STUDY PROGRAMME ACCREDITATION MATERIAL:

MECHANICAL ENGINEERING

DOCTORAL ACADEMIC STUDIES

Novi Sad

2012.

Prevod sa srpskog jezika:

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Programme name	Mechanical Engineering
Independent higher education institution where the programme is being executed	University of Novi Sad
Higher education institution where the programme is being executed	Faculty of Technical Sciences
Educational-scientific/educational-art field	Technical-Technological Science
Scientific, proffesional or art field	Mechanical Engineering
Type of studies	Doctoral Academic Studies
Study scope, expressed in ECTS	180
Academic degree, abbreviation	Doctor of Science - Mechanical Engineering, Ph.D.Mech.Eng.
Study length	3
Programme implementation starting year	2005
Future course implementation starting year (for new programme)	
Number of students attending this programme	29
Planned number of students to be enrolled in this programme	120
Programme approval date (state the approval issuer)	14.11.2012 - Science Education Council 29.11.2012 - University of Novi Sad Senate
Programme language	Serbian, English
Programme accreditation year	2008
Web address containing programme information	http://www.ftn.uns.ac.rs

Standard 00.	Higher Education Institution Competence for the Implementation of PhD Studies

Mechanical Engineering at the Faculty of Technical Sciences in Novi Sad was developed on the basis of earlier founded Faculty of Mechanical Engineering (founded in June 1960) and for more than half of a century it covers research in both basic sciences and fields of application useful for industrial practice. During its development, numerous workers went abroad for professional improvement and returned with new ideas and potential for creating their own experts. That process is followed by the production of scientific results. Thus in mid 1960s, scientific works were published in leading international highly reputable journals, nowadays defined by SCI list. The number of such results, independent and original research, by teachers at the Department of Mechanical Engineering exceeds hundreds.

This study programme should enable students to become capable for individual scientific and research work within the selected field of their Doctoral thesis. Besides additional concretisation and integration of knowledge, stronger understanding of main physical principles and acquisition of capabilities necessary for the realization of contemporary technical systems, students should also develop their abilities for individual looking up and utilizing foreign literature, innovative thinking unburdened by previous realizations, and propositions of solutions that will represent the expansion of the boundaries of current scientific knowledge and professional engineering practice.

The Faculty is fully prepared in terms of academic staff, classroom capacity and other facilities for administering doctoral studies in all the fields studied at the Faculty based on indicators related to scientific and research work. The Faculty has a short-term and long-term plan and is accredited as a scientific and research institution, as required by law.

The ability of the Faculty to administer doctoral studies can be indicated by the following criteria:

• the number of Ph.D. and Master theses defended at the higher education institution which are in the area for which the study programme is accredited, in terms of the ratio of the doctoral and master theses and the number of students who have graduated from the programme and the number of professors.

• the ratio between the number of professors and the number of professors involved in scientific and research projects.

• the ratio between publications in the Ministry of Science acclaimed international journals in the last 10 years and the number of professors.

• cooperation with institutions in the country and abroad.

The Faculty employs a number of tenured teachers who have acted as doctoral thesis supervisors.

The capability of the Faculty to administer doctoral studies is obvious from the references which are enclosed with the accreditation material.

Standard 01.   Programme Structure

The name of the Doctoral Study Programme is "Mechanical Engineering". The acquired academic degree is a Doctor of Science – Mechanical Engineering (Ph.D.).

Programme is realized in two phase: preparation when student attend courses aimed at understanding and mastering skills for problem solving and production with original and independent research which should result in at least one paper in SCI list prior to defending doctoral theses.

As research supplement, each student of doctoral studies is advised to participate in the other pedagogical side of the studies through active involvement in classes at undergraduate and graduate studies that are held at the Faculty of Technical Sciences.

The outcome of the learning process is the knowledge which enables students to become capable of independent scientific research.

Doctoral studies in Mechanical Engineering last for three years and they are worth at least 180 ECTS. Out of it, 90 ECTS is obtained through examination at the subjects, 30 ECTS is obtained by laying theoretical basis for doctoral dissertation, and 60 ECTS is acquired by elaborating and defending the doctoral dissertation.

Research study on theoretical grounds is a doctoral dissertation qualifying exam for the preparation of a doctoral dissertation in which students demonstrate that they mastered necessary theoretical knowledge in the scientific areas of interest.

Doctoral studies are organized through lectures, research study, research work, construction and defense of the doctoral dissertation.

Student`s research interest is profiled by selecting teaching subjects which will be studied and taken; and thus, contribute in-depth knowledge and understanding of areas (themes) of his doctoral dissertation.

Optional subjects are selected from the group of proposed subjects of study programme, but the students have the opportunity to choose a number of subjects, with the consent of the mentor (co-mentor), from a set of subjects for Doctoral Studies at Faculty of Technical Sciences, University of Novi Sad, or any other University in the country or abroad. At the same time the conditions prescribed for teaching attendance in selected cases have to be fulfilled.

Teaching activity for the subjects (compulsory or optional) is group or individual (mentoring) activity. Group classes are held if the subject was chosen by five or more students or if this type of lecturing is necessary to be organized due to the nature (character) of the subject. The decision on the type of instruction and optional subjects that will be taught is made by the Head of Doctoral Studies following the proposal of the Committee for the Quality of the study programme (study group).

Standard 02. Programme Objectives

The purpose of the Doctoral Study Programme is to provide to advanced students at graduate studies – masters a programme of special university education in special fields of applied science. At the same time, through numerous optional subjects, fulfil their obligations individually according to their choice of preparatory courses – subjects. Through courses and following exams, students are expected to demonstrate great understanding of theory, methodology and application of the acquired knowledge, and all this based on the newest published results in the considered field.

The purpose of the Study Programme is the education of students capable of high quality and independent scientific research in accordance with the needs of society. On the other hand educating staff trained to critically evaluate research work and independently carry out original and scientifically relevant research enables the development of new technologies and procedures that contribute to the overall development of society. In addition, the purpose of this Doctoral Study Programme is a contribution to national science as well.

Study Programme of Doctoral Studies in Mechanical Engineering is designed to provide the acquisition of skills that are socially justified and useful. Faculty of Technical Sciences defined tasks and goals for educating highly competent personnel in the field of technology and the purpose of the Study Programme of Mechanical Engineering is completely in accordance with the objectives and goals of the Faculty of Technical Sciences.

Standard 03.   Programme Goals

The objective of the study programme is to achieve student`s scientific competencies and academic skills in the field of Mechanical Engineering. The idea is to produce an expert who knows to solve problems and to follow fundamental physics, geometry and principle science on energy in order to handle problems. Thus, the main focus is not on studying methods but on application of the acquired knowledge in solving real problems. This also includes the development of creative abilities in considering problems and the ability of critical thinking, the development of teamwork skills and the mastering of specific practical skills necessary to perform the profession.

The objective of the study programme is to educate an expert who has sufficient extended knowledge consistent with contemporary directions of development of science in the world.

One of the specific objectives which is in accordance with educational aims of experts at the Faculty of Technical Sciences is to develop students` awareness of the need for a personal contribution to the development of a society in general and the environmental protection. The objective of the study programme is also the education of experts in the field of teamwork, and the development of technical capacity for communication and presentation of their original results to scientific public.

Standard 04.   Graduates' Competencies

PhD graduates of the academic study programme in Mechanical Engineering are competent to conduct research and solve problems in real life practice activities. Competencies include, above all, the development of critical thinking skills, problem analysis capabilities, the synthesis solution, predicting the behaviour of selected solutions with a clear representation of what is good and what is bad by the selected solution.

Qualifications that indicate the completion of doctoral academic studies are gained by students:
• who have demonstrated systematic knowledge and understanding in the field of civil engineering that complements the knowledge gained at graduate academic studies, being the basis for developing critical thinking and application of knowledge;
• who have mastered the skills and methods of research in the field of civil engineering;
• who have shown the ability of making concepts, design and application
• who have shown ability to adapt the research process with the necessary level of academic integrity;
• who have performed original research and work, extending the boundaries of knowledge, which is verified by publishing papers in the appropriate scientific journal and by the references in national and international levels;
• who are capable of critical analysis, evaluation and synthesis of new and complex ideas;
• who are capable of knowledge and ideas transfer to their colleagues, wider academic community and society in general
• who are capable of promoting technological, social and cultural progress in the academic and professional environment.

These competences are realized through monitoring study processes and individual results of students.

After graduation, PhD programme allows students to have the knowledge, skills, developed abilities and competencies to :
• independently solve practical and theoretical problems and organize and realize developing activities and research;
• be involved in international scientific projects
• be able to implement the development of new technologies and procedures in the field of civil engineering and to understand and use modern knowledge;
• think critically, work creatively and independently;
• respect the code of ethics and principles of good scientific practice;
• be capable to present scientific research results at scientific conferences and publish in scientific journals, verifying them through patents and new technical solutions;
• contribute to the development of scientific disciplines in science generally.

After this study programme completion, the student obtains the following subject-specific competences:
• thorough knowledge and understanding of the disciplines that are the subject of their involvement;
• ability to solve problems using scientific methods and procedures;
• linking basic knowledge in various fields and their application;
• ability of modern developments in the field of profession;
• necessary skills and ability in applying knowledge in the field of mechanical engineering;
• mastering information and communication technologies.

Students will be enabled to design, organize and manage the construction of specific and complex structures. During their education, students acquire the knowledge to independently perform experiments, process statistic data, as well as formulate and make adequate conclusions.

Students who obtain their Doctoral degree in Mechanical Engineering acquire knowledge on how to economically utilize natural resources of the Republic of Serbia in accordance with the sustainable development principles. In particular, attention is paid to the development of skills in team work and development of professional ethics.

Acquired competence are verified by scientific papers. Before obtaining the Doctoral Diploma a candidate must publish (or to prove that the papers are accepted for publication) at least one paper in the SCI listed journal.

Standard 05.   Curriculum

The curriculum of the Doctoral Academic Study Programme in Mechanical Engineering is made to meet the set goals. The structure of the study programme enables the students to choose optional courses which will be worth at least 70% of ECTS credits.

During the course of the doctoral academic studies students are encouraged to specialize in the specific field of study they are most interested in. Through optional courses they are able to take further interest in the scientific and research areas studied during the course of their graduate academic studies.

All courses last one semester and are worth a certain number of ECTS credits.

The curriculum defines every course of the study programme which states the following: the course name, type, the year and semester when the course is lectured, the number of ECTS credits, the name of the lecturer, the course objective with the expected outcome, the knowledge and competences the student will acquire, the prerequisites for taking the course, the course content, the recommended literature, the methods of lecturing, the knowledge tests and evaluation and other data. Each subject is created in such a way that approximately one half represents lectures and the other half represents research and scientific work. Research and scientific work is independent work of doctoral students in research in the subject field, what is defined in cooperation with the professor.

The study programme is created in accordance with the European standards concerning the enrolment requirements, the duration of studies, the terms of enrolling into the next year of studies, the acquisition of a diploma and the mode of study.

The curriculum enables students to attend 7 courses during the first three semesters.

During the first semester one compulsory courses (Methods of Scientific Research) and two optional course are taught.

During the second and third semesters (each containing two optional courses) students elect optional courses after consulting their co-mentor, one being available to every student of the doctoral studies. These courses are a part of the main preparation for research work. Generally they can be followed also by other forms of improvement: participation in conferences, summer schools, workshops, as a result of independent research for which the student is specially educated.

The fourth semester is planned for theoretical and methodological preparations for elaboration of doctoral studies worth 30 ECTS credits which are taken in the form of an exam and evaluated. Doctoral dissertation is an independent scientific work created during doctoral studies. The procedure of application, elaboration and defending of doctoral dissertations defined by special General act of the Faculty. (Procedure for application, elaboration and defending of doctoral studies). The right to take exam in Theoretical Bases in Doctoral Studies has a students who enrolled at the second year and passed all exams defined by study programme. After passing Theoretical Bases, the candidate is ready for elaboration and defending of doctoral dissertation, which he works on during the fifth and sixth semester and is 60 ECTS credits.

It is determined by the study programme that 50% of ECTS credits is reserved for preparation and elaboration of doctoral dissertation and that the number of ECTS credits for the doctoral dissertation is part of total number of ECTS credits necessary for the completion of doctoral studies.

Table 5.2 Course specification

Course:			
Course id:	DZ001	Scientific Research Method	
Number of ECTS:	5		
Teachers:		Atanacković M. Teodor, Folić J. Radomir	
Course status:		Mandatory	

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
0	0	0	3	0

Precondition courses	None

1. Educational goal:

To enable students for successful writing of scientific papers and doctoral dissertations.

2. Educational outcomes (acquired knowledge):

- Ability of understanding varius scientific metods witch was used in scientific literature
- Ability of successful managing in proffesonal literature
- Ability of successful writing of scientific paper in area of of interests
- Ability of successful creating and ending of doctoral dissertation

3. Course content/structure:

Definition of science. Development of science through history.
Scientific methodology.
General and special scientific methods.
Structure of a scientific paper. Types of scientific results.
Writing and publishing scientific papers.
Writing the doctoral dissertation.
Evaluating scientific results.

4. Teaching methods:

Lectures. Consultations with students. Seminar paper.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Project	Yes	30.00	Oral part of the exam	Yes	70.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Karl Poper	Logika naučnog otkrića	Nolit, Beograd	1973

Table 5.2 Course specification

Course:		Energy Systems			
Course id:	DM216				
Number of ECTS:	13				
Teachers:		Gvozdenac D. Dušan, Grković R. Vojin, Petrović R. Jovan			
Course status:		Elective			

Number of active teaching classes (weekly)					
Lectures:	Practical classes:	Other teaching types:	Study research work:		Other classes:
5	0	0	4		0

Precondition courses	None

1. Educational goal:

Contemporary technological solutions make a complex unity, in which power is almost always inseparable part. The most significant power plants are independent unity connected to consumers by distribution and transmission systems. Thus, it is necessary to have at least basic knowledge of power engineering for those who deal with managing and using power in any way.

2. Educational outcomes (acquired knowledge):

Acquiring basic knowledge on power engineering in order to use it rationally, which means efficiently using of a specific energy source in technological processes, institution and private life.

3. Course content/structure:

Concept of power management in industry; Connecting of power consumption and production; Power indicators; Implementation of power management system. Steam power system; Electrical power system; System of compressed air; Cooling systems.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Požar, H.	Osnovi energetike	Školska knjiga, Zagreb	1976
2,	Požar, H.	Osnovi energetike, drugi svezak	Školska knjiga, Zagreb	1976
3,	Devins, D.W.	ENERGY: ITS PHYSICAL IMPACT ON THE ENVIRONMENT	Robert E. Krieger Publishing Company, Malabar, Florida	1982
4,	Vuorinen, A.	Planning of Optimal Power Systems	Ekoenergo Oy, Finland	2008

Table 5.2 Course specification

Course:		Selected chapters in Analytical Mechanics
Course id:	DM401	
Number of ECTS:	13	
Teacher:		Kovačić N. Ivana
Course status:		Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Introducing students to classic terms in analytical mechanics.

2. Educational outcomes (acquired knowledge):

Ability to solve problems in the field of mechanical systems movement with analytical mechanics methods.

3. Course content/structure:

Dynamic connections classification. Movement classification. Lagrange izochrone variation. Generalization – non izochrone variation. Zurdenov, Gaussian and Manzzeron-Deleano variation. Lagrange-Dalamber principle of analytical mechanics. Lagrange equation of movement with nondetermined multiplicators. The connection between Lagrange – Dalamber principles and variational calculation. Hamilton variational principle of mechanics. Natural and forced two-point bourder conditions. Examples of formulating technical problems of dynamics by variational Hamilton principle. Hamilton canonian equations of analytical dynamics. Cannon transformations. Integration methods of cannon equations. Hamilton-Jacobi differential equation. Jacobi theoreme. First movement integral. Noether theorem. This program depends on candidate`s previous knowledge and can be adjusted to it.

4. Teaching methods:

Lectures. Mentor work.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	40.00	Oral part of the exam	Yes	60.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	A. L. Lurije	Analitičeskaja mehanika	Gos. izd. FML Moskva	1961
2,	E.T. Whittaker	Analytical dynamics of particles and rigid bodies	Cambridge UP	1970
3,	G. Hamel	Theoretische Mechanik	Springer Berlin	1949
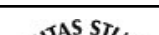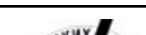
Table 5.2 Course specification

Course:			
Course id:	DZ01M	Selected Chapters in Mathematics	
Number of ECTS:	12		
Teachers:		Adžić Z. Nevenka, Doroslovački D. Rade, Gilezan K. Silvia, Grbić P. Tatjana, Kostić Z. Marko, Kovačević M. Ilija, Mihailović P. Biljana, Pantović B. Jovanka, Pilipović R. Stevan, Rajković R. Milan, Ralević M. Nebojša, Sladoje Matić I. Nataša, Stojaković M. Mila, Teofanov Đ. Ljiljana, Uzelac S. Zorica	
Course status:		Elective	

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	3	0

Precondition courses	None

1. Educational goal:

To acquire knowledge which can be used in professional subjects and practical work, develop and solve mathematical models for engineering courses using the knowledge gained through selected chapters in mathematics.

2. Educational outcomes (acquired knowledge):

Student will have been competent enough to develop and solve mathematical models in further professional education.

3. Course content/structure:

Student can choose in consultation with programme supervisor, one of the suggested modules: 1. Numerical Mathematics, 2. Optimization. 3. Pattern Recognition. 4. Partial Differential Equations, 5. Nonlinear Equations. 6. Computational geometry. 7. Elements of Functional Analysis. 8. Combinatorics. 9. Graph Theory.10.Operational Research- Linear Programming. 11. Probability 12. Statistics .13.Stochastic Processes. 14. Vector analysis. 15. Complex Analysis. 16. Linear Algebra. 17. Differential and Difference Equations. 18. Euclidean and Non-Euclidean Geometry. 19. Fractional Calculus,Differential Equations . 20. Operational Research-Quiuing theory. 21. Logic in Computing. 22. Discrete Mathematics. 23. Higher order Logic. 24. Theory of Mobile Processes. 25. Numerical Methods of Linear Algebra. 26. Fuzzy Sets. 27. Economic and Financial Mathematics. 28. Groups and Algebras Li. 29. Formal Languages and Automata Theory. 30. Process Algebras. 31. History of Mathematics. Part of the course is in the form of independent research and study in the field of mathematics. Study and research work is based on primary scientific sources, organization and conduction of experiments and statistical data analysis, numerical simulations, and possible paper in the field of mathematics.

4. Teaching methods:

Lectures. (The student can choose in consultation with supervisor, one or more modules depending on module scope). Consultations. Lectures are organized in combined form. The presentation of the theoretical part is followed by the corresponding examples which contribute to better understanding of the theoretical part. In addition to lectures there are regular consultations. Through research and study work the student will, on the bases of scientific journals and other relevant literature that has been studied independently, develop further understanding of the material covered in lectures. Working with the course teacher the student develops the ability to independently work on a scientific paper.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Alexander Mood,...	Introduction to the theory of statistics	McGraw Hill	2005
2,	Athanasios Papoulis	Probability, random variables and stochastic processes	McGraw Hill	2002
3,	I. Kovačević, N. Ralević	Funkcionalna analiza	FTN (edicija tehničke nauke-udžbenici), Novi Sad	2004
4,	N.Ralević,I.Kovačević	Zbirka rešenih zadataka iz Funkcionalne analize	FTN (edicija tehničke nauke-udžbenici), Novi Sad	2004
5,	M.Stojaković	Slučajni procesi	FTN, Novi Sad	1999
6,	V.Jevremović,J.Mališić	Statističke metode u metorologiji i inženjerstvu	Savezni hidrometorološki zavod, Beograd	2002
7,	Zeidler E.	Nonlinear Functional Analysis and Aplications	Springer-Verlag, New York-Berlin-Heidelberg-Tokyo	1985
8,	Zlobec S., Petrić J	Nelinearno programiranje	Naučna knjiga, Beograd	1989
9,	Dauxois, M. Peyrard	Physics of Solitons	Cambridge University Press, Cambridge, New York	2006
10,	Saaty, T. L	Modern Nonlinear Equations	Dover Publications, Inc., New York	1981
11,	N. Ralević, S.Medić	Matematika 1 - drugi deo	FTN, Novi Sad	2002
12,	Heinz-Otto Peitgen, H. Juergens, D. Saupe	Chaos and Fractals	Springer Verlag, New York	2004

Literature				
Ord.	Author	Title	Publisher	Year
13,	Mileva Prvanović	Osnovi geometrije	Građevinska knjiga, Beograd	1990

Table 5.2 Course specification

Course:		Selected Chapters in Mechanics
Course id:	DZ003	
Number of ECTS:	13	
Teachers:		Glavardanov B. Valentin, Kovačić N. Ivana, Novaković N. Branislava, Simić S. Srboljub, Spasić T. Dragan
Course status:		Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Expanding knowledge in one of mechanics brances at student`s choice. One of the subjects under condes DM401 to DM408 and SDI5 is should be chosen from.

2. Educational outcomes (acquired knowledge):

Ability to solve problems from one of the mechanics branches accordin to students` choosing among subjects with codes DM401 to DM408 and SDI5.

3. Course content/structure:

According to individual needs and interests one of the following modules is chosen: analytical mechanics, theory of elasticity, continuum mechanics, mathematical rod theory, non linear oscillations, non smooth mechanics and optimization, collision theory, chaos in dynamic systems, non linear mechanics with nonconservative characteristics and if needed biomechanics. One of the subjects under condes DM401 to DM408 and SDI5 is should be chosen from.

4. Teaching methods:

Lectures. Mentor work.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Project	Yes	30.00	Oral part of the exam	Yes	70.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	-	Literatura predviđena za predmete DM401- DM408 i SDI5, u zavisnosti od izabranog modula	-	-

Table 5.2 Course specification

Course:		Selected Chapters in Physics
Course id:	DZ01F	
Number of ECTS:	12	
Teachers:		Budinski-Petković M. Ljuba, Kozmidis-Luburić F. Uranija, Kozmidis-Petrović F. Ana, Satarić V. Miljko, Vučinić-Vasić T. Milica
Course status:		Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	3	0

Precondition courses	None

1. Educational goal:

To acquire the knowledge of physics which is applied in modern engineering.

2. Educational outcomes (acquired knowledge):

The students will have acquired the knowledge which enables them to develop models for solving problems in practical professional work as well as evolvement in science and research work in the corresponding areas.

3. Course content/structure:

Student can choose in consultation with programme supervisor, one of the suggested modules: 1. Lasers, their applications in engineering, 2. Quantum tunnelling effect and applications, 3. Quantum dots, wires and tubes, Applications in nanotechnologies, 4. New materials, amorphous materials, spin glass, 5. Natural and artificial polymers and their application in nanotechnologies, 6. Numerical method of statistics physics, random number generator. Monte Carlo simulation.

4. Teaching methods:

Lectures. (The student can choose in consultation with co-mentor, one or more modules depending on module scope). Consultations. Lectures are organized in combined form. The presentation of the theoretical part is followed by the corresponding examples. In addition to lectures there are regular consultations. Through research and study work the student will, on the bases of scientific journals and other relevant literature that has been studied independently, develop further understanding of the material covered in lectures. Working with the course teacher the student develops the ability to independently work on a scientific paper.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	K. Binder, D.W. Heermann	Monte Carlo Simulation in Statistical Physics	Springer-Verlag	1988

Table 5.2 Course specification

Course:		Contemporary Methods of Designing and Machine Constructing
Course id:	DM213	
Number of ECTS:	13	
Teachers:		Georgijević S. Milosav, Kuzmanović B. Siniša, Navalušić V. Slobodan, Vladić M. Jovan
Course status:		Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Expanding knowledge in the field of development, designing and constructing machines and transporting systems.

2. Educational outcomes (acquired knowledge):

Enabling students for solving complex problems of development and designing of mobile mechanization means.

3. Course content/structure:

Product development. Role and significance of designing. Designing as a creative process. Designing theory. Types of designing. Methods for forming variotional solutions and selection of optimal variation. Methodology of automated designing. Geometrical modelling – 3D models and CAD programs. Parameter and associational modelling. Fundamental of industrial design. FEM application in engineer analysis. Procedure automation of engineering analysis by utilization of CAE program. Mobile machine modelling. Stress and element dimensioning. Software integrating and virtual machine prototype forming.
Fundamentals and methods in developing and construction process. Understanding of iterativity in construction process. Basic functionality of PLM (PDM) systems. Product structure as basis for defining inforamtion systems. Document management. Information flow (workflow management). Storing documents in various shapes. Upgrading PLM system functionality. PLM system integration with CAD and business systems. Product typing. Utilization of knowledge and experience in PLM systems. Knowlege and experience network. Choice of primery PLM system in relation to product and information flow. PLM system setting and prototyping. Subsystems for survailance in simulation and realization of new products. Advantages and disadvantages of PLM system. Computer programs for menagement of product databases. Electronical storing documents. Systems for data menagement (PLM). Informacional process chain and virtual reality.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled or independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Janošević D.	Projektovanje mobilnih mašina	Mašinski fakultet Niš	2000
2,	Vladić J.	Projektovanje računarom, skripta	FTN Novi Sad	2009
3,	Jovanović M.	Teorija projektovanja konstrukcija računarom	MF Niš	2009
4,	Jovanović M., Jovanović J	CAD/FEA praktikum za projektovanje u mašinstvu	MF Niš i MF Podgorica	2009
5,	Zamani, N.G.	CATIA V5 FEA Tutorials	University of Windsor	2000
6,	-	ANSYS ED Workbench Tutorial - Introduction and Overview	-	2000
7,	Duhovnik, J., Tavčar, J.	Elektronsko poslovanje i tehnički informacijski sistemi	LECAD, Univerzitet u Ljubljani, Mašinski Fakultet	2000
8,	Hubka, V., Erder, W.E.	Theory of Technical Systems	Springer Verlag, Berlin, Heidelberg, New York	1988
9,	J. Bethune	Engineering Design and Graphics with Autodesk Inventor 2008	-	2008

Table 5.2 Course specification

Course:		Probability, Statistics and Theory of Engineering Experiment
Course id:	DOM30	
Number of ECTS:	12	
Teachers:		Kovačević M. Ilija, Lužanin L. Zorana, Grbić P. Tatjana, Hodolič J. Janko, Hadžistević J. Miodrag, Kovač P. Pavel
Course status:		Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	3	0

Precondition courses	None

1. Educational goal:

The knowledge is used in vocational subjects and practical work and mathematical models are made and solved in vocational subjects with application of the the gained knowledge in probability and statistics. The qualifications are checked in the theory of engineering experiments.

2. Educational outcomes (acquired knowledge):

The student is competent for further education in vocational subjects, being able to create and solve mathematical models. In addition, he/she is capable of practical realization of experimental studies based on lessons learned from the theory of the experiment.

3. Course content/structure:

Selected topics in probability theory. Selected topics in mathematical statistics. Selected topics in theory of engineering experiment. Part of the teaching course to be done through an independent study research in the field of probability, mathematical statistics and theory of engineering experiments. Research work includes active monitoring of primary scientific sources, organization and execution of experiments and statistical data processing, numerical simulations, paper writing in the field of probability, mathematical statistics and theory of engineering experiments.

4. Teaching methods:

Lectures: (Supervisor together with a student chooses topics in probability theory, mathematical statistics and theory of engineering experiment, depending on the choices of candidates for other courses). Consultation. Lectures are conducted in combination. The theoretical part is followed by examples which serve to clarify the theoretical part of the curriculum. Apart from lectures, consultations are held regularly. Through the study research, the student deepens the material from the lectures, by studying scientific journals and other literature independently. Working with the teacher, students are trained for independent writing of paper.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Written part of the exam - tasks and theory	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Mood, A. M., Graybill, F. A., Boes, D. C.	Introduction to the theory of statistics	McGraw Hill	2005
2,	Papoulis, A.	Probability, random variables and stochastic processes	McGraw Hill	2002
3,	Stojaković, M.	Slučajni procesi	FTN, Novi Sad	1999
4,	Jevremović, V., Mališić, J.	Statističke metode u metorologiji i inženjerstvu	Savezni hidrometorološki zavod, Beograd	2002
5,	Hodolič, J., Hadžistević, M., Tkač, M., Hajduova, Z.	Alati za statističko upravljanje kvalitetom	FTN, Novi Sad	2011
6,	Kovač, P.	Metode planiranja i obrade eksperimenta	FTN, Novi Sad	2011
7,	Silvia Gilezan, Zorana Lužanin, Tatjana Grbić, Biljana Mihailović, Ljubo Nedović, Zoran Ovcin, Jelena Ivetić, Ksenija Doroslovački	Zbirka rešenih zadataka iz verovatnoće i stetistike	FTN, Novi Sad	2009

Table 5.2 Course specification

Course:		
Course id:	DP001	**Design and Research Methods in Production Engineering**
Number of ECTS:	13	

Teachers:	Hodolič J. Janko, Budak M. Igor, Kakaš I. Damir, Kovač P. Pavel, Plančak E. Miroslav, Todić V. Velimir, Vukelić B. Đorđe, Škorić N. Branko, Hadžistević J. Miodrag, Vilotić Ž. Dragiša, Zeljković V. Milan, Antić T. Aco, Gostimirović P. Marin, Lužanin B. Ognjan, Milošević P. Mijodrag, Sekulić Lj. Milenko, Šiđanin P. Leposava, Baloš S. Sebastian
Course status:	Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

To acquire in-depth knowledge in design and research methods in production engineering.

2. Educational outcomes (acquired knowledge):

Acquired knowledge should enable students to successfully elaborate and defend doctoral dissertation.

3. Course content/structure:

Fundamentals, significance and opportunities of application of research and design methods in production engineering. Partly lectures are relaized through independent study and research work in the field related to the subject. Study and research work includes actively following of primary scientific sources, organization and conducting experiments and statistic data processing, numeric simulations, and possiblem elaboration of scientific papers in this field.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Grupa autora	Odabrani radovi iz naučnih časopisa i skupova		2012

Table 5.2 Course specification

Course:		
Course id:	DM302	Engineering Experimental Methods
Number of ECTS:	13	
Teachers:		Grković R. Vojin, Gvozdenac D. Dušan
Course status:		Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

It is occasionally demanded for theory to offer solution for solution of various practical engineering problems in its full complexity. Contemporary technological plants are very complex unity of tools and devices in which various processes are conducted. All elements in plants should be synchronised in order to justify existence of the plant and create final and effective product. Nowadays experimental methods and experimental techniques are highly developed and can equally be used with theoretical methods in studying engineering problems.
The subject aim is for the student to be introduced to fundamental experimental concept, experiment planning, experimental data analysis, contemporary complex engineering measurements, data acquisition and their processing as well as writing and presentation of experiment results.

2. Educational outcomes (acquired knowledge):

Mastering contemporary engineering experimental technique in order to understand and master physical phenomena of contemporary technological plants.

3. Course content/structure:

Theory and experiment in engineering. Applied statistics. Measurement system designing and its application. Experiment plan. Dimensional analysis. Similarity and model theory. Experiment conducting. Analysis and interpretation of experimental data. Technical communication.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Holman, J.P.	Experimental methods for Engineers	McGraw-Hill International Editions	1994
2,	Doebelin, E.O.	Engineering Experimentation (Planning, Execution, Reporting)	McGraw Hill International Editions	1995
3,	Pantelić, Ilija	Uvod u teoriju inženjerskog eksperimenta	Radnički univerzitet "Radivoj Ćirpanov"	1976
4,	Profos, P.	Industriellen Messtechnik, , 1974. (Russion translation is available, too).	Vulkan Verlag, Essen	1974
5,	Doeblin, E. O.	Measurement Systems - Application and Design (third edition)	McGraw Hill	1983
6,	McGee, T. D.	Principles and Methods of Temperature Measurement	John Wiley & Sons	1988

Table 5.2 Course specification

Course:		
Course id:	SID04	Current State in the Field
Number of ECTS:	2	
Teachers:		Atanacković M. Teodor, Katić A. Vladimir, Kulić J. Filip, Vilotić Ž. Dragiša
Course status:		Mandatory

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
0	0	0	2	0

Precondition courses	None

1. Educational goal:

Introducing students to the current research directions and manners in solving problems from the wider study field.

2. Educational outcomes (acquired knowledge):

Knowledge on the current research directions worldwide in the field, based on lectures by prominent professors from the universities in Europe or prominent experts from the well-known companies abroad.

3. Course content/structure:

Contemporary topics in the field of research, presented by prominent professors and experts on lectures on invitation. Students select topics or attend lectures as they wish or as they find the topic interesting.

4. Teaching methods:

Survey on solving contemporary problems by theoretical methods and multimedia presentations.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Project	Yes	30.00	Oral part of the exam	Yes	70.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Razni	Časopisi sa SCI liste	IEEE Publishing, i dr.	2008

Table 5.2 Course specification

Course:		
Course id:	DM214	**Selected Chapters in Working Strength**
Number of ECTS:	14	
Teachers:		Šostakov S. Rastislav, Gerić D. Katarina
Course status:		Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Expanding knowledge in the field of machine design.

2. Educational outcomes (acquired knowledge):

Acquiring basic knowledge for scientific and research work in the field of phenomenological monitoring of material fatigue, with special emphasis on calculation phase of machine design.

3. Course content/structure:

Stress characteristics, time-invariable strain, stress concentration, constant temperatures and multiaxial stress state impacts and a strength proof. Mechanical and thermal material fatigue. Time-variable strain with constant amplitude or stress relation, material characteristics, proof of permanent and time-limited fatigue endurance. Experimental and "synthetic" fatigue endurance determination, testing programs and testing equipment. Hypotheses of mechanical and thermal fatigue damages accumulation. Fatigue endurance proof and service life forecasting, influence of multiaxial stress state, concept of nominal stress and hot-spot stress. Review of technical regulations according to application. Probability character of a proof. Specific quality of welded part fatigue. Monitoring the fatigue crack based on the fracture mechanics. Forming the structure components exposed to fatigue. Applicable software (N-Code etc.).

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. In addition to lectures, consultations are held regularly. Parts of lectures can be passed during the lectures in the form of seminar paper and projects (presented and defended orally).

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	E. Haibach	Betriebsfestigkeit	VDI-Verlag Düsseldorf	1989
2,	O. Buxbaum	Betriebsfestigkeit	Verlag Stahleisen mbH, Düsseldorf	1986
3,	B. Haenel, E. Haibach, T. Seeger, G. Wirthgen, H. Zenner	Rechnerischer Festigkeitsnachweis für Maschinenbauteile	VDMA Verlag, Frankfurt	2003
4,	D. Radaj, M. Vormwald	Ermudungsfestigkeit	Springer Verlag, Berlin, Heidelberg	2007
5,	VDEh	Leitfaden für eine Betriebsfestigkeitsrechnung	VDEh-Institut Verlag, Düsseldorf	1985
6,	EN, DIN, TGL, GOST	Relevantni svetski standardi u vezi pogonske čvrstoće	-	2000

Table 5.2 Course specification

Course:			
Course id:	DM307	Selected Chapters in Mass Transfer	
Number of ECTS:	14		
Teachers:		Dragutinović D. Gordan, Đaković D. Damir	
Course status:		Elective	

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Introducing students to higher problems of mass transfer theory.

2. Educational outcomes (acquired knowledge):

Extended knowledge on methods of mass transfer analysis, as well as possibilities of application of mass transfer within various industrial fields.

3. Course content/structure:

Fick`s equations for n-k mixtures, diffusion in n-k systemes in relation to constitutive relations of Fick type, Macwell equations, diffusion in n-k systems in relation ot consitutive relations of Macwell`s type. Molecular diffusion onedimensional and multiple dimensional diffusion in multiple component systems, nonstationary molecular diffusion in one direction – multiple componenet systems. Convection diffusion (fundamental tersm, mass transfer in the case of laminated fluid film which gravitationally flows down the solid surface, mass trasnfer in the case of laminated streaming through pipes, mass transfer with laminated border layer on a flat plate, convective diffusia with turbulent fluid streaming, interstep diffusion mass transfer, modelling near interstep fluid surface – stationary border film theory, penetration theory, renewable surfaces theory). Several specific problems of diffusion mass transfer (convective diffusion with high absolute flux, experimental mass transfer modelling proces).
The research study requires the student`s active and constant interest in and reading of the primary scientific resources, the organization and conducting of experiments and statistical processing of data, numerical simulations, writing a paper in the specific scientific field relevant to the doctoral dissertation.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Milan Dimić	Difuzioni prenos mase	Interno izdanje, Fakultet tehničkih nauka, Novi Sad	1994

Table 5.2 Course specification

Course:		Optimization of Operation Life of Energy and Process Equipment			
Course id:	DM308				
Number of ECTS:	14				
Teacher:		Jovanović S. Aleksandar			
Course status:		Elective			
Number of active teaching classes (weekly)					
Lectures:	Practical classes:	Other teaching types:	Study research work:		Other classes:
5	0	0	4		0
Precondition courses		None			

1. Educational goal:

The aim of the subject is for doctoral students to acquire scientific competences and academic skills in the field of optimization of operation life of energy and process equipment, including development of creative skills for analysis and problem synthesis and critical evaluation capability.

2. Educational outcomes (acquired knowledge):

The subject`s outcome and purpose is education and enabling doctoral students for quality - inependent and team – scientific work in the field of optimization of operation life of energy and process equipment. The outcome is also acquiring scintific and professional competencies in this field.

3. Course content/structure:

Theoretical principles of optimization of operation life of energy and process equipment. Criteria for optimization of spent and remaining operation life. Evaluatiom methods of spent and remaining operation life. Numeric and information problem treatment. Development problems and optimization model and communication software application . The research study requires the student`s active and constant interest in and reading of the primary scientific resources, the organization and conducting of experiments and statistical processing of data, numerical simulations, writing a paper in the specific scientific field relevant to the doctoral dissertation.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00
Literature					
Ord.	Author	Title		Publisher	Year
1,	-	Odabrani radovi iz naučnih časopisa i skupova			-

Table 5.2 Course specification

Course:		
Course id:	DM331	Selected Chapters in Transport and Construction Machines
Number of ECTS:	14	

Teachers:	Georgijević S. Milosav, Malešev T. Petar, Šostakov S. Rastislav, Vladić M. Jovan
Course status:	Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

To acquire higher knowledge in the field of transport and construction machines.

2. Educational outcomes (acquired knowledge):

To prepare students for advancement, research, independent designing work and application of contemporary monitoring methods and quality maintenance and exploitation of machines in this field.

3. Course content/structure:

Student is allowed to choose, according to his/her interests one of the following modules:
Driving systems. Material flow and transport systems. Transport machines of continuous and automated transport. Transport machine for interupted transport. Building machine for land works. Machines for stone fractioning and classificaton. Machines for production, transport of concrete. Production, transport asphalt machines. Simulations and logistics. Warehouses and equipment

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Babin N. , Vladić J., Šostakov R.	Transportna sredstva (skripta)	FTN, Novi Sad	2009
2,	Vladić J.	Mehanizacija pretovara	FTN, Novi Sad	1991
3,	Plavšić M.	Građevinske mašine	Naučna knjiga, Beograd	2008
4,	Jevtić V.	Građevinske i rudarske mašine	Univerzitet u Nišu	2008
5,	M. Scheffler	Grundlagen der Fördertechnik	VEB Verlagtechnik Berlin	1999
6,	G. Pajer	Unstetigförderer 1	VEB Verlagtechnik Berlin	2009
7,	M. Scheffler	Unstetigförderer 2	VEB Verlagtechnik Berlin	2009

Table 5.2 Course specification

Course:		Selected Chapters in Mechanics of Continuum		
Course id:	DM404			
Number of ECTS:	14			
Teacher:		Glavardanov B. Valentin		
Course status:		Elective		

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Analysis, formulation and solving equation which describe movement of continuous environment for actual engineering problems.

2. Educational outcomes (acquired knowledge):

Ability to solve problems in the field of continuous environment movement.

3. Course content/structure:

Fundamental equations. Elasticity theory. The case of geometrical nonlinear material linear body. Equation solving methods. Variatonal methods. Tension concentration. Thermal tension. Board theory. Nonlinear board theory. Stability problems. Solving problems in linear high elasticity.

4. Teaching methods:

Lectures, Mentor work

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Project	Yes	30.00	Oral part of the exam	Yes	70.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	J. Jarić	Mehanika kontinuuma	Gradjevinska knjiga, Beograd	1988
2,	C. Truesdell and W. Noll	The non-linear field theories of mechanics	Springer, Berlin	1965

Table 5.2 Course specification

Course:			
Course id:	DOM23	**Product Development**	
Number of ECTS:	14		
Teachers:		Kuzmanović B. Siniša, Vladić M. Jovan	
Course status:		Elective	

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Acquiring special knowledge on systematic access to product development with special emphasis on PDM system with application of CAx methodology in simulations. Product analysis as the basis for student advancement for integral product development.

2. Educational outcomes (acquired knowledge):

Introduction to principles of designing and choice of materials in relation to product life cycle. Different approach to new product development. Systematic, radical, iterative and integral product development.

3. Course content/structure:

Systematic constructing. Implementation of knowledge (skills) influencing product development. Knowledge structure. Development and construction process definition in relation to gradual recognition of function and shapes. Research in the field of systematic constructioning. Planning process principles. Network planning. Radical constructing. Model introduction. Expert knowledge. Radicality evaluation method. Mastering planning process. Iterative constructing. Introduction of models with analysis of given conditions related to function and shape. Process planning. Study and research significatn subsystems or new product processes. Utilization of iterative process for optimal relation between function and shape. Result presentation. Problem function structure setting. Modularity and standardization. Local standardization principles. 2D and 3D space modelling. Relationship between both spaces. Significance of presentation of geometrical model. Data basis for geometrical mode. Standardized grphich languages.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled or independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Duhovnik, J., Tavčar, J.	Elektronsko poslovanje i tehnični informacijski sistemi	LECAD, Univerzitet u Ljubljani, Mašinski fakultet	2000
2,	Hubka, V., Erder, W.E.	Theory of Technical Systems	Springer Verlag, Berlin Heidelberg, New York	1988
3,	Vladić, J.	Automatizovano projektovanje, skripta	FTN, Novi Sad	2007

Table 5.2 Course specification

Course:		Procedure and Machines for Sustainable Agriculture
Course id:	DOM24	
Number of ECTS:	14	
Teachers:		Martinov L. Milan, Veselinov V. Branislav
Course status:		Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Acquiring knowledge on purpose and needs for locationaly specific agriculture.

2. Educational outcomes (acquired knowledge):

Knowledge on locationaly specific agriculture, procedures, machines and equipment.

3. Course content/structure:

Fundamentals of specific agricultural production. Definition of ecological, economic and ethical principles of precise agricultural production. Identification of local specific resources and needs. Procedures for defining local resources and needs. Identification of state and quality of land and other resources. Locationg resources and buildings, GPS and DGPS, satelite system, accurateness. Web sites in the field of Precision Farming.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled or independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Anonim	Yearbook Agricultural Engineering	KTBL, LAV, VDI-MEG	2006
2,	Anonim	Yearbook Agricultural Engineering	KTBL, LAV, VDI-MEG	2007
3,	Aurenhamer, H.	Elektronik in Traktoren und Maschinen	Verlagsunion Agrar, München, Wien, Zürich	1991
4,	Schön H.	Elektronik und Computer in der Landwirtschaft	Verlag Eugen Ulmer	1993

Table 5.2 Course specification

Course:		Selected Chapters in e-Manufacturing
Course id:	DP017	
Number of ECTS:	14	
Teachers:		Todić V. Velimir, Milošević P. Mijodrag
Course status:		Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

The basic aim is introduction to the concept and principles e-Manufacturing within distribution manufacturing systems. Also, the aim is knowledge acquiring in the field of collaborative engineering in the conditions of application of internet/intranet technologies in distributed design and manufacturing.

2. Educational outcomes (acquired knowledge):

Introduction to modern approach in manufacturing by application of internet technologies. Analysis of methodologies and systems which enable production data exchange easily at the global level. Possibilities and methods of WEB-based collaborative engineering within distributive manufacturing systems.

3. Course content/structure:

Concept of digital factory and digital manufacturing. Application of internet technologies in production engineering. Components of e-Manufacturing. Hierarchical levels of e-Manufacturing. Process planning in the e-Manufacturing conditions. Fundamental characteristics and structure of process planning systems in e-Manufacturing. Aspects of product technologicality in e-Manufacturing. Collaborative e-Manufacturing. Collaborative engineering environment and systems. WEB-based collaborative product design and process planning. Standards for data exchange in the Web-based manufacturing process.

4. Teaching methods:

Lectures, independent study and research work. Apart from that, consultations are held in order for students to completely understand subject content. Within study and research work, subject content is expanded through scientific journals and literature. This represents the basis for independent writing of scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Cheng, K.	E-Manufacturing: Fundamentals and Applications	WIT Press / Computational Mechanics	2005
2,	Greeff, G., Ghoshall, R.	E-Manufacturing and Supply Chain Management	Newnes	2004
3,	Meyer, H., Fuchs, F., Thiel, K.	Manufacturing Execution Systems, Optimal Design, Planning and Deployment	The McGraw-Hill Companies, Inc	2009
4,	Li, W.,D., Ong, S.K., Nee, A.Y.C.	Integrated and Collaborative Product Development Environment	World Scientific	2006
5,	Li, W.D., Qui, Z.M.	State-of-the-art technologies and methodologies for collaborative product development systems	Taylor & Francis	2006
6,	Milošević, M.	Kolaborativni sistem za projektovanje tehnoloških procesa izrade proizvoda baziran na internet tehnologijama - Doktorska disertacija	Fakultet tehničkih nauka, Novi Sad	2012

Table 5.2 Course specification

Course:		Selected topics in technical diagnosis
Course id:	DP019	
Number of ECTS:	14	
Teachers:		Budak M. Igor, Hadžistević J. Miodrag, Vukelić B. Đorđe, Antić T. Aco
Course status:		Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Acquiring knowledge about modern approaches to technical diagnostics, as well as the possibilities of their practical application.

2. Educational outcomes (acquired knowledge):

Competence to solve scientific research and technical tasks and problems in the field of technical diagnostics.

3. Course content/structure:

The concept of technical diagnostics. Basic methods of recognizing the state of technical systems. Acquisition, transmission and processing of data. Systems for the acquisition, transmission and processing of data. Infrared thermography. Non-destructive testing. Vibration diagnostics. Noise diagnostics. Products processing diagnostics. Identification of the state of the technical system. Automatic identification data. Maintenance and effectiveness of technical systems. Maintainability and cost of technical systems.

4. Teaching methods:

Lectures are realized interactively in the form of lectures with theoretical presentations, corresponding examples and practical exercises with the application of modern equipment, information technologies and program systems with the aim to mastering knowledge in the given fields. Apart from lectures consultations are held regularly. Study and research work includes active following of primary scientific resoruces, experiment conduction and numeric simulations as well as writting scientific papers in the field of doctoral dissertation.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Todorović, P., Jeremić, B., Mačužić, I.	Tehnička dijagnostika	Mašinski fakultet u Kragujevcu	2009
2,	Roderick T.	Thermography Monitoring Handbook	Coxmoor Publishing Company	1999
3,	Bies, D. A., Hansen, C. H.	Engineering Noise Control: Theory and Pratice	Taylor & Francis	2009
4,	Manzini, R.	Maintenance for Industrial Systems	Springer	2010
5,	Norton, M. P., Karczub, D. G.	Fundamentals of Noise and Vibration Analysis for Engineers	Cambridge University Press	2003

Table 5.2 Course specification

Course:		Joining technologies - selected topics
Course id:	DP023	
Number of ECTS:	14	
Teachers:		Baloš S. Sebastian, Šiđanin P. Leposava
Course status:		Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

The aim of this subject is knowledge transfer from the field of joining technologies.

2. Educational outcomes (acquired knowledge):

The excpectance is advanced sudent education in the field of modern joining technologies of engineering maerials.

3. Course content/structure:

Advanced brazing, soldering, adhesive technology, build-up welding.

4. Teaching methods:

Lectures, independent study and research work, consultations, mentorship. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled or independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	V. Palić	Zavarivanje	FTN Novi Sad	1987
2,	R. Mishra, M. Mahoney	Friction stir welding and procedures	Wiley Publishing	2003
3,	D.A. Dillard, A. V. Pocius	Adhesion science and engineering	Elsevier	2004

Table 5.2 Course specification

Course:		Seelcted Chapters in Machine and Mechanisms Theory			
Course id:	DM215				
Number of ECTS:	14				
Teachers:		Čavić M. Maja, Kuzmanović B. Siniša			
Course status:		Elective			

Number of active teaching classes (weekly)					
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:	
5	0	0	4	0	

Precondition courses	None

1. Educational goal:

Mastering knowledge in the filed of analysis and mechanism synthesis, additional advancement of optimization procedure implementation.

2. Educational outcomes (acquired knowledge):

Enabling students for selection and realization of appropriate analysis procedures and synthesis as an optimization method in mechanism designing in practical problems.

3. Course content/structure:

Theoretical lectures: Complex flat mechanisms analysis, Analysis of complex spacial mechanisms, Complex mechanisms synthesis (structural synthesis, Dimensional synthesis for kinematic requirements, Dimensional synthesis for dynamic requirements), Optimal mechanism synthesis (Optimization problem formulation in the TmiM field, Goal functin definition and limitations in mechanism optimization problems, Optimization problem solutions in the TmiM field. Study and research work: Project for solving an actual problem. Collecting and studying literature, professional journals and other available information necessary for solving project problems.Sofwares necessary for solving project problems (MATLAB, CATIA, and others).

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled or independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Zlokolica M., Čavić M., Kostić M.	Mehanika mašina	FTN, Novi Sad	2005
2,	Erdman A., Sandor G.	Mechanism Design-Analysis an Synthesis	Prentice Hall, New Jersey,	1997
3,	Pantelić T., Ćulafić G.	Mehanizmi – Sinteza mehanizama	Mašinski fakultet, Beograd	1986
4,	Suh C.H., Radcliffe C.W.	Kinematics and Mechanism Design	John Wiley	1978
5,	Arora J. S.	Introduction to Optimum Design	McGraw-Hill, Inc	1989

Table 5.2 Course specification

Course:		Engineering Analysis Methods
Course id:	DOM20	
Number of ECTS:	14	
Teachers:		Georgijević S. Milosav, Vladić M. Jovan
Course status:		Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Enabling students for application of method in structural analysis of machine parts by contemporary FEM programme systems and systems for dynamic simulation of transporting machines.

2. Educational outcomes (acquired knowledge):

Understanding theoretical fundamentals of finite elements method, as well as acquiring practical knowledge through elaboration of independent paper, by contemporary programme systems for engineering analysis.

3. Course content/structure:

Fundamental principles of structural modelling. Direct method – rigidity matrix forming. Phase shift method, defining of boundary conditions (loads and phase shift). Automation of engineering analysis appilcation by CAE programmes. Principles of elements, connections, masses and mobile machine load modelling – preprocessing. Forming of dynamic models and operation simulation of transporting machines (ADAMS). Finite elements method and application of MKE in engineering analysis (softwares for FEM). Mathematical interpretation of 2D (triangular and right-angled) final elemnets, 3D final elements (elements in the shape of tetrahedron and quadrilateral) – defining funcitons of shape and phase shift. Numeric integration. Convergetnion requirements. Computer implementation of FEM. Pre processing – defining of models and boundary conditions. Processing (selection of calculation method). Post processing (determination of elements tension). Optimization softwares and methods. Integration of software and forming of virtual machine prototypes (Virtual Prototyping). Operation simulation and behaviour of virutal prototype as project solution control.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled or independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Project	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Janošević, D.	Projektovanje mobilnih mašina	Mašinski fakultet Niš	2000
2,	Vladić, J.	Automatizovano projektovanje, skripta	FTN Novi Sad	2007
3,	Jovanović, M.	Teorija projektovanja konstrukcija računarom	MF Niš	2009
4,	Jovanović, M., Jovanović, J.	CAD/FEA praktikum za projektovanje u mašinstvu	MF Niš i MF Podgorica	2009
5,	Sekulović, M.	Metod konačnih elemenata	Građevinska knjiga, Beograd	1988
6,	Zamani, N.G.	CATIA V5 FEA Tutorials	University of Windsor	2000
7,	-	ANSYS ED Workbench Tutorial - Introduction And Overview	-	2000

Table 5.2 Course specification

Course:		Selected Chapters in Elasticity Theory
Course id:	DM402	
Number of ECTS:	14	

Teacher:	Glavardanov B. Valentin

Course status:	Elective

Number of active teaching classes (weekly)

Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Formulating fundamental set of equations which describe elastic body deformation and solving those equations for actual engineering problems.

2. Educational outcomes (acquired knowledge):

Ability to solve problems that include elastic body deformation with elasticity theory methods.

3. Course content/structure:

Fundamental equations of elasticity theory. The case of geometrical non linear material linear body. Methods for solving equations. Variational methods. Fundamental of mechanical cracks. Load concentration. Thermal load. Plate theory. Non linear theory of plates. Influence of load on plate deformation. Stability problems. Elastic plate stability. Linear highly elastic body. Methods for solving problems in linear high elasticity.

4. Teaching methods:

Lectures. Mentor work.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Project	Yes	30.00	Oral part of the exam	Yes	70.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	SP Timoshenko and JN Goodier	Theory of elasticity	McGraw-Hill	1970
2,	TM Atanackovic and A Guran	Theory of elasticity for scinetists and engineers	Birkhauser, Boston	2000

Table 5.2 Course specification

Course:		
Course id:	DAU005	**Selected Chapters in Optimization Methods**
Number of ECTS:	14	
Teachers:		Jeličić D. Zoran, Petrovački P. Dušan
Course status:		Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Training students to get acquainted with the literature and active research work in nonlinear programming and dynamic optimization.

2. Educational outcomes (acquired knowledge):

A student is trained to actively monitor the scientific literature and research in the field of nonlinear optimization and dynamic programming.

3. Course content/structure:

Nonlinear programming. Dynamic optimization. Network optimization. Part of the teaching activity on the subject is done through independent research and study work in the field of optimization. Research and study work includes active monitoring of the primary sources of scientific, numerical simulations, optional writing paper from the field of optimization.

4. Teaching methods:

Lectures. Seminar papers. Consultations. Research and study work.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	40.00	Oral part of the exam	Yes	60.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Vujanovic, B.D.; Atanackovic	An introduction to modern variational techniques in mechanics and engineering	Boston, MA: Birkhauser (ISBN 0-8176-3399-5/hbk)	2004
2,	Dimitri P.Bertsekas,Angelia Nedic,Asuman Ozdaglar	Convex Analysis and Optimization	Athena Scientific	2003
3,	Dimitri P. Bertsekas	Network Optimization: Continuous and Discrete Models	Athena Scientific	1998
4,	Dimitri P. Bertsekas	Nonlinear Programming: 2nd Edition	Athena Scientific	1999

Table 5.2 Course specification

Course:		Nonlinerar Oscillations
Course id:	DM408	
Number of ECTS:	14	

Teachers:	Cvetićanin J. Livija, Kovačić N. Ivana
Course status:	Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Development of abstract thinking and mastering methods for examining nonlinear oscillations of dynamic systems.

2. Educational outcomes (acquired knowledge):

Ability to research in the field of nonlinear oscillations.

3. Course content/structure:

Continuum kinematics. Tension and deformation theory. Simple materials. Constutive equations. Reduced constitutive equations. Isotopy: solid bodies, fluids, liquid cristals. Fluids: streaming through pipes. Solid bodies: waves and stability. Continuum thermodynamics. Simple materials thermodynamics. Variational principles of continuous environments mechanics.

4. Teaching methods:

Lectures. Mentor work.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	B. Vujanović	Teorja oscilacija	FTN, Novi Sad	1991
2,	A.H. Nayfeh, D.T. Mook	Nonlin Oscillations	New York: John Wiley & Sons	1979

Table 5.2 Course specification

Course:		State and development trends of metrology, quality and fixtures
Course id:	DP006	
Number of ECTS:	14	
Teachers:		Durakbasa M. Numan, Budak M. Igor, Hadžistević J. Miodrag, Hodolič J. Janko, Soković M. Mirko, Vukelić B. Đorđe
Course status:		Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Mastering advanced knowledge of the theory of measurement, the practical realization of measurement, processing of the measurement results, improvement of the quality of the theory and practical application of fixtures.

2. Educational outcomes (acquired knowledge):

Qualification for the solution of scientific research and professional and practical problems in the field: measurements, interpretation of measurement results, improve quality, design and exploitation fixtures.

3. Course content/structure:

Calibration and traceability. Measurement uncertainty. International metrology organizations. Development trends of production metrology. Geometric specifications and their verification. Agile manufacturing and metrology. Development and application of measuring instruments in nanotechnologies. Coordinate measurement for intelligent manufacturing systems. Product quality - new approaches. Methods and techniques of quality improvement. Taguchi method. Fixtures design automation with the help of modern computer and software systems. Display system developed for fixtures design automation. The application of artificial intelligence in the development of modern system of fixtures design automation. Tendencies of development fixtures. Part of teaching the course is conducted through independent study and research work in the field related to the case. Research work includes active monitoring of primary scientific sources, organizing and conducting experiments and statistical analyzes, numerical simulations, possibly in the area of writing subjects.

4. Teaching methods:

Lectures are realized interactively in the form of lectures with theoretical presentations, corresponding examples and practical exercises with the application of modern equipment, information technologies and program systems with the aim to mastering knowledge in the given fields. Apart from lectures consultations are held regularly. Study and research work includes active following of primary scientific resoruces, experiment conduction and numeric simulations as well as writting scientific papers in the field of doctoral dissertation.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Budak I., Hodolič J., Bešić I., Vukelić Đ., Osanna H., Durakbasa N.	Koordinatne merne mašine i CAD inspekcija	Fakultet tehničkih nauka, Novi Sad	2009
2,	Rong, Y., Zhikun, H., Huang, S. H.	Advanced Computer Aided Fixture Design	Academic Pr.	2006
3,	Nee, A.Y.C., Tao, Z. J., Senthil Kumar, A.	Advanced Treatise on Fixture Design and Planning	World Scientific	2004
4,	Stević, M.; Vukelić Đ., Budak I., Matin I., Stepien K., Adamczak S.	Merenje/modeliranje geometrijskih specifikacija proizvoda	Fakultet tehničkih nauka, Novi Sad	2009
5,	Stević, M.	Povećanje tačnosti merenja numerički upravljanih mernih mašina	Fakultet tehničkih nauka, Novi Sad	2006
6,	Budak, I.	Reverzibilno inženjerstvo - preprocesiranje rezultata 3D digitalizacije	Fakultet tehničkih nauka, Novi Sad	2012
7,	Vukelić, Đ.	Automatizovano projektovanje pribora	Fakultet tehničkih nauka, Novi Sad	2012

Table 5.2 Course specification

Course:		Procedures of Plasma Depozition			
Course id:	DP007				
Number of ECTS:	14				
Teachers:		Kakaš I. Damir, Škorić N. Branko			
Course status:		Elective			
Number of active teaching classes (weekly)					
Lectures:	Practical classes:	Other teaching types:	Study research work:		Other classes:
5	0	0	4		0
Precondition courses		None			

1. Educational goal:

This subject`s goal is mastering theory and application of plasma deposition methodology in contemporary industry.

2. Educational outcomes (acquired knowledge):

Acquired knowledge in this subject enables analysis of problem of optimal procedures choice and process parameters with the aim to gain as quality as possible products with minimum production expenses.

3. Course content/structure:

Controle issues and managing plasma. Modern devices for plasma depozition. Development of procedures based on electorn. Hybride techbnologies of plasma depozition.
Partly lectures are realized through independent study and research work in the field of probability, mathematical statistics and engineering experiment theory. Study and research work includes active following of primary scientific sources, organization and conducting experiments and statistical data processing, numeric simulations, possible elaboration of scientific papers in the field of probability, mathematical statistics and engineering experiment theory.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Fauchais, P.	Progress in plasma processing of materials	Begell House Publishers, Inc.	2002
2,	Seshan, K.	Handbook of thin film deposition – Processes and Technologies	Noyes Publications	2002

Table 5.2 Course specification

Course:		Advanced Characterization of Materials
Course id:	DP016	
Number of ECTS:	14	
Teacher:	Šiđanin P. Leposava	
Course status:	Elective	

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Mastering knowledge necessary for material characterisation with the aid of contemporary testing methods

2. Educational outcomes (acquired knowledge):

At the end of the course candidates will have necessary knowledge for independent experimental conducting of contemporary methods for material characterisation.

3. Course content/structure:

Application and significance of contemporary material testing methods. Division of characterisation methods according to material type (metals, ceramics, polyers and composits). Chemical characterisation of materials of bulk samples and small volume samples: optical emission spectroscopy, X ray emission spectroscopy, energy dispersive spectroscopy – EDX, wave dispersive spectroscopy – WDX. Selection and sample preparation for chemical characterisation. Thermal characterisantio methods for materials: TGA, DTA, DSC, DIL and TMA .Selection and sample preparation for thermal characterisation. Material microsturcture characterisation: Quality and quantity X ray structural analysis, light microscopy, skening electorn microscopy, transmission electron microscopy, microscopy, scanning probe microscopy. Choice and sample preparation for microstructure characterisation. Computer analysis application for quantitative phase determination. Mechanical features characterisation: micro and macro strength, ICE phenomenon. Partly lectures are realized through independent study and research work in the field of probability, mathematical statistics and engineering experiment theory. Study and research work includes active following of primary scientific sources, organization and conducting experiments and statistical data processing, numeric simulations, possible elaboration of scientific papers in the field of probability, mathematical statistics and engineering experiment .

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Robert F. Mehl	Metals handbook: Atlas of Microstructures of Industrial Alloys	American Society for Metals	1972
2,	James L. McCall and P.M. French	Metallography in Failure Analysis	Plenum Press	1977
3,	G. Thomas	Transmition Electron Microscopy of Materials	Johan Wiley & Sons	1979
4,	M.H. Loretto & R.E. Smallman	Defect Analysis in Electron Microscopy	Chapman & Hall	1975
5,	J. Ranogajec	Metode karakterizacije materijala	UNS, Tehnološki fakultet	2005

Table 5.2 Course specification

Course:		
Course id:	DP002	**State and Trend in Forming by Material Removal**
Number of ECTS:	14	

Teachers:	Kovač P. Pavel, Kopač I. Janez, Gostimirović P. Marin, Sekulić Lj. Milenko
Course status:	Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Acquiring latest knowledge in the field of forming by material removal and justification of their application in modern practice.

2. Educational outcomes (acquired knowledge):

Acquired knowledge should enable correct designing of product technology, choice of most convenient ways of forming and possibility of designing contemporary formidable systems.

3. Course content/structure:

Contemporary state and research in the field of chip creation process, cutting resistance, thermal occurrences during cutting, roughness of machined surfaces, wear tools study of different cutting processes, machinability of materials. State and trend in the development of new forming processes and theirs performances: highly productive processing, machining of hard materials, dry machining. Machining of new materials, new constructions of tools and machines, application of alternative materials and cooling and lubricant means. Ecological aspects of cutting. Partly lectures are realized through independent study and research work. Study and research work includes active following of primary scientific sources, organization and conducting experiments and statistical data processing, numeric simulations, possible elaboration of scientific papers in the field of probability, mathematical statistics and engineering experiment theory.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Kovač P.	Rezanje metala	FTN, Novi Sad	1998
2,	Gostimirović M.	Upravljanje toplotnim pojavama pri obradi brušenjem	FTN, Novi Sad	2002
3,	P Kovac	Modeliranje procesa obrade-faktorni planovi eksperimenta	FTN, Novi Sad	2006
4,	Milikić, D., Gostimirović, M., Sekulić, M.	Osnove tehnologije obrade rezanjem	FTN, Novi Sad	2008
5,	Trent E., Wright P.	Metal Cutting	Butterworth–Heinemann, Woburn, USA	2000
6,	Grzesik W.	Advanced Machining Processes of Metallic Materials-Theory, Modelling and Applications	Elsevier Science Ltd	2008

Table 5.2 Course specification

Course:		
Course id:	DP008	**Contemporary Methods and TPD Systems**
Number of ECTS:	14	
Teachers:		Plančak E. Miroslav, Vilotić Ž. Dragiša
Course status:		Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

The aim of this subject is mastering contemporary methods and systems of plastic metal forming technology.

2. Educational outcomes (acquired knowledge):

Upon passing this exam, student is expected to demosntrate: detailed knowledge of contemporary technological processes of plastic deforming technology, knowing working system elements, ability to design contemporary processes by using modern designing, creativity in application of certain contemporary plastic deforming methods, crating basic strategic concepts and methods of plastic deformin technologies.

3. Course content/structure:

Introduciton into volume derforming methods and sheet metal deforming. Method calssification. Contemporary methods for determining tension and deforming state and other relevant parameters of metal sheet processing. Characteristic methods analyses. Contemporary working systems of volume deforming and metal sheet forming. Elements of working system for deforming. New driving plants.
Partly lectures are realized through independent study and research work in the field of probability, mathematical statistics and engineering experiment theory. Study and research work includes active following of primary scientific sources, organization and conducting experiments and statistical data processing, numeric simulations, possible elaboration of scientific papers in the field of probability, mathematical statistics and engineering experiment theory.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Avitzur, B.	Metal Forming Proceses	Mc-Graw –Hill, New York	1968
2,	Lange, K.	Lehrbuch der Umformtechnik, Band 1,2,3	Springer, Verlag, Berlin	1974
3,	Chakrabaty J	Theory of Plasticity	Elsevier	2006
4,	Altan T.	Cold and Hot Forging	ASM International	2005

Table 5.2 Course specification

Course:		State and Developing Trend in the Field of Machine Tools, FTS, and Automation of Designing Processes
Course id:	DP003	
Number of ECTS:	14	
Teacher:		Zeljković V. Milan
Course status:		Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Acquiring knowledge in the field of development and exploitation of modern machine tools and flexible technological structures.

2. Educational outcomes (acquired knowledge):

Introduction to tendencies of development in designing modern machine tools and flexible technological structures, as well as with the development in automation of designing procedures.

3. Course content/structure:

Recent development and state in the field of machine toosl (MT) and flexible technologicas (FT) structures. Statistics of machine tool structure. Working system dynamics. Thermal behaviour of working systems. Prerequisits for automatic machine tools and FT control. Experimental and computer identification of machine tools and systems. Contemporary approach to development and design of machine tolls. Contemporary concepts of building machine tools (machines with parallel kinematics). Remaining components in automated flexible technological structures, measure and control systems, transport and storing systems, computer integrated production (CIM). Partly lectures are realized through independent study and research work in the field of probability, mathematical statistics and engineering experiment theory. Study and research work includes active following of primary scientific sources, organization and conducting experiments and statistical data processing, numeric simulations, possible elaboration of scientific papers in the field of probability, mathematical statistics and engineering experiment theory.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Zeljković, M.	Sistema za automatizovano projketovanje i predikciju ponašanja sklopova glavnih vretena mašina alatki	FTN, Novi Sad	1996
2,	Borojev, Lj.	Prilog razvoju metodologije projektovanja savremenih mašina alatki ... - doktorska disertacija	FTN, Novi Sad	1994
3,	Kalajdžić, M. i drugi	Fleksibilni tehnološki sistemi u obradi rezanjem, stanje i perspektive razvoja	Naučna konferencija „Mašinstvo za XXI vek", Novi Sad	1995
4,	Tlusty, J.	Manufacturing Processes and Equipment	Upper Saddle River. New Jersey	2000
5,	Bor, C., R., Smith, K., S., Molinari-Tosatti, L.	Parallel kinematic machines: theoretical aspects and industrial requarements	Springer, London	2005

Table 5.2 Course specification

Course:			
Course id:	SAP002		Engineering Materials
Number of ECTS:	14		
Teachers:		Gerić D. Katarina, Baloš S. Sebastian	
Course status:		Elective	

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Expanding and acquiring new knowledge in the field of engineering materials selection and application.

2. Educational outcomes (acquired knowledge):

Expanded and acquired knowledge for mastering types of engineering materials and deciding on material choice for certain products.

3. Course content/structure:

New developing trends of metal, poymers and composites. Metals and alloys: characterisation and features of alloys on the bases of iron, copper, aluminium and titanium. •Ceramica: connections, cristal and amorphous microstructure, balance and reactions, mechanical, electrical, thermical, magnetic and optical characteristics • Polymers: molecule structure, polymerisation, characterisation methods, morphology, mechanical characteristics • Composits: particular, fibre strengthened and laminated composed materials; Choice of materials according to mechanical characteristics, optical strength, fatigue, corrosion and weare resistance. Relation between material selection and forming processes. Materials, estetics and industrial design. Case studies of material choice in automobile and aviation industry, ship building, with bearing.
Partly lectures are realized through independent study and research work in the field of probability, mathematical statistics and engineering experiment theory. Study and research work includes active following of primary scientific sources, organization and conducting experiments and statistical data processing, numeric simulations, possible elaboration of scientific papers in the field of probability, mathematical statistics and engineering experiment theory.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	R. E. Smallman, R. J. Bishop	Metals and Materials	Buttenvorth-Heinemann, Oxford	1995
2,	Arie Rani	Fundamentals of Polymer Engineering	Planum Press, New York	1997
3,	Michel W. Barsoum	Fundamentals of Ceramics	McGraw-Hill, New York	1997
4,	Derek Huli	An Introduction to Composite Materials	Cambridge University Press	1995
5,	B.D.Ratner,A.S.Hoffman,F.J. Schoen,J.E.Lemons	Biomaterials Science	Academic Press	1996
6,	Ashby M.F	Materials selection in mechanical design	Pergamon Press	1992
7,	Charles, J.A. i ostali	Selection an use of engineering materials	Butterworth-Heineman	1997
8,	Ashby, M.F. and Johnson, K.	Materials and design	Elsevier	2004

Table 5.2 Course specification

Course:		Contemporary Energy Technologies			
Course id:	DM218				
Number of ECTS:	14				
Teachers:		Gvozdenac D. Dušan, Jovanović S. Aleksandar, Petrović R. Jovan			
Course status:		Elective			

Number of active teaching classes (weekly)					
Lectures:	Practical classes:	Other teaching types:	Study research work:		Other classes:
5	0	0	4		0

Precondition courses	None

1. Educational goal:

Enabling students for: independent research of contemporary energy technologies, mastering of general, national and other interests and significance of their application in industry and building. This is specially emphasises from the point of view of energy efficiency, supply security, ecological, economical and social conditions.

2. Educational outcomes (acquired knowledge):

Mastering knowledge and contemporary energy technologies will enable students to understand implementation of contemporary energy technologies in industry and buildings with the aim to reduce total energy costs, better perserve environment and total prosperity for final energy user.

3. Course content/structure:

Subject structure enables study of contemporary energy technologies for energy transformation of primeral energy into thermal energy, simultaneous production of thermal and electrical energy, contemporary energy technologies for energy storing with the aim to increase energy efficiency and reducing energy costs.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled or independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	European Comission	Integrated Pollution Prevent and Control	EU	--
2,	CHP Club	The Managers Guide to Combined Heat and Power Systems	SMEITS, Beograd	2005
3,	-	A market assessment, Prepared for: Energy Efficiency and Renewable Energy	U.S Department fo Energy Washington	-
4,	Griffits, R. T.	Combined Heat and Power	Energy Publications, Cambridge	1995
5,	Raya A. K., Sriastava A. P., Dwivedi M.	Power Plan Engineering	New Age Intrenatinal Publischers, Delhi	2006
6,	Paul Breeze	Power Generation Technologies	Elsevier, Burlington	2006

Table 5.2 Course specification

Course:		
Course id:	DM219	**Energy Politics**
Number of ECTS:	14	

Teachers:	Grković R. Vojin, Gvozdenac D. Dušan, Petrović R. Jovan
Course status:	Elective

Number of active teaching classes (weekly)

Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Introduction to political mechanisms at the national and local levels and their significance for rational energy using and climate change control.

2. Educational outcomes (acquired knowledge):

Apart from technical aspects of energy in general, energy efficiency and using renewable energy resources, social and political environment which will enable reaching optimal effects of applied technologies is of great importance.

3. Course content/structure:

Influence of society on the environment; Energy politics and strategy; Priority in energy development in countries in transition; Energy elements in the politics of the Republic of Serbia; Programmes for energy efficiency advancement; Programme for renewable energy resources advancement; Financing projects in the field of energy; Global geopolitical context and energy supply security.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled or independently write scientific papers.

Knowledge evaluation (maximum 100 points)

Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature

Ord.	Author	Title	Publisher	Year
1,	Morvaj Z, Bukarica V.	Immediate challenge of combating climate change: effective implementation of energy efficiency policies	21st World Energy Congress, 12-16 September, Montreal	2010
2,	European Commission (2006): Action Plan for Energy Efficiency COM(2006)545 final,	Renewable Energy	OXFORD University Press	2004
3,	--	European Environment Agency (2009): Annual European Community greenhouse gas inventory 1990–2007 and inventory report 2009, Office for Official Publications of the European Communities,	ISBN 978-92-9167-980-5, Copenhagen	2009
4,	Joosen S, Harmelink M.	Guidelines for the ex-post evaluation of 20 energy efficiency instruments applied across Europe, publication published within AID-EE project supported by Intelligent Energy Europe programme	-	2006

Table 5.2 Course specification

Course:		State and Tendencies in Development of Unconventional Forming Processes
Course id:	DP020	
Number of ECTS:	14	
Teachers:		Gostimirović P. Marin, Kovač P. Pavel, Sekulić Lj. Milenko
Course status:		Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Acquiring advanced knowledge in the field of non-conventional processing and justification of theirs application, especially in machining hard materials and complex geometry products.

2. Educational outcomes (acquired knowledge):

Acquired knowledge should enable proper design of non-conventional technological process. For chosen process type proper design of products is possible, selection of optimal machining parameters and possibility of constructing advanced non-conventional manufacturing systems.

3. Course content/structure:

State and directions of contemporary research in field of non-conventional processes, especially in direction of technological processes improvement. Justification of application non-conventional processes: abrasive jet machining, water jet machining, ultrasound machining, electrical discharge machining. Innovation of existing processes and implementation possibilities of newly developed non-conventional processes. Development directions of combined non-conventional processes or combined with conventional processes.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Gostimirović M.	Nekonvencionalni postupci obrade.	Fakultet tehničkih nauka, Novi Sad	2012
2,	El-Hofy H.	Advanced machining processes, Nontradicional and hybrid machining processes	McGraw-Hill Professional	2005
3,	Grzesik W.	Advanced Machining Processes of Metallic Materials-Theory, Modelling and Applications	Elsevier Science Ltd	2008

Table 5.2 Course specification

Course:		
Course id:	DP027	Advanced technologies of plastics packiging manufacturing
Number of ECTS:	14	

Teacher:	Plančak E. Miroslav

Course status:	Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Familiarize the students with plastic packiging manufacturing procedures.

2. Educational outcomes (acquired knowledge):

Student should become familiar with the basic types of plastics packiging, their properties and how they are produced.

3. Course content/structure:

Introduction and historical development of plastics packaging. Development of new packaging materials. Polymer structure and properties. Identification of polymers.
Plastics materials in packaging. Extrusion, calendering. Thin-walled packaging manufacturing.
Lamination and coating. Flexible packaging. Film welding.
Thermoforming. Foil welding.
Injection moulding.
Roatational moulding.
Manufacturing of closures and tubes.
Blow moulding.
Transport packaging.
Plastic packaging testing. Packaging and environment.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	R.J. Hernandez, S E.M. Selke, J.D. Cutter	Plastics Packaging: properties, processing, applications and regulations	Hanser Publishers, Munich	2000
2,	Čatić, I.	Proizvodnja polimernih tvorevina	Društvo za plastiku i gumu Zagreb	2006
3,	O.E. Ahlhaus	Verpackung mit Kunststoffen	Carl Hanser Verlag, Munchen	1997
4,	K. Galić i dr.	Analiza ambalažnog materijala	HINUS, Zagreb	2000

Table 5.2 Course specification

Course:		State and Tendencies in Development of Metrology, Quality and Equipment
Course id:	DP005	
Number of ECTS:	14	

Teachers:	Plančak E. Miroslav, Vilotić Ž. Dragiša
Course status:	Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

This subject is aimed at exploring the behavior of materials under different conditions of deformation for maximum utilization of the potential plasticity

2. Educational outcomes (acquired knowledge):

The knowledge gained from this course provides application of a methodology to determine the Forming Limit Diagram in the bulk metal and sheet metal forming and process optimization with the criterion of the minimum number of process phases.

3. Course content/structure:

Selected topics in the theory of plasticity. Plasticity of materials and methods of determination. Formability in the bulk metal forming, stress state influence on the occurrence of fracture during plastic deformation, deformation history. The methodology for determining the Forming Limit Diagram in bulk metal forming. Formability of materials in upsetting, forging, drawing and extrusion. Formability of materials in sheet metal forming, anisotropy of materials. Simulation test methods for sheet metal formability. Evaluation of sheet metal formability based on mechanical tests. The methodology for determining Keeler-Goodwin's chart, the influence of deformation history on the Forming Limit. Optimization of the forming process due to material deformation criterion. Part of course is conducted through independent study and research work in the field related to the case. Research work includes active monitoring of primary scientific sources, organizing and conducting experiments and statistical analyzes, numerical simulations, possibly paper writing in the area of subjects.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Kolmogorov, V. L.	Mehanika obrabotki metalov davleniem	UPI, Ekaterinburg	2001
2,	B. Avitzur	Metal forming: Processes and Analysis	McGraw-Hill, New York	1968
3,	Vujović V.	Deformabilnost	FTN, Novi Sad	1992
4,	Vilotić D.	Ponašanje čeličnih materijala u različitim obradnim sistemima hladnog zapreminskog deformisanja	FTN, Novi Sad	1987
5,	Kolmogorov V	Udranoe nagruženje i razrušenie tverdih tel	IMaš UrO RAN	2006

Table 5.2 Course specification

Course:			
Course id:	DP004	Advanced Technologies in Casting and Heat Treatment	
Number of ECTS:	14		
Teachers:		Kakaš I. Damir, Škorić N. Branko	
Course status:		Elective	

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

This subject`s aim is to master theory, latest accomplishments and application of heat treatment an casting in mechanical engineering in contemporary industry.

2. Educational outcomes (acquired knowledge):

Acquired knowledge in this subject enables analysis of problems of choosing optimal procedures and process parameters with the aim to acquire as quality as possible products with minimum production costs.

3. Course content/structure:

Position of thermal forming in contemporary mechanical engineering and contemporary industry. Thermal processing of new materials and alloys. Development of equipment and technologies in the filed of thermal processing. New controling procedures. Significance of technologies in casting. Specific points in casting magnesium and magnesium alloys. Specific features of casting titanium and titanium alloys. Casting equoipment development. Specific constructions of contemporary casting tools.
Partly lectures are realized through independent study and research work in the field of probability, mathematical statistics and engineering experiment theory. Study and research work includes active following of primary scientific sources, organization and conducting experiments and statistical data processing, numeric simulations, possible elaboration of scientific papers in the field of probability, mathematical statistics and engineering experiment theory.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	George E. Totten	Steel Heat Treatment Handbook - 2 Volume Set	CRC Press	2006
2,	Campbell, J.	Castings, Second Edition	Elsevier Butterworth-Heinemmann, Oxford	2003
3,	Campbell, J.	Castings Practise: The Ten Rules of Castings	Elsevier Butterworth-Heinemmann, Oxford	2004

Table 5.2 Course specification

Course:		Experimental testing and analysis in mechanization - advanced topics
Course id:	DM412	
Number of ECTS:	14	

Teacher:	Zuber F. Ninoslav

Course status:	Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Acquisition of in-depth knowledge of experimental testing and analysis in mechanization

2. Educational outcomes (acquired knowledge):

Acquisition of basic knowledge for scientific work in the field of experimental investigation in mechanization with special attention on methods of stress – strain state determination using strain gauges and investigation of operating states of rotating machinery using vibrodiagnostical methods.

3. Course content/structure:

Application of strain gauges. Stress - strain relations. Strain gauge principle of operation. Selection of strain gauges. Application of strain gauge on test object. Wheatston bridge. Reduction of measurement errors. Special load cases. Measurement amplifiers. Software for analysis (HBM Catman). Signal types. Signal representation in time and frequency domains. Fourier transform. System analysis (excitation and response), transfer function, coherence function. Digital signal processing and errors. Vibration of rotating machinery - spectral maps, order tracking, relative phase analysis, orbit analysis, experimental modal analysis. Portable and stationary acquisition systems. Machinery faults in low frequency domain, midlle frequency domain, high frequency domain. Signature analysis. Software for data analysis: 01dB-Metravib XPR, 01dB-Metravib dbFA, Vibrant MeScope etc.

4. Teaching methods:

Lectures, self-study research, consultancy. Lectures are conducted in combination. Lectures in theoretical part are followed by examples which serve to clarify the theoretical part of the curriculum. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled or independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Project	Yes	30.00	Oral part of the exam	Yes	50.00
Term paper	Yes	20.00			

Literature				
Ord.	Author	Title	Publisher	Year
1,	Robert Bond Randall	Vibration-based Condition Monitoring: Industrial, Aerospace and Automotive Applications	Wiley	2011
2,	Anders Brandt	Noise and Vibration Analysis: Signal Analysis and Experimental Procedures	Wiley	2011
3,	Robert Bond Randall	Frequency analysis	BK	1987
4,	Kihong Shin, Joseph Hammond	Fundamentals of Signal Processing for Sound and Vibration Engineers	S Wiley	2008
5,	Karl Hoffman	An Introduction to Measurements using Strain Gages	HBM	1989

Table 5.2 Course specification

Course:		Energy Management in Idustry
Course id:	DM217	
Number of ECTS:	14	

Teachers:	Grković R. Vojin, Gvozdenac D. Dušan, Petrović R. Jovan
Course status:	Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Enabling students for: systematic study of industrial energy systems, role and significance of individual energy systems in total company energy consumption, evaluation of energy systems on company business results, possibilities for improvement of energy efficiency in industry energy systems.

2. Educational outcomes (acquired knowledge):

Acquired knowledge will enable students to understand relations between energy and production flows in industry, influence of energy on total production costs, possibilities of energy costs reduction.

3. Course content/structure:

Eneregy management in industry, Relation between energy consumption and production, Energy indicators, Implementation of energy management systems, Energy management and protection of environment as initiator of integral management, Industrial energy systems, Steam energy systems, Electiric energy systems, Cooling systems.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled or independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Morvay, Z, Gvozdenac, D.	Applied Energy and Environmental Management	John Wiley and Sons	2008
2,	Vuorinen, A.	Planning of Optimal Power Systems	Ekoenergo Oy, Finland	2008
3,	Gvozdenac, D, Vanjur, I.	Rashladna tehnika	FTN, Novi Sad	2010

Table 5.2 Course specification

Course:		Collaborative Engineering		
Course id:	DP022			
Number of ECTS:	14			
Teacher:		Milošević P. Mijodrag		
Course status:		Elective		

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

The basic aim is introduction to the concept and principles of collaborative engineering in framework of distributed manufacturing systems.

2. Educational outcomes (acquired knowledge):

Introduction to modern approach in manufacturing by application of collaborative engineering concept. Possibilities and methods of WEB-based collaborative engineering within distributive manufacturing systems.

3. Course content/structure:

Collaborative design approach. Collaborative design environments. Collaborative product development systems. Aspects of distribution and collaboration. Synchronous and asynchronous communication. Collaborative design functions. Collaboration based on visualization. Co-design collaboration. Hierarchical (CE-based) collaboration. Collaborative systems based on visualization. Efficient 3D visualization of objects in web applications. Co-design collaborative systems. Architecture of co-design collaborative systems. Coordination and management of collaborative design processes. Hierarchical (CE-based) collaborative systems. Hierarchical collaborative environment. Mechanisms for system integration. Data-centric integration. Service-centric integration. Collaborative and distributed process planning. Overview of the developed systems for collaborative and distributed process planning.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Milošević, M.	Kolaborativni sistem za projektovanje tehnoloških procesa izrade proizvoda baziran na internet tehnologijama - Doktorska disertacija	Fakultet tehničkih nauka	2012
2,	Li, W.,D., Ong, S.K., Nee, A.Y.C.	Integrated and Collaborative Product Development Environment	World Scientific	2006
3,	Wang, L., Nee, Y.C.A.:	Collaborative Design and Planning for Digital Manufacturing	Springer-Verlag London Ltd.	2009
4,	Kamrani, A.K., Nasr, E.A.	Collaborative Engineering - Theory and Practice	Springer Science+Business Media	2008
5,	Coleman, D., Levine, S.	Collaboration 2.0 - Technology and Best Practices for Successful Collaboration in a Web 2.0 World	HappyAbout.info	2008
6,	Kühnle, H.	Distributed Manufacturing - Paradigm, Concept, Solutions and Examples	Springer-Verlag London Ltd.	2010
7,	McClellan, M.	Collaborative Manufacturing	St. Lucie Press	2003
8,	Kock, N.	Encyclopedia of E-Collaboration	IGI Publishing	2008

Table 5.2 Course specification

Course:		Modern methods for polymers investigation
Course id:	DP026	
Number of ECTS:	14	

Teachers:	Pilić M. Branka, Vilotić Ž. Dragiša

Course status:	Elective

Number of active teaching classes (weekly)

Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

The goal of this course is to master theoretical and practical knowledge in the field of polymer testing.

2. Educational outcomes (acquired knowledge):

By mastering this subject, student acquires following knowledge, skills and capabilities: - to independently choose measuring techniques for specific tests, to process results and to relate polymers properties to their structure

3. Course content/structure:

Theoretical foundations and principles of polymer structure investigation methods: infrared sprectroscopy (IR) and nuclear magnetic resonance (NMR), molecular weight and molecular weight distribution by polymer gel chromatography, light scattering, viscosity measurement of dilute solutions, the method of MALDI-TOF-MS. Theoretical foundations and principles of methods for testing polymer structure, determination of degree of crystallinity differential scanning calorimetry, DSC, infrared spectroscopy IR, microscopy, optical microscop, electron microscop, transmission electron microscope, scanning electron microscope. Theoretical foundations and principles of the method for thermal, mechanical and dynamic-mechanical testing of polymers, relaxation stress, creep.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Slobodan Jovanović, Katarina Jeremić	Karakterisanje polimera	Tehnološko-metalurški fakultet Beograd	2007
2,	Shroder, Mulleler, Arndt	Polymer characterization	Hanser	1982
3,	Campbell D., Pethrick R.A. and White J.R.	Polymer characterization	Stanley Thornes Ltd. 2000	2000
4,	Bernhard Wunderlich	Thermal analysis of polymeric materials	Springer	2005

Table 5.2 Course specification

Course:		Preparation for the Application of Doctoral Dissertation Topic
Course id:	SID05	
Number of ECTS:	2	
Teachers:		
Course status:	Mandatory	

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
0	0	0	2	0

Precondition courses	None

1. Educational goal:

Overview of situation in the area of the proposed topic for doctoral dissertation based on the scientific literature analysis – books, monographs, papers in referential journals, papers from conference proceedings, available documentation at websites, etc. The objective is to overview the possibilities of the thesis and scientific potential of the topic.

2. Educational outcomes (acquired knowledge):

Study on the potentials of the proposed doctoral dissertation topic, i.e. the systematized knowledge in the area of the research topic for doctoral dissertation, as well as clear directions in further research on the topic.

3. Course content/structure:

Defining the wider area of the doctoral dissertation topic and key motives for research. Overview of literature on the basis of available scientific books, monographs, papers in referential journals, papers from conference proceedings, available documentation at websites, etc. Study on the potentials of the proposed doctoral dissertation topic.

4. Teaching methods:

Teaching is performed as tutorials.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	70.00	Oral part of the exam	Yes	30.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Priznati naučnici i stručnjaci iz oblasti teme Dr teze	Razna naučna dela		sve

Table 5.2 Course specification

Course:		Energy Management Methods			
Course id:	DM309				
Number of ECTS:	14				
Teacher:		Gvozdenac D. Dušan			
Course status:		Elective			

Number of active teaching classes (weekly)					
Lectures:	Practical classes:	Other teaching types:	Study research work:		Other classes:
5	0	0	4		0

Precondition courses	None

1. Educational goal:

This field should enable students to acquire theoretical and primarily practical knowledge on functioning energy systems and their efficiency and management. This educational profile should enable students to in further practical work contributes on local and national level in social and economical and technological development.

2. Educational outcomes (acquired knowledge):

Mastering academic, theoretical and methodological scinetific disciplines within this subject will help students to acquire general knowledge and skills in the field of economy, power engineering, environment protection and will be able to: critically and independently consider theory and practice approach, and apply metodology in research work, develop communication skills and businee ethics respect, apply acquired knowledge in practical work. Students who attend the course in ENERGY MANAGEMENT METHODS should be capable to manage small, middlle and big energy systems as well as activities on planning and creating energy politics on local and national level.

3. Course content/structure:

Theory lectures – significance of energy management and rational energy consumption in idustry. – Defining energy flow, Relationship between power engineering and production. Energy indicators and energy profile in production and consumption of energy. – Energy laws and standards which influence energy consumption, Indicators for energy consumption. – Energy efficiency analysis in industry - Energy efficiency analysis in construction works. Energy saving measures. Practical lecutres: carrying out energy bilance of a company and proposing measures for energy managment improvement (seminar paper)

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled or independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Devins, D.W.	ENERGY: ITS PHYICAL IMPACT ON THE ENVIRONMENT	Robert E. Krieger pub.co, Malabar, Florida	1988
2,	Petrecca, G.	INDUSTRIAL ENERGY MANAGEMENT: Principles and applications	Kluwer Academic Publishers	1993
3,	Capehart, B. L., Turner, W. C., Kennedy, W. J.	GUIDE TO ENERGY MANAGEMENT (4th edition)	The Fairmont Press	2003
4,	Harris, P.	PREPARING THE COMPANY ENERGY PLAN – A Management planning guide	Energy Publications	1986
5,	Capehart, B. L., Turner, W. C., Kennedy, W. J.	GUIDE TO ENERGY MANAGEMENT (4th edition)	The Fairmont Press	2003
6,	D.H.F. Lui, B. Liptak (editors)	ENVIRONMENTAL ENGINEER"S HANDBOOK	CRC Press	1999
7,	Schnell, K.B., Brown, C.A.	AIR POLLUTION TECHNOLOGY HANDBOOK	CRC Press	2002
8,	Shepherd, W., Shepherd, D. W.	ENERGY STUDIES (2nd edition)	Imperial College Press, London	2003
9,	Eastop, Croft	ENERGY EFFICIENCY FOR ENGINEERS AND TECHNOLOGISTS	Longman Scientific & Technical, NY, USA	1990

Table 5.2 Course specification

Course:		Mathematical Process Modelling
Course id:	DM310	
Number of ECTS:	14	
Teacher:		Grković R. Vojin
Course status:		Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

The subject`s objective is to enable doctoral students to acquire scinetific compentences and academic skills in the field of mathematical modelling (simulation) of technical processes. This includes, among other, development of creative skills of analysis and synthesis of problems and ability of critical thinking.

2. Educational outcomes (acquired knowledge):

Outome and purpose of the subject are education and enabliing students for quality indivudual and team scientific and research work and using techniques for creating virtual processes and numeric experiments in mathematical modelling technical processes.

3. Course content/structure:

The content of the subject includes study of contemporary theories of process modelling and corresponding mathematicla aparatus. Modelling application in simple processes and processes in individual energy and process devices. Complex process modelling in energy and process plants and complex processing in energy and process systems.
Partly lectures are realized through independent study and research work in the field of probability, mathematical statistics and engineering experiment theory. Study and research work includes active following of primary scientific sources, organization and conducting experiments and statistical data processing, numeric simulations, possible elaboration of scientific papers in the field of probability, mathematical statistics and engineering experiment.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Theoretical part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Razni autori	Modelling & Simulation in Materials Science & Engineering (Časopis)		2007
2,	Stahara S. S.	Develop. of a Turbomach. Design Optimiz. Procedure Using Multiple Parametar Non Linear Perturbation Method		1984
3,	Chernobrovkin A. A.	Numerical Simulations of Complex Turbomachinery Flows		1999
4,	Ravindran A., Ragsdell K. M. and Reklaitis G. V.	Engeering Optimization		2006
5,	Ceragioli F., Dontchev A., Furuta H. and Marti K.	System Modeling and Optimization: Proceedings of the 22nd IFIP TC7 Conferenc; Jully 18-22, 2005, Turin, Italy		2006
6,	Ross Sheldon	Simulation		2001
7,	Ziegler B. P., Kim T. G. and Praehofer H.	Theory of Modeling and Simulation	Academic Press	2000
8,	Razni autori	Simulation Modelling Practice & Theory (Časopis)		2007
9,	Razni autori	Simulation Practice & Theory (Časopis)		2007
10,	Razni autori	International Journal of Simulation Modelling (Časopis)		2007

Table 5.2 Course specification

Course:		Process Kinetics		
Course id:	DM313			
Number of ECTS:	14			
Teachers:		Dragutinović D. Gordan, Đaković D. Damir, Sokolović S. Dunja, Vićević D. Marija		
Course status:		Elective		

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Introducing students to problems of process kinetics.

2. Educational outcomes (acquired knowledge):

Students will be capable to solve problems of process kinetics.

3. Course content/structure:

Various aspects of process kinetics are analysed, including reactions in gass and liquide phase, on surface. Problems are observed and discussed from the point of view of exhaust gases in atmosphere,
Partly lectures are realized through independent study and research work in the field of probability, mathematical statistics and engineering experiment theory. Study and research work includes active following of primary scientific sources, organization and conducting experiments and statistical data processing, numeric simulations, possible elaboration of scientific papers in the field of probability, mathematical statistics and engineering experiment.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Milan Dimić	Kinetika procesa	skripta	2007

Table 5.2 Course specification

Course:			
Course id:	DM316		**Risk Technologies**
Number of ECTS:	14		
Teacher:		Jovanović S. Aleksandar	
Course status:		Elective	

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

The aim of the subject is for students to achieve competences and academic skills in the field of risk technologies, including development of creative skills of analysis and synthesis of problems and ability of critical analysis.

2. Educational outcomes (acquired knowledge):

The outcome and purpose of the subject are education and enabling students for quality – independent and team – scientific and research work in the field of risk technologies. The subject outcome is acquiring necessary scientific and professional competences of doctoral students in this field.

3. Course content/structure:

Theoretical thesis on risk technologies. Criteria and methods on risk evaluation incident consequences evaluation. Numeric and information problem treating. Problems of development and simulation models application and communication software. Partly lectures are realized through independent study and research work in the field of probability, mathematical statistics and engineering experiment theory. Study and research work includes active following of primary scientific sources, organization and conducting experiments and statistical data processing, numeric simulations, possible elaboration of scientific papers in the field of probability, mathematical statistics and engineering experiment.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	40.00	Oral part of the exam	Yes	60.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Jovanovic, A.	Risk-based inspection and maintenance in power and process plants in Europe.	Nuclear Engineer and Design	2003
2,	Jovanovic, A., De Witte, M.	The hypertext based reference procedure used in expert system for life assessme		1991

Table 5.2 Course specification

Course:			
Course id:	DM318	Contemporary Methods for Turbomachine Design	
Number of ECTS:	14		
Teacher:		Grković R. Vojin	
Course status:		Elective	

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

The aim of the subject is for doctoral students to reach scientific competences and academic skills in the field of contemporary methods for turbomachine design. That includes development of creative skills of analysis and synthesis of problems and abilities of critical analysis and mastering specific practical skills for professional realization.

2. Educational outcomes (acquired knowledge):

The aim and the purpose of the subject are education and enabling doctoral students for quality – independent and team – scientific and research work in the field of Contemporary methods for trubomachine design. Creating basis for the development of new technologies and procedures which contribute to further development of industry and science. Acquiring appropriate competences of doctoral students.

3. Course content/structure:

Theoretical basis for development of turbomachine design methods as well as high technology machine. Methods based on quasi two dimensional calculations. Methods on the basis of quasi three dimensional and three dimensional calculations. Basic problems of calculation method development. Problem of design inclusion of nonstationary processes in turbines. Calculation methods only single grating.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled or independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Horlock J. H.	Advanced Gas Turbine Cycles		2007
2,	Wilson D. G. and Theodosios K.	The Design of High-Efficiency Turbomachinery and Gas Turbines		1998
3,	Razni autori	International Journal of Turbo & Jet-Engines (Časopis)		2007
4,	Razni autori	Turbomachinery International (Časopis)		2007
5,	Razni autori	Transactions of the ASME Journal for Gas Turbines and Powewr (Časopis)	American Society of Mechanical Engineers	2007
6,	Horlock J. H.	Combined Power Plants: Incliding Combined Cycle Gas Turbine (CCGT) Plants		2001
7,	Chernobrovkin A. A.	Numerical Simulations of Complex Turbomachinery Flows		1999
8,	Stahara S. S.	Development of a Turbomachinery Design Optimization Procedure Using Multiple Parametar Non Linear Perturbation Method		1984

Table 5.2 Course specification

Course:			
Course id:	DM319	Optimization of Power Machine and Thermal Equipment	
Number of ECTS:	14		

Teacher:	Grković R. Vojin

Course status:	Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

The subject`s aim is for students to achieve scientific competence and academic skills in the field of optimization of power and process systems, plants, machines. This includes development of creative skills for analysis and synthesis of critical thinking problems.

2. Educational outcomes (acquired knowledge):

The outcome and purpose of the subject are education and acquiring ability for quality – independent and team – scientific and research work in the field of optimization of power machines and thermal equipment. The outcome of the subject is acquiring necessary scientific and professional competences in this field.

3. Course content/structure:

Theoretical basis of optimization. Design optimization. Process optimization. Optimization method. Optimization criteria. Goal function. Optimization models development problems. Some issues of optimization models application.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled or independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Razni autori	Optimization and Engineering (Časopis)		2007
2,	Ceragioli F., Dontchev A., Furuta H. and Marti K.	System Modeling and Optimization: Proceedings of the 22nd IFIP TC7 Conference; Jully 18-22, 2005, Turin, Italy</eng		2006
3,	Stahara S. S.	Development of a Turbomachinery Design Optimization Procedure Using Multiple Parametar Non Linear Perturbation Method		1984
4,	Ravindran A., Ragsdell K. M. and Reklaitis G. V.	Engeering Optimization		2006
5,	Razni autori	Engineering Optimization (Časopis)		2007
6,	Razni autori	Journal of Optimization Theory & Applications		2007

Table 5.2 Course specification

Course:		
Course id:	DM322	**Numeric Methods in Power Machines and Plants**
Number of ECTS:	14	
Teacher:		Uzelac S. Zorica
Course status:		Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Enabling students for abstract thinking and acquiring knowledge in numeric mathematics.

2. Educational outcomes (acquired knowledge):

Student is competent to use methods of numeric solving mathematic models in further education and professional subjects.

3. Course content/structure:

Numeric solving of linear equation systems: direct procedures, iterative procedures. Numeric solving of non linear equations. Numeric solving nonlinear equation systems. Interpolation and approximation: interpolation methods, average square approximation, approximation, spectral approximation. Numeric integration: Newton-Cotes formulas, Gaussian quadrature formulae.

4. Teaching methods:

Lectures. Consultations. In lectures theoretical part is presented followed by appropriate examples in order to understand subject content easier. Along with lectures consultations are held regularly.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Radunović,D.	Numeričke metode	Gradjevinska knjiga, Beograd	1995
2,	Herceg,D., Krejić, N.	Numerička analiza	Stylos, Novi Sad	1997
3,	Herceg,D., Herceg,Dj.	Numerička matematika	Stylos, Novi Sad	2003
4,	Mathews, J. H	Numerical Methods for Mathematics, Sciences and Engineering,	Prentice - Hall Inc.	1992

Table 5.2 Course specification

Course:			
Course id:	DM403	**Mathematical Rod Theory**	
Number of ECTS:	14		
Teachers:		Maretić B. Ratko, Novaković N. Branislava	
Course status:		Elective	

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Formulating and solving problems of elastic rod stability theory.

2. Educational outcomes (acquired knowledge):

Ability to apply methods of mathematical theory of elastic rods in solving engineering problems.

3. Course content/structure:

Basic equations of nonlinear theory of elastic rods. Great deformations and material nonlinearity. Plain and spatial deformations. Influence of compressibility axis and sharing load on balance equations and movement. Stability analysis procedures. Euler`s method and their relation to bifurcations. Energy method. Ljapunov dynamic method and their relation to Euler`s and energy method. Examples of elastic rods stability analysis.

4. Teaching methods:

Lectures. Mentor work. Science and research work.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Project	Yes	30.00	Oral part of the exam	Yes	70.00
Literature					
Ord.	Author	Title		Publisher	Year
1,	T. Atanackovic	Stability Theory of Elastic Rods		World Scientific	1997

Table 5.2 Course specification

Course:		
Course id:	DM405	**Chaos in Dynamic Systems**
Number of ECTS:	14	
Teacher:		Cvetićanin J. Livija
Course status:		Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Development of abstract thinking and mastering methods of chaos testing in dynamic systems.

2. Educational outcomes (acquired knowledge):

Ability to recognize and analyse chaotic movements of mechanic systems.

3. Course content/structure:

Qualitative dynamics. Vector field as a dynamic system. Balance position and their stability. Attractors. Poincare conjecture. Bifurcation of periodic orbits. Chaos in deterministic systems. Criterion for chaos existing. Melnikov criterion. Numerical method for chaotic movement analysis. Qualitative measures of deterministic chaos. Ljapunov characteristic exponent. Strange attractors. Examples of chaos: Van der Pol`s oscillator, Duffing equation, Lorenz equations.

4. Teaching methods:

Lectures. Mentor work.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	J.M.T. Thompson and H.B. Stewart	Nonlinear Dynamics and Chaos	John Wiley and Sons, NY	1986
2,	S. Wiggins	Global Bifurcations and Chaos	Springer-Verlag, NY	1988
3,	J. Guckenheimer and P. Holmes	Nonlinear Oscillations, Dynamical Systems, and Bifurcations of Vector Fields	Springer-Verlag NY	1983

Table 5.2 Course specification

Course:		
Course id:	DM406	**Nonsmooth Mechanics and Optimization**
Number of ECTS:	14	
Teacher:		Spasić T. Dragan
Course status:		Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Application of nonsmooth mathematical analysis in studying of mechanical systems movement and acquiring optimal solutions.

2. Educational outcomes (acquired knowledge):

Ability to analyse system with unilateral limit movement, in the presence of regular and impact force, with or without dry friction.

3. Course content/structure:

Elements of nonsmoothe mathematical analysis: general and multivalue functions. Unilateral functions. Differential equations. Differential inclusions. Complementar formulations. Systems with unilateral limitations. Variational principles and unilateral limitations. Collision of two or more bodies. Moor`s process. Stability of nonsmooth dynamic systems with unilateral limitations. Quazidifferential functions and sets. Quazidifferential optimization. Algorithms of nonsmooth optimization. Application in robotics in theory of oscillation and economy.

4. Teaching methods:

Lectures. Mentor work.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Project	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	B. Brogliato	Nonsmooth mechanics, models, dynamics and control	Springer London	1999
2,	MDP Monteiro Marques	Differential inclusions in nonsmooth mechanical problems	Birkhauser	1993
3,	Demyanov Stavroulakis Polyakova Panagiotopoulos	Quasidifferntiability and nonsmooth modelling in mechanics, engineering and economics	Kluwer	1996

Table 5.2 Course specification

Course:		
Course id:	DM407	Nonlinear Mechanics with Nonconservative Properties
Number of ECTS:	14	

Teacher:	Simić S. Srboljub

Course status:	Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Acquiring knowledge of basic principles of analysis of nonlinear and nonconservative mechanical systems.

2. Educational outcomes (acquired knowledge):

Ability to apply the methods of analysis of nonlinear and nonconservative systems in solving engineering problems.

3. Course content/structure:

Conservation laws of conservative and nonconservative dynamical systems. Theorem of Emmy Noether. Generalized Killing's equations. Application of Hamilton-Jacobi method and the field method in nonlinear and nonconservative mechanics. Applications in the theory of nonlinear oscillations. Variational principles with vanishing parameter. Variational principle with noncomutative variational rule. Gauss' principle.

4. Teaching methods:

Lectures. Mentor work.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Project	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	B.D. Vujanovic and T.M. Atanackovic	An introduction to modern variational techniques in mechanics	Birkhauser Boston	2004
2,	B.D. Vujanovic and S.E. Jones	Variational methods in nonconservative phenomena	Academic Press NY	1989

Table 5.2 Course specification

Course:		
Course id:	DM409	Selected Chapter in Power and Motion Transmission
Number of ECTS:	14	

Teachers:	Čavić M. Maja, Navalušić V. Slobodan
Course status:	Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Acquiring advanced knowledge in the field of power transmission and movement.

2. Educational outcomes (acquired knowledge):

Students are prepared for development, research, individual project work and application of contemporary methods in the field of power transmission and movement.

3. Course content/structure:

Theoretical lectures: Special mechanisms (Intermitent motion mechanism, Mechanisms with high transmission ratio etc.), Mechanisms with elastic members, Mechanisms characteristic for specific field of application (Mechanisms in agricultural engineering, Mechanisms in manipulative and transport systems, Mechanisms in medicine, Biologically inspired mechanisms, and similar), Machine dynamics (Problem formulation, Load analysis, Appropriate machine model forming, Problem solving procedures in the field of machine dynamics. Dynamic machine behaviour optimization). Study and research work: Project in which an actual problem needs to be solved. Collecting and studying of written literature, professional journals and other relevant information necessary for solving project problems. Operations with softwares needed for solving project problems (MATLAB, CATIA, etc.)

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled or independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Zlokolica M., Čavić M., Kostić M.	Mehanika mašina	FTN, Novi Sad	2005
2,	Zlokolica M., Cvetićanin L	Prenos snage i kretanja	FTN, Novi Sad	1989
3,	Erdman A., Sandor G.	Mechanism Design-Analysis an Synthesis	Prentice Hall, New Jersey	1997
4,	Litvin F., Fuentes A.	Gear Geometry and Applied Theory	Cambridge University press	2004
5,	Chironis N. P., Sclater N.	Mechanisms and Mechanical Devices Sourcebook	McGraw-Hill Education	2001

Table 5.2 Course specification

Course:		Selected Chapters in Food Processing Machines and Equipment
Course id:	DM410	
Number of ECTS:	14	
Teachers:		Malešev T. Petar, Šostakov S. Rastislav, Vladić M. Jovan
Course status:		Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Enabling students to understand, research, advance and manage development and application of food industry machines, processing, packaging and transport of food products, as well as technological processes and operations in food production with specific characteristics of this production industry and equipment and machines used in it.

2. Educational outcomes (acquired knowledge):

Acquiring knowledge in the selected groups of food industry machines, recognizing and understanding of technological processes and operations in the production and processing of food, connecting the needs of technological processes and characteristics of food industry machines, knowing contemporary trends and specific development of the equipment in the production, processing, packaging and transport of food, ability for independent and team research and development of food production machines and their fitting into technological processes.

3. Course content/structure:

Subject includes the following modules which are chosen according to students interests: food industry machines and processing and operation equipment: liquid materials transport, solid materials transport, material fragmentation, material separation, material mixing , heat transmission, material concentration, crystallization, drying, rectification, adsorption and absorption, extraction, packaging, storing and transport of food product.

4. Teaching methods:

The lecturer choses, together with the student, one or more modules, depending on the magnitude and the interconnection of modules. The lecturer organizes the consultations with the students and, depending on the student number and the interconnection of chosen modules, the lecturer keeps lectures with the purpose of transmitting practical and theoretical knowledge relevant for most of the students. The student studies proposed literature and scientific journals to independently enlarge achieved knowledge and, through the consultations with the lecturer, gets the skill how to write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Vaclavik V.A., Christian E.W.	Essentials of food science	Springer	2000
2,	Redman N.E.	Food Safety	Abc clio	2000
3,	Myer Kutz	Handbook of farm, dairy and food machinery	William Andrew	2000

Table 5.2 Course specification

Course:		Contemporary Approach to Integration of Reverse Engineering of Rapid Prototyping, Tools, Products and Virtual Manufactur
Course id:	DM411	
Number of ECTS:	14	
Teachers:		Budak M. Igor, Plančak E. Miroslav, Lužanin B. Ognjan, Hodolič J. Janko, Vukelić B. Đorđe, Durakbasa M. Numan
Course status:		Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Acquiring knowledge on contemporary approach to integration of reverse engineering modelling, rapid prototyping / tools / products and technologies of virtual manufacturing, as well as opportunities for their practical application.

2. Educational outcomes (acquired knowledge):

Ability to solve scientific and research and professional assignments and problems related to application of integrated systems for reverse engineering modelling and rapid prototyping, tools and products.

3. Course content/structure:

Fundamental terms and definitions in relation to reversible engineering and rapid prototyping, tool creating and producing products. Metodology of reversible engineering modelling and rapid prototyping, tool creating and producing products. Contemoprary approach to integration of reversible engineering and rapid prototyping, tool creating and producing products, Practical application of integrated systems for revesible engineering modelling and rapid prototyping, tool creating and producing products,
Development tendencies of integrated systems for rapid prototyping, tool creating and producing products. Virtual technologies, fundamentals of virtual manufacutring and application of virtual technologies in virtual manufacturing.

4. Teaching methods:

Lectures are realized interactively in the form of lectures with theoretical presentations, corresponding examples and practical exercises with the application of modern equipment, information technologies and program systems with the aim to mastering knowledge in the given fields. Apart from lectures consultations are held regularly. Study and research work includes active following of primary scientific resoruces, experiment conduction and numeric simulations as well as writting scientific papers in the field of doctoral dissertation.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Plančak M.:	Brza izrada prototipova, modela i alata	Fakultet tehničkih nauka, Novi Sad	2009
2,	Budak, I., Hodolič, J., Bešić, I., Vukelić, Đ., Osanna, P. H., Durakbasa, N. M.:	Koordinatne merne mašine i CAD inspekcija	Fakultet tehničkih nauka u Novom Sadu	2009
3,	Gebhardt, A	Rapid Prototyping	Carl Hansen Verlag Muenchen	1995
4,	Budak I.	Reverzibilno inženjersko modeliranje – preprocesiranje podataka-tačaka	Fakultet tehničkih nauka, Novi Sad	2012
5,	Burdea, G.C., Coiffet, P	Virtual Reality Technology, 2nd ed.	John Wiley & Sons	2003

Table 5.2 Course specification

Course:		
Course id:	DM420	Selected Chapters – Internal Combustion (IC) Engines
Number of ECTS:	14	

Teachers:	Dorić Ž. Jovan, Klinar J. Ivan
Course status:	Elective

Number of active teaching classes (weekly)

Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Expanding knowledge in the field of development and designing of IC engines.

2. Educational outcomes (acquired knowledge):

Ability of independent and creative utilization of acquired knowledge and skills, solving complex and non routine problems and understanding new tendencies in development of engine industry.

3. Course content/structure:

Theoretical engine cycles: Otto, diesel, combined, analysis and comparison. Semitheoretical cycles. Real cycle analysis and selection of calculating cycle parameters. The charge exchanging process of four-stroke engines with unsupercharging and supercharging and specialities of two-stroke engines. Compression. Combustion. Expansion. Mechatronic IC engine systems. Simulation and designing of combustion processes. Phases of normal combustion. Forms of abnormal combustion. Ecological and energy aspects of contemporary IC engines. Forming of combustion space in Otto and diesel engines. Characteristics of engines: analysing speed, stationary, propeller, combined, governor, and other characteristics.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled or independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	-	Odabrani radovi iz naučnih časopisa i skupova	-	-

Table 5.2 Course specification

Course:		
Course id:	DM421	**Design and Expoitation of Metal Cutting Machine Tools**
Number of ECTS:	14	
Teacher:		Sovilj N. Bogdan
Course status:		Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Acquiring knowledge and enabling students for further application and practical work in the field of designing and exploitation of machine tools for metal cutting in the domain of real industrial systems in accordance with constructing, tribological, energetic, economic and ecological principles of sustainable development.

2. Educational outcomes (acquired knowledge):

Acquired knowledge and experiences are used in further scientific and research work.

3. Course content/structure:

General issues in designing machine tools for metal cutting, interdisciplinary character of designing machine tools for metal cutting, tribology in designing, systematic approach in designing of machine tools for metal cutting, tribological aspects in conceptualizing and forming constructions of machine tools for metal cutting, material wear forcasting, and tribological regulators, contemporary materials for machine tools for metal cutting, basic terms and definitions of systems for automated designing of machine tools for metal cutting. Systems of automated designing of machine tools for processing openings by milling. Conditions of rational exploitation of machine tools for metal cutting for automated production. Development of theories for machine tools for metal cutting. Contemporary tendencies in designing special machine tools for metal cutting for automated production. Fundamentals in designing and technologies for making boring machine tools. Fundamentals in advancing constructions for machine tools for metal cutting.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	S. Tanasijević	Tribološki ispravno konstrisanje	Mašinski fakultet, Kragujevac	2004
2,	SANDVIK Coromant	Technical guide	SANDVIK Coromant, Kista	2010
3,	S. P. Radzevich	Gear Cutting Tools: Fundamentals of Design and Computation	Eaton Corporation, Southfield	2010

Table 5.2 Course specification

Course:			Tribology
Course id:	DM422		
Number of ECTS:	14		
Teacher:		Sovilj N. Bogdan	
Course status:		Elective	

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Acquiring knowledge and enabling students for further application and practical work in the field of tribology in domain of real systems in accordance with tribological, energetic, economic and ecological principles of sustainable development.

2. Educational outcomes (acquired knowledge):

Acquired knowledge and experiences utilized in further scientific and research work.

3. Course content/structure:

Fundamentals of trioanalysis. Collecting and systematization of scientific information and on fundamental aspects of friction and wear processes.
Tribomaterials. Develpment of new materials from tribological aspect and determination of triobological characteristics of the existing matierials. Development and methods of determination of trbological characteristics of all sorts of lubricants.
Tribotechnology – Working processes which form contact surfaces and methods for their improvement.
Tribometrics – methods of friction force measurement in contact zones, methods for wear measurements of tribosystem elements, temperature, nonsmooth surfaces, counture size and actual contact surface, contact deformation.
Tribodiagonositcs – Methods for continuous control of tribological parameters in tribosystems and their elements during the process of equipment utilization.
Tribobilogy – Studying processes of friction and weare in tribo-mechanic systems in human bodies.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	T. A. Stolarski	Tribology in machine design	Butterworth-Heinmann, Oxford	2000
2,	J. Vižentin, M. Kalin, D. Kuniaki, S. Jahanmir	Tribology of mechanical systems: a guide to present and future technologies	ASME Press, NY	2004
3,	J. D. Summers- Smith	A tribology casebook, a lifetime in tribology	Mechanical engineering publications, London	1997

Table 5.2 Course specification

Course:		
Course id:	DOM25	Contemporary Procedures for Mobile Machine Designing
Number of ECTS:	14	

Teachers:	Malešev T. Petar, Šostakov S. Rastislav, Vladić M. Jovan
Course status:	Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	2

Precondition courses	None

1. Educational goal:

Expanding knowledge in the field of development and designing mobile means of mechanization.

2. Educational outcomes (acquired knowledge):

Enabling students for solving complex problems of product development in the field of mobile means of mechanization.

3. Course content/structure:

Module 1: Basics of modelling. Model types and development. Mobile machine structure. Reologic models of machine materials. Complex model forming. Experimental defining of model parameters. Modelling of masses, component connections and loadings. Number of degrees of freedom. Model reduction. Rigid and elastokinetic mobile machine model.
Module 2: Modelling of driving systems. Simulation of driving system operation. Controlled and regulated driving systems, regulated parameters. Sensors, data acquisition and transfer. Software models of driving electric motors (stationary regime, two-phase D-Q), supplying and control/¬regulation systems, mechanical, hydro¬static and hydro¬dynamic power transmission systems, brakes, resistance of working machines and devices. Numerical solving of motion equations. Commercial software.
Module 3: Dynamics of mobile machines. Forming of dynamic models of transporting and civil engineering machines. Cmmercial software for simulation of mobile machines behavior.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled or independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Janošević, D.	Projektovanje mobilnih mašina	Mašinski fakultet Niš	2000

Table 5.2 Course specification

Course:		
Course id:	DOM28	**Modeling and Simulation of Driving Systems**
Number of ECTS:	14	

Teachers:	Šostakov S. Rastislav, Vasić V. Veran
Course status:	Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled or independently write scientific papers.

2. Educational outcomes (acquired knowledge):

Acquiring fundamental knowledge for scientific and research work in this field, high level of ability for designing work in the field of mechanical structures.

3. Course content/structure:

Simulation of driving system operation. Controlled and regulated driving systems, regulated parameters. Sensors, data acquisition and transfer. Software models of driving electric motors (stationary regime, two-phase D-Q), supplying and control/¬regulation systems, mechanical, hydro¬static and hydro¬dynamic power transmission systems. Modelling of brake operation. Modelling of resistance of charasteristic working machines and devices. Commercial software for modelling.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled or independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	A. Laschet	Simulation von Antriebssystemen	Springer-Verlag	1988
2,	H. Dresig, F. Holzweißig	Maschinendynamik	Springer-Verlag	2009
3,	H. Dresig	Schwingungen und mechanische Antriebssysteme	Springer-Verlag, Berlin	2006
4,	H. Watter	Hydraulik und Pneumatik	Springer-Verlag, Berlin	2007
5,	G. Niemann, H. Winter	Maschinenelemente, Band I ÷ III	Springer-Verlag, Berlin	1983
6,	V. Vučković	Opšta teorija električnih mašina	Nauka Beograd	1992

Table 5.2 Course specification

Course:	Modern Approach in Development Technological Preparation of Production
Course id: DP018	
Number of ECTS: 14	

Teachers:	Todić V. Velimir, Milošević P. Mijodrag
Course status:	Elective

Number of active teaching classes (weekly)

Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Acquisition basic and advanced knowledge from field of modern technological preparation of production. Students learn how to use information technology in activities of technological preparation of production.

2. Educational outcomes (acquired knowledge):

Students should acquire basic and advanced knowledge about modern approaches in development of technological preparation of production that can be implemented in specific production systems.

3. Course content/structure:

The aim, importance and content of course. The place and role of technological preparation in manufacturing systems. Models and basic tasks of modern technological preparation of production. Analysis of manufacturability products, DFX-DFMA. Conceptual and final, macro and micro manufacturing process planning. Application of artificial intelligence in technological preparation. Group and type technology. Feature-based technology. Agents and multi-agents. Generate technology numerical information. STEP and STEP-NC. Techno-economic optimization. Modeling and simulation technological and manufacturing process. Technological database and knowledge. Reengineering technological processes and rapid prototyping. Methods for selection and evaluation of products and process. The application software of general purpose in processing of the production. CAPP systems and their development. Integration of CAPP and other systems. Exchange and data control by products and processes. The application of internet technology in technology preparation production.

4. Teaching methods:

Lectures, self-study research, consultancy. Lectures are followed by interactive presentations were have analyzed the theoretical basis and typical examples. Research work related to the study of scientific journals and other publications which expand their knowledge in the subject. On the basis of previously acquired knowledge in collaboration with the teacher, students being qualifes for writing scientific papers and apply knowledge in the production practice.

Knowledge evaluation (maximum 100 points)

Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature

Ord.	Author	Title	Publisher	Year
1,	Todić, V.	Projektovanje tehnoloških procesa	Fakultet tehničkih nauka, Novi Sad	2004
2,	Todić, V., Penezić, N., Lukić, D., Milošević, M.	Tehnološka logistika i preduzetništvo	Fakultet tehničkih nauka, Novi Sad	2011
3,	Devedžić, G.	Softverska rešenja CAD/CAM sistema	Mašinski fakultet, Kragujevac	2004
4,	Nasr, E.A., Kamrani, A.K.	Computer-Based Design and Manufacturing: An Information –Based Approach	Springer	2006
5,	Scallan, P.	Process Planning-The design/manufacturing interface	Publisher: Elsevier Science & Technology Books	2003
6,	Kuric, I., Matuszek, J., Debnar, R.	Computer Aided Process Planning in Machinery Industry	Politechnika Lodzka, Biesko-Biata	1999
7,	Xu, X.	Integrating Advanced Computer-Aided Design, Manufacturing, and Numerical Control	Information Science Reference, New York	2009
8,	Leondes, C.T.	Computer-Aided design, Engineering, and Manufacturing, vol. I-VII	CRC Press	2001

Table 5.2 Course specification

Course:		Selected Chapters in Micro and Nano Forming by Material Removal
Course id:	DP021	
Number of ECTS:	14	

Teachers:	Kovač P. Pavel, Gostimirović P. Marin, Sekulić Lj. Milenko
Course status:	Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

To acquire in-depth knowledge in micro and nano cutting processes.

2. Educational outcomes (acquired knowledge):

Acquired knowledge should enable students proper production technology design of micro and nano products and possibility of constructing latest micro manufacturing systems.

3. Course content/structure:

Contemporary research and trends in development of micro and nano machining processes in production engineering. Importance and possibility of conventional (turning, milling, drilling, grinding) and non-conventional (abrasive jet machining, ultrasound machining, laser and ion beam machining, chemical machining) micro and nano processes application. Development of micro and nano products. Micro and nano technology. Technological characteristics of micro and nano processes. Characteristics of ultra-precision machined surface.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Gostimirović M.	Nekonvencionalni postupci obrade	Fakultet tehničkih nauka, Novi Sad	2012
2,	Jackson J.M.	Micro and nanomanofacturing	Springer	2007
3,	Schulz H.	High Speed Machining	Carl Hanser Verlag Wien	1996

Table 5.2 Course specification

Course:		Welding technology - selected topics			
Course id:	DP024				
Number of ECTS:	14				
Teachers:		Baloš S. Sebastian, Šiđanin P. Leposava			
Course status:		Elective			

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

The aim of this subject is knowledge transfer from the field of welding technologies.

2. Educational outcomes (acquired knowledge):

The excpectance is advanced sudent education in the field of modern welding technologies of engineering materials.

3. Course content/structure:

Advanced welding techniques of similar and dissimilar materials.

4. Teaching methods:

Lectures, independent study and research work, consultations, mentorship. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	V. Palić	Zavarivanje	FTN Novi Sad	1987
2,	R. Mishra, M. Mahoney	Friction stir welding and procedures	Wiley Publishing	2003
3,	R. Messler	Principles of welding	Wiley Publishing	2004
4,	Grupa autora	New advances in laser welding	Philips CFT	2008

Table 5.2 Course specification

Course:		
Course id:	DP025	**Materials Corrosion and Protection**
Number of ECTS:	14	

Teachers:	Šiđanin P. Leposava, Baloš S. Sebastian

Course status:	Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

The aim is knowledge transfer from corrosion and corrosion protection.

2. Educational outcomes (acquired knowledge):

Knowledge obtained from corrosion and material protection are of a great importance to industrial basis, because of high losses due to these issues, which refer to direct and indirect expenses.

3. Course content/structure:

Basic issues regarding material degradation to environment. Corrosion damage expenses. Corrosion development and identification of the corrosion. Corrosion rate. Corrosion processes and their classification. Corrosion mechanisms. Chemical corrosion. Electrochemical corrosion. Corrosion in different environments: sea water, local corrosion, atmosphere corrosion, soil corrosion. Special corrosion forms: biological, mechanical corrosion, fatigue corrosion, abrasion corrosion, erosion corrosion, cavitation corrosion etc. Corrosion characterisation. Corrosion protection. Coating protection.

4. Teaching methods:

Lectures, independent study and research work, consultations, mentorship. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled or independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	E.D.D. During	Corrosion Atlas	Elsevier	1997
2,	P.R.Roberge	Handbook of corrosion engineering	McGraw-Hill	1999
3,	D.A.Jones	Principles and Prevention of Corrosion	Macmillan Publishing	1996
4,	P.Marcus, J.Oudar	Corrosion Mechanisms in Theory and Practice	Marcel Dekker Inc.	1995
5,	I.Esih	Osnove površinske zaštite	Fakultet strojarstva i brodogradnje, Zagreb	2003

Table 5.2 Course specification

Course:			
Course id:	DP028	Theoretical basis for forming polymer technology	
Number of ECTS:	14		
Teacher:		Vilotić Ž. Dragiša	
Course status:		Elective	

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Knowledge mastering of the theory of the most important forming polymers operations in order to student achieve competency skills and creative abilities for future career development.

2. Educational outcomes (acquired knowledge):

By completing the course the student acquires the knowledge, skills, abilities and competencies that enable him to: independently solve practical problems, improve existing technologies, uses contemporary scientific findings and information technology, think critically, act creatively and independently.

3. Course content/structure:

Theoretical study: Rheological and thermodynamic properties of polymers, polymer phase states; Mixing polymers and additives; Calendaring (the behavior of the polymer melt; impact variables, product errors and methods of elimination); Extrusion (analysis of flow, melting, mixing, forming and cooling of polymers, microstructure of extrudate; product errors and methods of elimination); Injection (important factors for designing molds, mold filling, molding cycle management, product structure, product errors and methods of elimination); Blow (change of the phase state and swelling of the polymers, stretching the preform, the structure of the product); Other forms of teaching: The use of computer programs for the design of making injection molded products (construction tools, material selection, selection of technological work conditions, analysis of the elimination of possible errors).

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Igor Čatić	Injekcijsko prešanje plastomera i ostalih materijala	DPG, Zagreb	2004
2,	A. W. Birley, B. Haworth, J. Batchelor	Physics of Plastics - Processing, Properties and Materials	Hanser, Munich	1991
3,	Igor Čatić	Proizvodnja polimernih tvorevina	DPG, Zagreb	2006
4,	R. V. Torner	Teoretičeskie osnovы perabotki polimerov	Німія, Moskva	1977
5,	H. F. Mark	Encyclopedia of Polymer Science	Interscience Publ., New York	1968

Table 5.2 Course specification

Course:		
Course id:	DP029	Advanced Development of Polymeric Products
Number of ECTS:	14	

Teacher:	Plančak E. Miroslav

Course status:	Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

The aim of the course is detailed investigation of cyclic and continuous processing of polymer materials.
, starting with basic materials till final product.

2. Educational outcomes (acquired knowledge):

learning outcome: student should be able to perform the processes of polymer fabrication.

3. Course content/structure:

Development of a complex product. Systematization of polymeric products development. Marketing. Planning of product development. Technological/culturological product designing. Designing starting activities. Checking of a hypothetical product by means of criteria of technology evaluation. Main designing phase. End-properties of polymeric materials. Mechanical dimensioning. Polymeric materials databases. Designing of a polymeric product with respect to processing, handling, assembly, application, aesthetics and ergonomics. Macro-geometrical and final shape of a product: dimensions, materials, surface, style and fashion, clearances of shape and dimensions, design optimization, product quality. Designing final activities. Analysis of product durability and reliability, product-list. Functional and prototype checking of a product. Checking of producing, and internal and external characteristics of product quality. Contemporary trends in product development. Case studies: Designing of polymeric products by means of analytical and numerical methods.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Čatić, I.	Proizvodnja polimernih tvorevina	Društvo za plastiku i gumu Zagreb	2006
2,	Rauwendaal, C.	Polymer extrusion	Hanser Verlag	2001
3,	De Lorenzi, H.G., Nied, H. F.	Modeling of polymer processing	Carl Hanser Verlag	1992

Table 5.2 Course specification

Course:		
Course id:	DTM02	**Theory of impact**
Number of ECTS:	14	
Teachers:		Grahovac M. Nenad, Spasić T. Dragan, Žigić M. Miodrag
Course status:		Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Professor`s intention is through this course to: - expand terms of classic analytical mechanics to the set of general functions (distributions) as well as to involve differential equations of mechanic systems movement with interrupted right sides (differential inclusions) what is directly applied in problems including collision and dry friction, - understand how mechanic methods can be applied in bio system problem analysis which are more complex and principally less defined than technical problems mainly consisting of simple geometric forms, in order to analyse problems that include vehicle collision and participants injuries.

2. Educational outcomes (acquired knowledge):

Upon completion of this course student acquires knowledge to: - utilize acquired knowledge in engineering disciplines which as tool use non smooth mechanics, and deal with collision analysis, - recognize through models various movements of real systems, effects of various actions (forces and force coupling, regular and impact), analyse friction and energy balance, as well as to simulate forecasting of various models by using computers, - apply acquired knowledge in analysing movement and collision of actual mechanical systems including biological, i.e., to identify, formulate (idealise practical problems by using appropriate mathematical model) and solve problem in the field covered by following content, with special insight to restrains resulting from entopic inequality,- communicate and work with other engineers on the team.

3. Course content/structure:

Elements of collision theory. Derivative in the distribution sense. Distribution model of collision. General Euler-Lagrange equations of second type. Theorem on kinetic energy application on collision. Collision theory of Hertz type – regularization. Zener model. Constrains deriving from Clausius – Duhem inequality. Fremont approach. Herz-Signorini-Moreau law of unilateral contact. Linear complementarity problems. Generated derivative and differential. Different models of force of dry friction. Differential inclusions. Theorem by Phillip. Mechanical systems with forces which are modelled by multi-value functions. Non smooth potentials. Method of wider Lagrange. Application of Gaussian principle. Methods of numerical integration. Moreau algorithm. Human body structure. Mechanical features of biomaterials. Inner forces in human body. Dynamic modelling of human joints with special emphasis on knee and connection neck head. Models for collision analysis with special emphasis on biodynamic response of human body in frontal collision as head response to crash. Air bag models.

4. Teaching methods:

Lectures. Mentor work.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Project	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Ch. Glocker	Set valued force laws, Dynamics of non-smooth systems	Springer, Berlin	2001
2,	R. Leine and H. Nijimeijer	Dynamics and bifurcations of nonsmooth mechanical systems	Springer, Berlin	2004
3,	B. Brogliato	Non-smooth mechanics, Springer, London	Springer, London	1999
4,	N. Ayache (ed.)	Computational models for the human body	Elsevier, Amsterdam	2004

Table 5.2 Course specification

Course:		
Course id: HDOKL1		**Selected topics in non-industrial robotics**
Number of ECTS: 14		
Teacher:	Borovac A. Branislav	
Course status:	Elective	

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

The goal of the course is that, in accordance with their prior knowledge and interests, students learn about traditional and new areas of industrial robotics and to introduce the research problem.

2. Educational outcomes (acquired knowledge):

The outcome of the course are the knowledge and ability of students to understand the issues, particularly the advanced field of industrial robotics and to get involved into research work in this field of study.

3. Course content/structure:

Basic concepts and definitions, homogeneous transformations, robot kinematics (direct and inverse problem), Denavit-Hartenbergova notation, Jacobians, synthesis trajectory, the dynamics of robots, robot control, robot programming, sensors in robotics and their application, the application of robots in industrial tasks. Part of the teaching activity on the subject is a self-study research in the field of industrial robotics. Study research includes active monitoring of the primary scientific sources, organization and execution of experiments and statistical data processing, numerical simulation, writing a paper with a topic close to the scientific and teaching area of the subject of student`s doctoral dissertation.

4. Teaching methods:

Depending on the number of students teaching activity may have a classic approach (lectures, consultations), or mentoring. Forms of teaching activity are adapted to the number of students and selected chapters. Study research.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	M. Vukobratović, D. Stokić	Control of Manipulation Robots	Springer, ISBN 3-540-11629-X, ISBN 0-387-11629-X	1982
2,	M. Vukobratović, M. Kirćanski	Kinematics and Trajectory Synthesis of Manipulation Robots,	Springer Verlag, ISBN 3-540-13071-3	1986
3,	M. Vukobratović, D. Stokić, N. Kirćanski	Non-adaptive and Adaptive Control of Manipulation Robots	Springer, ISBN 3-540-13073-X, ISBN 0-387-130	1985
4,	M. Spong, S. Hutchinson, M. Vidyasagar	Robot Modelling and Control	John Wiley & Sons, ISBN-10 0-471-64990-2, ISBN-13	2006
5,	L. Sciavicco, B. Sicilijano	Modelling and control of robot manipulators	Springer - Verlag, ISBN 1-85233-221-2	2000
6,	B. Borovac, G. Đorđević, M. Rašić, M. Raković	Industrijska robotika	(u pripremi)	2007
7,	B. Borovac, G. Đorđević, M. Rašić, M. Raković	Zbirka zadataka iz industrijske robotike	(u pripremi)	2007

Table 5.2 Course specification

Course:		Artificial Intelligence Application in Forming by Material Removal
Course id:	DP009	
Number of ECTS:	14	

Teachers:	Kovač P. Pavel, Gostimirović P. Marin, Sekulić Lj. Milenko
Course status:	Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Acquiring latest knowledge in the field of artificial intelligence and justification of theirs application in forming by material removal.

2. Educational outcomes (acquired knowledge):

Acquired knowledge should enable scientific and professional application of neural networks, experts systems and fuzzy logic in forming by material removal.

3. Course content/structure:

State and trends of actual research in field of conventional and unconventional machining by material removal by the use of artificial intelligence. Possibilities, justification and innovation of development machining processes by the use of artificial intelligence. Trends of development and structure of solutions of production problems by the use of artificial intelligence. Concrete scientific realization of problems of machining processes by the use of artificial neural network, expert systems, fuzzy logic, genetic algorithms. Lectures are carried out through research work which should cover active monitoring of primary scientific sources, organization and realization of experiments, statistical data processing, modelling and simulation of machining processes.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate examples contributing to easier understanding of the subject content. Students expand their knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is tutored for future independent writing of scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Miljković Z.	Sistemi veštačkih neuronskih mreža u proizvodnim tehnologijama	Mašinski fakultet, Beograd	2003
2,	Subašić P.	Fazi logika i neuronske mreže	Tehnička knjiga, Beograd	1997
3,	Stuart S., Norvig P.	Veštačka inteligencija: savremeni prilaz	RAF i CET, Beograd	2011
4,	Stuart S., Norvig P.	Artifical intelligence	Prentice Hall	2008
5,	Cus F.	Modeling and optimization of metal cutting	Faculty of Mechanical Engineering	2005
6,	Dreyfus G.	Neural Networks	Springer	2005

Table 5.2 Course specification

Course:		Behaviour Modelling and Experimental Testing of Working Systems
Course id:	DP010	
Number of ECTS:	14	
Teachers:		Zeljković V. Milan, Antić T. Aco
Course status:		Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Knowledge acquiring in the field of behaviour modelling and experimental testing of vital elements and working systems in the whole. Virtual reality application in designing and working systems exploitation.

2. Educational outcomes (acquired knowledge):

Knowing contemporary working systems from the point of view of designing and exploitation. Opportunities and methods of modelling and experimental testing of their vital components.

3. Course content/structure:

Working systems – assignments assigned to them. Structure and models of contemporary working systems. Assignments of individual components and way of their realization. Main characteristics of working systems. Geometrical characteristics – accuracy. Contemporary testing of geometrical accuracy and positioning accuracy. Modelling and experimental testing of physical phenomena following slow translation. Exploitation characteristics – accuracy and impact on it. Contemporary approach to behaviour modelling and experimental testing of working systems and their vital components under impact of static and dynamic load during heat treatment. Noise of working systems as a indicator of their quality. Experimental testing with the aim of locating noise source. Methods of decreasing share of acoustic energy. Computational modelling of working systems behaviour by utilization of virtual reality techniques (development of virtual prototype of working systems). Partly lectures are realized through independent study and research work in the field related to the subject. Study and research work includes active following of primary scientific resources, organization and realization of experiments and statistic data processing, numeric simulations, elaboration of scientific papers in the subject field.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Gatalo, R. i drugi	Fleksibilni tehnološki sistemi za obradu rotacionih izradaka, knjiga II	IPM-FTN, Novi Sad	1989
2,	Borojev, Lj.	Prilog razvoju metodologije projektovanja savremenih mašina alatki na bazi eksperimentalnog... - doktorska disertacija	FTN, Novi Sad	1994
3,	Zeljković, M.	Sistem za automatizovano projektovanje i predikciju ponašanja sklopa glavnog vretena mašina alatki	FTN, Novi Sad	1996
4,	Tlusty, J.	Manufacturing Processes and Equipment	Upper Saddle River, New Jersey	2000
5,	Zienkiewicz,O.,C., Taylor,R.,L.	The finite element method, Fifth edition, Volume 1	Butterworth-Heinemann, Linacre House, Jordan Hill	2000
6,	Zienkiewicz,O.,C., Taylor,R.,L.	The finite element method, Fifth edition, Volume 2	Butterworth-Heinemann, Linacre House, Jordan Hill	2000
7,	Zienkiewicz,O.,C., Taylor,R.,L.	The finite element method, Fifth edition, Volume 3	Butterworth-Heinemann, Linacre House, Jordan Hill	2000

Table 5.2 Course specification

Course:		
Course id:	DOM27	**Logistics and Simulation**
Number of ECTS:	14	
Teacher:	Georgijević S. Milosav	
Course status:	Elective	

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Introducing doctoral students to additional knowledge in logistics and simulations, which are basis for research work in the domain of students interests and the doctoral dissertation topic.

2. Educational outcomes (acquired knowledge):

Mastering necessary research and scientific knowledge, in order to apply logistics and simulation principles.

3. Course content/structure:

In accordance with studetn`s interests, the subject offers sellected chapters in logistics: logistics of materials and goods flow, from global to local withn SCM and SCDM (Supply Chain Design Management) – technical logistics, outsourcing, LLP – 4 PL best practice production and storing logistics – information technologies, - development logistics for analysis of logistical processes, simulation methods are studied as the latest tool for optimization: methods of model analysis, mathematical toosl, - computersimulations, linearity problems, - discrete events models and their simulators, - softwares for simulation, possibilities and limitations, - optimization methods

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled or independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Gudehus, T.	Logistik 1 und 2	Springer	2000
2,	Kaether, R.	Technische Logistik	Hanser	2001
3,	Günther, H.O., Tempelmeier, H.	Produktion und Logistik	Springer	2002
4,	Law A.M., Kelton W.D.	Simulation Modeling and Analysis	M.G.Hill	2000

Table 5.2 Course specification

Course:		Nanotechnologies and Nanomaterials Forming
Course id:	DP011	
Number of ECTS:	14	
Teachers:		Kakaš I. Damir, Škorić N. Branko
Course status:		Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

This subject`s objective is for students to master latest results related to development of nanotechnologies and nanomaterials and their significance for development of modern science and industry.

2. Educational outcomes (acquired knowledge):

Acquired knowledge in this subject enables problem analysis of optimal procedures and parameters selection with the aim to acquire new nanomaterials.

3. Course content/structure:

Position and significance of nanotechnologies in contemporary engineering. Types of nanomaterials and the field of their application. Production technologies for non organic nanomaterials. Noncomposites and production processes. Ecological aspect of application and production of nano layers and nanomaterials. Nano engines and selfadjusting materials. Genetic technologies in the field of nanomaterials.
Partly lectures are realized through independent study and research work in the field related to the subject. Study and research work includes active following of primary scientific resources, organization and realization of experiments and statistic data processing, numeric simulations, elaboration of scientific papers in the subject field.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	R. Kelsall, I. Hamley, M. Geoghegan	Nanoscale Science and Technology	John Wiley & Sons	2005
2,	C.P.Poole, F.J.Ovens	Introduction to Nanotechnology	Wiley, New Jersey	2003

Table 5.2 Course specification

Course:		Ecological Engineering Aspects
Course id:	DP013	
Number of ECTS:	14	
Teachers:		Hodolič J. Janko, Budak M. Igor, Hadžistević J. Miodrag, Vukelić B. Đorđe, Kovač P. Pavel, Soković M. Mirko
Course status:		Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Expanding knowledge and acquiring new knowledge in the field of ecological and engineering problems in produciton mechanical engineering.

2. Educational outcomes (acquired knowledge):

Acquiring ability to solve scientific and research and professional assignments related to application of ecological and engineering principles.

3. Course content/structure:

Sustainable development: Agenda 21 and sustainable development; Ecology versus economy and machine structures and their validation from the point of view of sustainable development. Ecological and engineering aspects of mechanical sturtures designing: ecological and engineering level validation; legislative conditions;computer support of ecological and engineering aspects od desining. Eco-design; fundamentals and metodology, eco-desing tools, method LCC (Life-Cycle Costs) application in eco-design process, Eco-CAD in implementation of eco-design. Partly lectures are realized through independent study and research work in the field related to the subject. Study and research work includes active following of primary scientific resources, organization and realization of experiments and statistic data processing, numeric simulations, elaboration of scientific papers in the subject field.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Hodolič J., Hadžistević M., Budak I., Antić A., Sklenarova M., Majernik M., Chovancova J.	Upravljanje zaštitom životne sredine - Eko-menadžment	Fakultet tehničkih nauka, Novi Sad	2009
2,	Hodolič J., Vukelić Đ., Budak I., Bešić I., Muransky J.	Ekodizajn i održivi razvoj u mašinskom inženjerstvu	Fakultet tehničkih nauka, Novi Sad	2009
3,	Budak I., Hodolič J., Hadžistević M., Vukelić Đ., Kosec B., Karpe B.	Označavanje proizvoda o zaštiti životne sredine	Fakultet tehničkih nauka, Novi Sad	2009
4,	Hodolič J., Vojinović-Miloradov M., Antić A., Hadžistević M., Agarski B., Šebo D., Badida M.	Zagađenje životne sredine i zagađujuće supstance, mogućnosti uklanjanja zagađujućih supstanci	Fakultet tehničkih nauka, Novi Sad	2009
5,	Šooš, Lj., Hodolič, J.	Upravljanje otpadom u Slovačkoj	Fakultet tehničkih nauka, Novi Sad	2008
6,	Kovač, P., Palkova, Z.	Proizvodno mašinstvo i obnovljivi izvori energije	Fakultet tehničkih nauka, Novi Sad	2011
7,	Kutz, M.	Environmentally Conscious Manufacturing	John Wiley & Sons	2007
8,	Kutz, M.	Environmentally Conscious Mechanical Design	John Wiley & Sons	2007

Table 5.2 Course specification

Course:		
Course id:	DP012	Physical Modelling and TPD Simulation by Computers
Number of ECTS:	14	

Teachers:	Plančak E. Miroslav, Vilotić Ž. Dragiša
Course status:	Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

This subject`s objective is for students to master theory and practical application of physical modelling and numerical simulations of TPD processes.

2. Educational outcomes (acquired knowledge):

Acquired knowledge in this subject enables analysis of metal forming process by application of physical modelling and numeric simulation methods.

3. Course content/structure:

Significance of deforming processes. Modelling methods. Physical modelling of deforming process. Modelling process theory. Deforming theory. Modelling materials. Determining physical and mechanical features of modelling materials. Friction during physical modelling. Numeric modelling and plastic deforming process simulation. Theoretical fundamentals of numeric modelling and plastic deforming process simulation. Modern software packages FE. Modelling and simulation of volume deforming and metal sheet forming by computer application. Application in modelling and simulations in Net Shape Forming technologies. Partly lectures are realized through independent study and research work in the field related to the subject. Study and research work includes active following of primary scientific resources, organization and realization of experiments and statistic data processing, numeric simulations, elaboration of scientific papers in the subject field.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Plančak M.	Naponsko deformaciono stanje u procesima istiskivanja	FTN, Novi Sad	1984
2,	Vilotić D.	Ponašanje čeličnih materijala u različitim obradnim sistemima hladnog zapreminskog deformisanja	FTN, Novi Sad	1987
3,	Mandić V.	Modeliranje i simulacija u obradi deformisanjem	Mašinski fakultet, Kragujevac	2005
4,	John Robinson	Integrated Theory of Finite Element Methods	John Wley and Sons	1973
5,	Mandić V.	Fizičko i numeričko modeliranje procesa obrade deformisanjem	FIN, Kragujevac	2012

Table 5.2 Course specification

Course:		Nano and Micro Layers Characterization
Course id:	DP014	
Number of ECTS:	14	

Teachers:	Kakaš I. Damir, Škorić N. Branko

Course status:	Elective

Number of active teaching classes (weekly)

Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

This subject`s objective is mastering features characterisation of nano micro layers.

2. Educational outcomes (acquired knowledge):

Acqured knowledge in this subject enables problme analysis of selecting optimal procedure of nanomaterials characteristics measruements with the aim to produce new nanomaterials of excellent quality.

3. Course content/structure:

Systematization of methods for micro and nano layers characterization. Application of skening probe – skening tunelling microscopy and atomic microscop. Determination of micro and nano strengthnes, elasticty module, layer thickness. Testing tribological features and restitance to wear. Determination of resistance to corrosion.
Partly lectures are realized through independent study and research work in the field related to the subject. Study and research work includes active following of primary scientific resources, organization and realization of experiments and statistic data processing, numeric simulations, elaboration of scientific papers in the subject field.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	R. Kelsall, I. Hamley, M. Geoghegan	Nanoscale Science and Technology	John Wiley & Sons	2005
2,	C.P.Poole, F.J.Ovens	Introduction to Nanotechnology	Wiley, New Jersey	2003

Table 5.2 Course specification

Course:		
Course id:	DP015	Nonconventional Procedures of Forming in TPD
Number of ECTS:	14	

Teachers:	Plančak E. Miroslav, Vilotić Ž. Dragiša
Course status:	Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

The objective of this subjecti is mastering non novnentional technologies of plastic deforming.

2. Educational outcomes (acquired knowledge):

After passing the exam in this subject, student is expected to demostrate:
- knowledge in non conventional methods of plastic deforming in theoretical and applicative domain, with detailed consideration of application and objective limitations.
- knowledge of main elements of working systems in non conventional methods in palstic deforming and their specific characteristics in relation to classical methods of plastic deforming.
- critical consideration of application of individual non conventional methods of plastic deforming in actual conditions

3. Course content/structure:

Classification of non convetional technologies of plastic deforming. Hydrodeforming of pipes, basic postulates, theoretical process analysis, possibilities of utilizaition, limitations, basic process parameters, friction, friction influence, Microdeforming in the field of metal sheet and volume deforming, similarity law, size effect, microdeforming in relation to classical metal deforming. Net shape forming ? near net shape forming, proces characterisations, application scope, reduction of energy parameters, quality and forming accuracy. Flexible bending, application in light constuctions, process conducting.
Partly lectures are realized through independent study and research work in the field related to the subject. Study and research work includes active following of primary scientific resources, organization and realization of experiments and statistic data processing, numeric simulations, elaboration of scientific papers in the subject field.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Lange, K.	Lehrbuch der Umformtechnik, Band 1,2,3	Springer, Verlag, Berlin	1974
2,	Kalpakjan,S.	Manufacturing Proceses for Engineering Materials	Adisson – Wesley Publishing Company	1991
3,	Johnson,W., Mellor,P.B.	Engineering Plasticity	Van Nostrand Reinhold, London	1980
4,	Altan T., Ngaile G., Shen G.	Cold and hot forging and application	ASM Publication	2004

Table 5.2 Course specification

Course:		Fracture Mechanics			
Course id:	SAP004				
Number of ECTS:	14				
Teacher:		Gerić D. Katarina			
Course status:		Elective			
Number of active teaching classes (weekly)					
Lectures:	Practical classes:	Other teaching types:	Study research work:		Other classes:
5	0	0	4		0
Precondition courses		None			

1. Educational goal:

Expanding and acquiring new knowledge in the field of material testing.

2. Educational outcomes (acquired knowledge):

Expanded and acquired knowledge of material behaviour under load impact and fracture avoidance.

3. Course content/structure:

Deformation and fracture of engineering materials including linear elastic mechanics of fracture continuun and microscopic fracture aspect. Dislocation theory, alloy strengthening and deformation. Fracture mechanism, linera and non linear elastic fracture mechanics. Physical fundamentals of fracture toughness, increasing metal material toughness.
Partly lectures are realized through independent study and research work in the field related to the subject. Study and research work includes active following of primary scientific resources, organization and realization of experiments and statistic data processing, numeric simulations, elaboration of scientific papers in the subject field.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00
Literature					
Ord.	Author	Title		Publisher	Year
1,	Hertzberg R.	Deformation and fracture mechanics of engineering materials		John Willey&Sons	1996
2,	Ćulafić V.	Uvod u mehaniku loma		Mašinski fakultet, Podgorica	1999
3,	Anderson T.L.	Fracture mechanics		Taylor&Francis	2005

Table 5.2 Course specification

Course:		
Course id:	DM315	Expert Systems
Number of ECTS:	14	

Teacher:	Jovanović S. Aleksandar

Course status:	Elective

Number of active teaching classes (weekly)

Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

The objective of subject is for doctoral students to acquire scientific compentences and academic skills in the field of expert systems. This includes development of creative skills of analysis and synthesis of problem and ability of critical thinking.

2. Educational outcomes (acquired knowledge):

Outcome and purpose of the subject are education and enabling doctoral students for quaity independent and team scientific and research work, Outcome is also acquiring scientific and professional competences in this field.

3. Course content/structure:

Theoretical principles and expert systems thesis. Fundamental principles and expert system architecture. Expert systems for diagnosis of technological processes disadvantages – characteristics, specific features of architecture. Expert systems for technological process control - characteristics, specific features of architeVerbal, visual, practical methods will be used.
Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers.
cture – conventional and fuzzy logical. Charcteristics, specific features of architecture of fuzzy logical expert systems with interpreter and translated knowledge base
Partly lectures are realized through independent study and research work in the field related to the subject. Study and research work includes active following of primary scientific resources, organization and realization of experiments and statistic data processing, numeric simulations, elaboration of scientific papers in the subject field.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled ot independently write scientific papers.

Knowledge evaluation (maximum 100 points)

Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Theoretical part of the exam	Yes	50.00

Literature

Ord.	Author	Title	Publisher	Year
1,	-	Odabrani radovi iz naučnih časopisa i skupova		-

Table 5.2 Course specification

Course:		Renewable Energy Resoruces
Course id:	DM333	
Number of ECTS:	14	

Teachers:	Grković R. Vojin, Gvozdenac D. Dušan, Petrović R. Jovan
Course status:	Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Acquiring knowledge and skills for further application and practical work in the field of alternative power engineering.

2. Educational outcomes (acquired knowledge):

Ability to use acquired knowledge in further education and engineering practical work.

3. Course content/structure:

Power engineering and renwable energy resources: Biomass, Solar enrgy, Hydroenergy, Wind energy, Geothermal energy, Energy storing, technical and economic analysis of renewable energy sources technologies and their applications.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled or independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Gvozdenac, D, Nakomčić-Smaragdakis, B, Gvozdenac-Urošević, B	Obnovljivi izvori energije	FTN	2010
2,	Boyle G, editor	Renewable Energy	OXFORD University Press	2004
3,	Boyle G, Everett B, Ramage J, editors	Energy Systems and Sustainability	OXFORD University Press	2003
4,	Bašić Đ.	Mogućnosti korišćenja energetskog potencijala geotermalnih voda u Vojvodini	Prometej, Novi Sad	2009

Table 5.2 Course specification

Course:		
Course id:	DM334	**Optimization of Energy Systems Operation**
Number of ECTS:	14	

Teacher:	Grković R. Vojin
Course status:	Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Introduction to energy systems operation optimization.

2. Educational outcomes (acquired knowledge):

Student preparation for elaboration of doctoral dissertation.

3. Course content/structure:

Methods for deteremination of optimal working conditions of regulated system: optimum searching mathematical model, differntial and variational methods, Pontryagin`s maximum principle, numerical methods. Energy power plants parametres: hydro power plants, pump and reversible plants, thermal power plants, thermo and electro plants. Technological requirements and working technology. Optimal working conditions in power plants: Load schedule on power,hydro and thermal plants in power system. Urban thermal and power systems, source characteristics, load schedule, expert systems.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled or independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	Krsmanović Lj.	Optimizacija rada elektroenergetskog sistema	Građevinska knjiga	1986
2,	Wilde D. J.	Optimum Seeking Methods	Prentice-Hall	1964
3,	Denn M. M., Aris R.	Green's Functions and Optimal Systems I, II, III	Ind. Eng. Chem	1965
4,	Liang-Tseng F., Chin-Sen W.	The Continuous Maximum Principle	-	1966
5,	Liang-Tseng F., Chin-Sen W.	The Discrete Maximum Principle	-	1964
6,	Grković V.	Tehnološke osnove regulisanja parnih turbina za SPETE	Futura publikacije, Novi Sad	1995
7,	Grković V.	Tehnologija rada termoenergetskih postrojenja	FTN, Novi Sad	2011

Table 5.2 Course specification

Course:		
Course id:	DM332	**Energy Management in Buildings**
Number of ECTS:	14	
Teachers:		Gvozdenac D. Dušan, Jovanović S. Aleksandar, Petrović R. Jovan
Course status:		Elective

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
5	0	0	4	0

Precondition courses	None

1. Educational goal:

Enabling students for: systematic study of energy buildings, energy systems study and role and significance individual energy systems study in total building energy, evaluation of energy systems impact on business results and cost of staying in a building. Final aim is for a student to be able to study building functionality and energy needs, volume and expences for meeting the needs for final energy sources and establishing energy flow control in a building.

2. Educational outcomes (acquired knowledge):

Mastering knowledge and methods for understanding: energy flow, energy impact on costs and building utilization, its control and possibility of reducing energy cosnts.

3. Course content/structure:

A building with its structure and energy infrastructure, whose aim is to meet final energy needs, make integral unity. Total building energy efficiency depends on the energy efficiency of the whole sturcture, relationship between individual parts, systems and subsystems in the building. Therefore subject strucutre includes building as a whole, primarly the surface and all heating, cooling and ventilation systems, supply systems for energy, hot and cold water, etc, with the aim to encrease energy efficiency and reduce energy costs for building residents.

4. Teaching methods:

Lectures, independent study and research work, consultations. Lectures are held in combined way. Theoretical part is presented in lectures and it is followed by appropriate exampled contributing easier understanding of the subject content. Students expand knowledge through study and research work, studying of scientific journals and other literature. In cooperation with professor, student is enabled or independently write scientific papers.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	B. Todorović	Projektovanje postrojenja za centralno grejanje	Mašinski fakultet, Beograd	2005
2,	B. Todorović	Klimatizacija	SMEITS, Beograd	2005
3,	L. D. Danny Harvey	Low-Energy Buildings and District-Energy Systems	Earthscan, London	-
4,	Eastop	Energy Efficiency for Engineers and Technologists	Croft, Longman Scientic& Technical	-
5,	Peter Harris	Preparing the Company Energy Plan	Energy Publications	-
6,	John Gibons	Building Energy Efficiency	U.S. Cogres, Office of Technologu Assesment, Washington	1992

Table 5.2 Course specification

Course:		Doctoral Dissertation (Theoretical Bases)
Course id:	SID01	
Number of ECTS:	30	
Teachers:		
Course status:	Mandatory	

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
0	0	0	20	0

Precondition courses	None

1. Educational goal:

The application of fundamental, theoretical and methodological, scientific and professional, and professional and applicative knowledge, methods and contemporary knowledge from the magazines from the SCI list in order to solve concrete problems within the courses at Doctoral studies.

2. Educational outcomes (acquired knowledge):

Enabling students to individually connect the contents from the courses at Doctoral studies, apply previously acquired as well as new knowledge for observing the structure of the set problems and its systematic analysis in order to elaborate conclusions on possible directions in its solving. Through individual usage of literature, students broaden their knowledge and utilizing new methods individually and creatively, they use new knowledge in solving the set problems.

3. Course content/structure:

It is formulated individually in accordance with further research. Students read scientific literature, and perform analyses in order to find solutions for a concrete task which is defined by setting the task on the side of the supervisor and other lecturers at Doctoral studies. Theoretical bases present a classification examinations. Students are prepared to take the classification examination.

4. Teaching methods:

Student`s co-supervisor sets the seminar paper task and delivers it to the student. The student has the obligation to elaborate the paper within the set theme defined by the paper task, utilizing the literature proposed by the co-supervisor. During the paper elaboration, the co-supervisor can provide additional instructions to the student direct them to certain literature and additionally direct them towards the elaboration of a quality paper. During the study research work, the student has tutorials with the co-supervisor and course lecturers, and if needed, with other lecturers dealing with the problems in the field of the set paper task. Within the set theme, the student can also perform certain measuring, research, calculations, surveys and other researches, statistic data processing, if it is necessary for the task. After the defence of the paper, the candidate has to pass the oral examination in the field of the passed examinations, in front of a committee. If the examination is

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	grupa autora	časopisi sa liste Kobsona		sve
2,	grupa autora	časopisi i doktorske disertacije iz date problematike		sve

Table 5.2 Course specification

Course:		Doctoral Dissertation – Study and Research
Course id:	SID02	
Number of ECTS:	30	
Teachers:		
Course status:	Mandatory	

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
0	0	0	30	0

Precondition courses	None

1. Educational goal:

The application of fundamental, theoretical and methodological, scientific and professional, and professional and applicative knowledge and methods in solving concrete problems within the selected field. In this segment of Doctoral dissertation, students investigate the problem, its structure and complexity and on the basis of the performed analyses draw conclusions on possible manner in its solving. Researching the literature, students are introduced to methods attended for creative solving of new tasks and the engineering practice in their solving. The objective of students` activity within this segment of research is to acquire necessary experience through solving complex problems and tasks and recognizing the possibility for applying previously acquired knowledge in practice.

2. Educational outcomes (acquired knowledge):

Enabling students to individually apply previously acquired knowledge from diverse areas already studied in order to observe the structure of the set problem and its systematic analysis for drawing conclusions on possible directions in its solving. Through individual usage of literature, students broaden their knowledge from the selected field and they investigate diverse methods and papers related to the similar fields. Thus, students develop the competence to perform analyses and identify problems within the set theme. Practical application of the acquired knowledge from diverse areas develops in students the ability to overview the place and the role of engineers in the selected field, the demand for cooperation with other professions and the team work.

3. Course content/structure:

It is formulated individually in accordance with the elaboration of the concrete Doctoral dissertation, its complexity and structure. Students read scientific literature, Doctoral dissertations by other students dealing with similar theme; they perform analyses in order to find solutions for a concrete task defined by the task of the Doctoral dissertation.

4. Teaching methods:

The supervisor of the Doctoral dissertation sets the dissertation task and delivers it to the student. The student has the obligation to elaborate the dissertation within the set theme defined by the Doctoral dissertation task, utilizing the literature proposed by the supervisor. During the elaboration of the Doctoral dissertation, the supervisor can provide additional instructions to the student direct them to certain literature and additionally direct them towards the elaboration of a quality Doctoral dissertation. During the study research work, the student has tutorials with the supervisor, and if needed, with other lecturers dealing with the problems in the field of the set dissertation task. Within the set theme, the student can also perform certain measuring, research, calculations, surveys and other researches, statistic data processing, if it is predicted by the task of the Doctoral dissertation.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	grupa autora	časopisi sa liste Kobson		sve
2,	grupa autora	časopisi i doktorske disertacije iz date problematike		sve

Table 5.2 Course specification

Course:		Doctoral Dissertation – Study and Research
Course id:	SID03	
Number of ECTS:	10	
Teachers:		
Course status:	Mandatory	

Number of active teaching classes (weekly)				
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:
0	0	0	10	0

Precondition courses	None

1. Educational goal:

The continuation of study and research from previous semester. The application of fundamental, theoretical and methodological, scientific and professional, and professional and applicative knowledge and methods in solving concrete problems within the selected field. In this segment of Doctoral dissertation, students investigate the problem, its structure and complexity and on the basis of the performed analyses draw conclusions on possible manner in its solving. Researching the literature, students are introduced to methods attended for creative solving of new tasks and the engineering practice in their solving. The objective of students` activity within this segment of research is to acquire necessary experience through solving complex problems and tasks and recognizing the possibility for applying previously acquired knowledge in practice.

2. Educational outcomes (acquired knowledge):

Enabling students to individually apply previously acquired knowledge from diverse areas already studied in order to observe the structure of the set problem and its systematic analysis for drawing conclusions on possible directions in its solving. Through individual usage of literature, students broaden their knowledge from the selected field and they investigate diverse methods and papers related to the similar fields. Thus, students develop the competence to perform analyses and identify problems within the set theme. Practical application of the acquired knowledge from diverse areas develops in students the ability to overview the place and the role of engineers in the selected field, the demand for cooperation with other professions and the team work.

3. Course content/structure:

It is formulated individually in accordance with the elaboration of the concrete Doctoral dissertation, its complexity and structure. Students read scientific literature, Doctoral dissertations by other students dealing with similar theme; they perform analyses in order to find solutions for a concrete task defined by the task of the Doctoral dissertation.

4. Teaching methods:

The supervisor of the Doctoral dissertation sets the dissertation task and delivers it to the student. The student has the obligation to elaborate the dissertation within the set theme defined by the Doctoral dissertation task, utilizing the literature proposed by the supervisor. During the elaboration of the Doctoral dissertation, the supervisor can provide additional instructions to the student direct them to certain literature and additionally direct them towards the elaboration of a quality Doctoral dissertation. During the study research work, the student has tutorials with the supervisor, and if needed, with other lecturers dealing with the problems in the field of the set dissertation task. Within the set theme, the student can also perform certain measuring, research, calculations, surveys and other researches, statistic data processing, if it is predicted by the task of the Doctoral dissertation.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Term paper	Yes	50.00	Oral part of the exam	Yes	50.00

Literature				
Ord.	Author	Title	Publisher	Year
1,	grupa autora	časopisi sa liste Kobsona		sve
2,	grupa autora	časopisi i doktorske disertacije iz date problematike		sve

Table 5.2 Course specification

Course:		Doctoral Thesis - Realization and Defence of Thesis
Course id:	DZR03	
Number of ECTS:	20	
Teachers:		
Course status:	Mandatory	

Number of active teaching classes (weekly)					
Lectures:	Practical classes:	Other teaching types:	Study research work:		Other classes:
0	0	0	0		20

Precondition courses	None

1. Educational goal:

Acquiring knowledge about structure and form of writing the dissertation report after analysis, and other activities carried out within the assigned theme of Doctoral dissertation. By writing the Doctoral dissertation, students gain experience in writing papers within which it is necessary to describe the problem, implement methods and procedures and obtained results, as well as to give new scientific contribution to the science development and to the application of the scientific research in practice. In addition, the objective of writing and defense of the Doctoral dissertation is to develop student skills for independent paper preparation in a suitable form for the purpose of public presentation, as well as to respond to comments and questions related to the given topic.

2. Educational outcomes (acquired knowledge):

Training students for a systematic approach in solving the given problems, carrying out analyses, applying knowledge and accepting knowledge from other areas in order to find creative solutions for a given problem. Through independent studying and solving tasks in a given topic, they acquire the knowledge about the complexity of the problems in the field of their profession. Through elaboration of Doctoral dissertation, students gain certain experiences that can be applied in practice when solving problems in the field of their profession. The student acquires necessary experience on how to present the results of independent or team work in practice by preparing the results for public defense, by public defense, and by answering questions and complaints of the Commission.

3. Course content/structure:

It is individually formed in accordance with the needs and the field covered by a given Doctoral dissertation. In agreement with a mentor, a student makes the Doctoral dissertation in a written form in accordance with the rules provided by the Faculty of Technical Sciences. The student prepares and defends the written Doctoral dissertation in public, in agreement with the mentor and in accordance with the prescribed rules and procedures.

4. Teaching methods:

During the elaboration of the Doctoral dissertation, the student consults with his/her mentor, and if necessary with other teachers dealing within a sphere of the Doctoral dissertation. The student writes the Dcotoral dissertation, and submits the bound copies to the Commission upon the approval of the Commission for assessment and defense. The Defense of the Doctoral dissertation is performed in public, and after the presentation, the student is obliged to orally answer the questions and comments.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points
Writing the PhD thesis	Yes	50.00	PhD thesis defence	Yes	50.00

Standard 06.   Programme Quality, Contemporaneity and International Compliance

The study programme is consistent with the modern world`s scientific developments and the status of the mechanical engineering profession, and comparable to similar programmes in foreign higher education institutions.

The structure of the study programme in mechanical Engineering is designed as complete and comprehensive and offers students the latest scientific and technical knowledge in this area and follows the new achievements in science.

Mechanical Engineering Study Programme is comparable to and in compliance with:

1. Politecnico di Milano, Milano, Italy, https://www11.ceda.polimi.it/manifestidott/manifestidott/controller/MainPublic.do?check_params=1&k_corso_la=1362&lang=EN&__pj0=0&__pj1=edb8b57b608fd60bd1844c13e9915e86

2. Brno University of Technology, Faculty of Mechanical Engineering, Brno, Czech Republic, http://www.fme.vutbr.cz/studium/ds/predmetyDS.html?rok=2012&obor=D-STG&lang=1

3. Ecole polytechnique federale de Lausanne, Manufacturing Systems and Robotics, Lausanne, Switzerland, http://phd.epfl.ch/page-19753-en.html</eng>

4. Slovak University of Technology in Bratislava, Faculty of Mechanical Engineering, Bratislava, Slovakia, http://www.sjf.stuba.sk/sk/uchadzacov/prijimacie-konanie-phd./studijny-program-doktorandskeho-stupna-studia-strojarske-technologie-amaterialy.html?page_id=4222</eng>

5. University of Zagreb, Faculty of Mechanical Engineering and Naval Architecture, Zagreb, Croatia, http://www.fsb.unizg.hr/atlantis/web/sites/poslijediplomski/

The study programme is formally and structurally consistent with the adopted subjects and specific standards for accreditation and conforms to European standards in terms of enrolment, length of study, conditions of transition to a following year, graduation and method of study.

Standard 07. Student Enrollment

Faculty of Technical Sciences announces competition for admission of candidates to the study programme of Doctoral Studies Mechanical Engeering in accordance with the social needs, available resources and approved number of students in the accreditation procedure. The number of students to be enrolled and the method of financing their studies (budget or self-financed) is defined each year by the special Decision of the Teaching Academic Council of the Faculty of Technical Sciences.

In the first year of doctoral studies may enroll a person who has completed the appropriate undergraduate academic and master academic studies in the aggregate are worth a total of at least 300 ECTS credits and average grade:

- at undergraduate studies at least 8.00,
- at master academic studies at least 8.00,

as defined by the Rules and regulations on enrollment and studying at the doctoral studies and PhD titles at the Faculty.

Doctoral studies can (under specific conditions) enroll a person who does not have fulfilled these conditions. Conditions of enrollment of such persons is also regulated by these Rules and regulations. The Committee for the Study Programme Quality of the Doctoral Studies in Mechanical Engeering evaluates the previously completed study programmes of all applied candidates and makes the decision whether or not they are adequate for the enrolment.

Candidates who completed the adequate study programme, according to the Committee's opinion, acquire the right to enroll the Doctoral Studies. The Committee for Quality makes the decision whether the candidates, who have the right to enroll, have to take the entrance examination. If the Committee for Quality makes the decision on taking the entrance examination, then the candidates take the entrance examination: Testing the knowledge in the field of the study programme.

The final ranking list for enrolment of the candidates is formed based on the success during previous education, on the duration of the studies and achieved success at the entrance examination, as defined by the Regulations of the Student Enrolment to the Study Programmes.

In accordance to the Regulations of the Student Enrolment to the Study Programmes, the Committee has the right to approve the enrolment of candidates who did not complete the adequate undergraduate academic and master academic studies and worth at least 300 ECTS credits, only if there are free places left after all candidates, who fulfill the set conditions by the Competition (adequate undergraduate academic and master academic studies, passed entrance examination), had enrolled. Candidates who did not complete the adequate study programme of undergraduate academic studies, according to the professional opinion of the Committee, may be allowed to enroll if the entrance examination is passed. In this case, the Committee determines the difference in examinations that need to be passed from the undergraduate academic studies for each of these candidates individually. The sum of the ECTS courses which are determined by this difference must not exceed 30 (thirty).

In addition, the candidate is required to know world languages and to have IT skills which guarantees the smooth attendance of classes and the use of literature.

At enrolment, the student and the Faculty conclude an agreement on the rights and obligations during studies.

Standard 08.   Student Evaluation and Progress

The final grade in each course included in this programme is formed by continual monitoring of students` accomplishments throughout the academic year and by passing the final examination.

Students master the study programme by taking examinations and thus obtaining a certain number of ECTS credits, in accordance with the study programme. Each course within the programme is worth a certain number of ECTS credits which students obtain by successfully passing the course examination. The number of ECTS credits is based on the quantity and quality of work students are required to submit during a certain course and on the Faculty of Technical Sciences` unique methodology for all study programmes. Students` success in mastering a certain course is constantly monitored during classes and is expressed in points. Maximum number of points obtained in a course is 100.

Students obtain points from a course through their work during classes, completion of the prerequisites and taking the examination. The minimal number of points a student can obtain by fulfilling the course prerequisites during classes is 30, the maximum 70.

Each course at the study programme has a clear and transparent mode of obtaining points. There are several ways students can obtain points: by participating in different activities during classes, by fulfilling the course prerequisites and by passing the course examination.

The final success of students at a course is presented with a grade from 5 (fail) to 10 (excellent). The student`s grade is based on the overall number of points obtained on fulfilling prerequisites and taking the examination, and in accordance with the quality of acquired knowledge and skills.

Studying at the study programme is carried out in the following way:

The Head of the Study Programme (the study group), upon admission, assigns for every student a co-mentor from the existing teaching stuff at the study programme, who will be their councillor until they choose a mentor.

At the end of each semester, the co-mentor submits to the Head of the Study Programme a report on the student`s work at a research project and the achieved results.

The requirement for admission to the next year of study programme is defined in the Regulations.

The right to take the qualifying exam in order to be able to write and defend the doctoral dissertation (a research study of the theoretical framework for the doctoral thesis) is given to students who have completed the second year of studies and passed all the examinations within the study programme.

The research study on the Theoretical Framework for the Doctoral Dissertation is a qualifying examination the student has to pass before he is allowed to start writing the doctoral thesis. The Theoretical Framework exam is taken in written or oral form, by chapters (questions) in at least three courses of the study programme. The list of chapters (questions) that have to be studied for the qualifying exam are sent to the student by the Head of the Study Programme of the Doctoral Studies within 14 days after the student submits a request. The qualifying examination is taken before a three-member jury, three being the minimum number of members, who are appointed by the Head of the Doctoral Studies at the Study Programme Quality Committee`s suggestion.  The Theoretical Framework examination cannot be taken sooner than 30 days, upon a student`s request, or later than 12 months after the student has passed his last examination at the study programme.

Exams in doctoral studies can be taken up to three times.

A student who has passes all the examinations prescribed by the study programme and has passed the research study on the theoretical framework for the Doctoral Dissertation, has the right to submit the topic for his/her Doctoral Dissertation. In addition, the student is expected to have published at lest one paper in journal on SCI list before submitting the dissertation topic.

The final part of doctoral studies is the preparation and defense of a doctoral dissertation.

Standard 09. Teaching Staff

As the institution in which the study program is conducted, the Faculty of Technical Sciences has a clearly defined criteria for the selection of full-time faculty members form other scientific institutions.

For the realization of the study programme there is a teaching staff with necessary professional and scientific qualifications, verified by the list of scientific papers and data on participation in national and international scientific and research projects. At least half of teachers participate in scientific and research projects. Teachers` competence is determined on the basis of scientific papers published in international journals, where at least one paper has been published or accepted to be published in a journals from the SCI list; scientific papers published in national journals; papers published in proceedings from international scientific conferences; monographs; patents; textbooks; new products or significant improvements on the existing products.

The supervisor has at least five scientific papers published or accepted to be published in scientific journals on the given field. It has been established that a supervisor cannot lead more than five Doctoral dissertation candidates simultaneously.

The number of teachers coincides with the demands of the study programme and depends on the number of courses they lecture and the number of classes at these courses. Out of the total number of necessary teachers is sufficient for all lectures at the study programme, and the teachers have on average 180 classes of active teaching (lectures, consultations, practice classes, practical work, etc) annually, that is 6 classes weekly.

Scientific and professional qualifications of the teaching staff relate to the educational and scientific field and the level of their participation. Each teacher has at least 10 references from the narrow scientific or professional field in which they lecture on the study programme.

No teacher has more than 12 classes per week. All data on teachers and assistants (CV, selections, and references) are available to the public.

Science, arts and professional qualifications

Name and last name:	Durakbasa M. Numan
Academic title:	Guest Professor
Name of the institution where the teacher works full time and starting date:	-
Scientific or art field:	Metrology, Quality, Fixtures and Ecological-Engineering Aspects

Academic carieer	Year	Institution	Field
Academic title election:	2010	Faculty of Technical Sciences - Novi Sad	Metrology, Quality, Fixtures and Ecological-Engineering Aspects
PhD thesis	1987	Vienna University of Technology - Beč	Metrology, Quality, Fixtures and Ecological-Engineering Aspects
Magister thesis	1982	Vienna University of Technology - Beč	Metrology, Quality, Fixtures and Ecological-Engineering Aspects
Bachelor's thesis	1977	Vienna University of Technology - Beč	Metrology, Quality, Fixtures and Ecological-Engineering Aspects

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	DM411	Contemporary Approach to Integration of Reverse Engineering of Rapid Prototyping, Tools, Products and Virtual Manufacturing	(M00) Mechanical Engineering, Doctoral Academic Studies
2.	DP006	State and development trends of metrology, quality and fixtures	(M00) Mechanical Engineering, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)
1. Ates, S.A., Durakbasa, N.M.: Evaluation of corporate energy management practices of energy intensive industries in Turkey, Energy, 45 (1), pp. 81-91, 2012, ISSN 0360-5442.
2. Durakbasa, N.M., Bas, G., Osanna, H.P., Bauer, J.M.: Sustainable management systems of quality, energy and environment in industry | [Sisteme durabile de management al calitţii, energiei şi mediului în industrie], Quality - Access to Success, 12 (4), pp. 21-25, 2011, ISSN 1582-2559.
3. Durakbasa, N.M.: Prüfmittelmanagement und Prüfmittelüberwachung in der Koordinatenmesstechnik, VDI Berichte, (1618) , pp. 157-168+251, 2001, ISSN 0083-5560.
4. Durakbasa, N.M, Osanna, P.H, Afjehi-Sadat, A.: A general approach to workpiece characterization in the frame of GPS (Geometrical Product Specification and Verification), International Journal of Machine Tools and Manufacture, 41 (13-14) , pp. 2147-2151, 2001, ISSN 0890-6955.
5. Osanna, P.H., Rezaie, K., Durakbasa, N.M., Heiss, C.P.: Form measurements - A bridge between production metrology and biomechanics, International Journal of Machine Tools and Manufacture, 35 (2), pp. 165-168, 1995, ISSN 0890-6955.
6. Osanna, P.H., Sarigul, E., Durakbasa, N.M., Osanna, A.: Role of databanks for artificial intelligence based measurement and control in computer integrated production, Applications of Artificial Intelligence in Engineering , pp. 471-478, 1994, ISSN 0952-1976.
7. Osanna, P.H., Durakbasa, N.M., Cakmakci, M., Oberländer, R.: Cylindricity - a well known problem and new solutions, International Journal of Machine Tools and Manufacture 32 (1-2), pp. 91-97, 1992, ISSN 0890-6955.
8. Osanna, P.H., Durakbasa, N.M., Vagszegi, I.G.: Laser optical roughness measurement, Measurement 6 (1) , pp. 33-36, 1988, ISSN 0263-2241.
9. Durakbasa, N.M., Osanna, P.H.: Coordinate Measuring Technique and Workpiece Microgeometry, F&M. Feinwerktechnik & Messtechnik 95 (8) , pp. 526-530, 1987, ISSN 0340-1952.
10. Demircioglu, P., Durakbasa, M.N.: Investigations on machined metal surfaces through the stylus type and optical 3D instruments and their mathematical modeling with the help of statistical techniques, Measurement, 44 (4) , pp. 611-619, 2011, ISSN 0263-2241.

Summary data for teacher's scientific or art and professional activity:			
Quotation total :	17		
Total of SCI(SSCI) list papers :	32		
Current projects :	Domestic :	1	International :	1

Science, arts and professional qualifications

Name and last name:	Adžić Z. Nevenka
Academic title:	Full Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	15.09.1978
Scientific or art field:	Mathematics

Academic carieer	Year	Institution	Field
Academic title election:	2002	Faculty of Technical Sciences - Novi Sad	Mathematics
PhD thesis	1990	Faculty of Sciences - Novi Sad	Mathematical Sciences
Magister thesis	1986	Faculty of Sciences - Novi Sad	Mathematical Sciences
Bachelor's thesis	1976	Faculty of Sciences - Novi Sad	Mathematical Sciences

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	E121	Mathematical Analysis 2	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
2.	E221A	Mathematical Analysis 2	(E20) Computing and Control Engineering, Undergraduate Academic Studies
			(MR0) Measurement and Control Engineering, Undergraduate Academic Studies
3.	GG10	Mathematical Methods 3	(G00) Civil Engineering, Undergraduate Academic Studies
4.	M106	Mathematics 2	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
			(M30) Energy and Process Engineering, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
			(P00) Production Engineering, Undergraduate Academic Studies
5.	S017	Mathematics 2	(S00) Traffic and Transport Engineering, Undergraduate Academic Studies
			(S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies
6.	S0213	Mathematical Statistics	(S00) Traffic and Transport Engineering, Undergraduate Academic Studies
			(S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies
7.	Z104	Mathematics 1	(Z01) Safety at Work, Undergraduate Academic Studies
			(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
			(ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies
			(Z20) Environmental Engineering, Undergraduate Academic Studies
8.	BMI91	Mathematics 1	(BM0) Biomedical Engineering, Undergraduate Academic Studies
9.	BMI92	Mathematics 2	(BM0) Biomedical Engineering, Undergraduate Academic Studies
10.	E101A	Discrete Mathematics	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
11.	IM1012	Probability and Statistics	(I10) Industrial Engineering, Undergraduate Academic Studies
			(I20) Engineering Management, Undergraduate Academic Studies
			(P00) Production Engineering, Undergraduate Academic Studies

	ID	Course name	Study programme name, study type
12.	IM1523	Discrete Mathematics	(M30) Energy and Process Engineering, Undergraduate Academic Studies
			(I20) Engineering Management, Undergraduate Academic Studies
13.	P216	Numerical Analysis	(P00) Production Engineering, Undergraduate Academic Studies
14.	0M517	Numerical Analysis	(OM1) Mathematics in Engineering, Master Academic Studies
15.	0ML517	Numerical Analysis	(OM1) Mathematics in Engineering, Master Academic Studies
16.	DZ01MS	Selected Chapters in Mathematics	(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
			(I12) Industrial Engineering, Specialised Academic Studies
			(I22) Engineering Management, Specialised Academic Studies
			(Z00) Environmental Engineering, Specialised Academic Studies
17.	D0M24	Numerical Solutions of Differential Equations	(OM1) Mathematics in Engineering, Doctoral Academic Studies
18.	DZ01M	Selected Chapters in Mathematics	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies
			(E20) Computing and Control Engineering, Doctoral Academic Studies
			(F00) Graphic Engineering and Design, Doctoral Academic Studies
			(F20) Engineering Animation, Doctoral Academic Studies
			(G00) Civil Engineering, Doctoral Academic Studies
			(GI0) Geodesy and Geomatics, Doctoral Academic Studies
			(H00) Mechatronics, Doctoral Academic Studies
			(I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
			(M00) Mechanical Engineering, Doctoral Academic Studies
			(M40) Technical Mechanics, Doctoral Academic Studies
			(OM1) Mathematics in Engineering, Doctoral Academic Studies
			(S00) Traffic Engineering, Doctoral Academic Studies
			(Z00) Environmental Engineering, Doctoral Academic Studies
			(Z01) Safety at Work, Doctoral Academic Studies
19.	AID06	Graph theory	(F20) Engineering Animation, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1.	N. Adzic, On the spectral solution for boundary value problem, ZAMM 70,(1990) 6, T647-T649.
2.	V. Vrcelj, N. Adzic, Z. Uzelac: A numerical asymptotic solution for singular perturbation problems, International journal of computer mathematics, Vol.39, (1991) 229-238.
3.	N. Adzic: Modified hermite polynomials in the spectral approximation for boundary layer problems, Bulletin of the Australian mathematical society, Vol.45, (1992) 267-276.<eng>
4.	N. Adzic: Spectral approximation for single turing point problem, ZAMM72(1992)6, T621-T624.
5.	N. Adzic: Nonclassical orthogonal polynomials and singularly perturbed problems, ZAMM73(1993) 7/8, T868-T871.
6.	N. Adzic: Spectral approximation and asymptotic behaviour of boundary layer problems, ZAMM74(1994)6, T-553-T555.
7.	N. Adzic, Z. Uzelac: A combination of spline and spectral approximation for a class of singularly perturbed problems, ZAMM78 (1998), S853-S854
8.	Z. Uzelac, N. Adzic: The Approximate Solution for Problems with Nonlocal Boundary Conditions, ZAMM79 (1999), S881-S882
9.	N. Adzic, Z. Uzelac: On spectral approximation for some two-dimensional singularly perturbed problems, ZAMM79 (1999), S851-S852
10.	N. Adzic: On the spectral approximation for singularly perturbed problems,ZAMM 71(1991)6,T773-T776.

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	5			
Total of SCI(SSCI) list papers :	10			
Current projects :	Domestic :	2	International :	0

Science, arts and professional qualifications

Name and last name:	Antić T. Aco
Academic title:	Assistant Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	01.07.1994
Scientific or art field:	Machine Tools, Flexible Technological Systems and Automatization

Academic carieer	Year	Institution	Field
Academic title election:	2010	Faculty of Technical Sciences - Novi Sad	Machine Tools, Flexible Technological Systems and Automatization Processes Design
PhD thesis	2010	Faculty of Technical Sciences - Novi Sad	Machine Tools, Flexible Technological Systems and Automatization Processes Design
Magister thesis	2002	Faculty of Technical Sciences - Novi Sad	Mechanical Engineering
Bachelor's thesis	1993	Faculty of Technical Sciences - Novi Sad	Mechanical Engineering

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	P1402	CAD/CAE/CAM i CIM Systems	(P00) Production Engineering, Undergraduate Academic Studies
2.	P301	Automation in Production Engineering	(P00) Production Engineering, Undergraduate Academic Studies
3.	P304	Processing and Technological Systems	(P00) Production Engineering, Undergraduate Academic Studies
4.	P307	Automated Flexible Technologial Systems	(P00) Production Engineering, Undergraduate Academic Studies
5.	P1405	Contemporary Approach to Product Designing	(PM0) Production Engineering, Master Academic Studies
6.	P307A	Flexible technological systems	(E20) Computing and Control Engineering, Master Academic Studies
7.	PAUP1	Automatization in plastic	(PM0) Production Engineering, Master Academic Studies
8.	PP110	The dynamics of micro machining systems	(PM0) Production Engineering, Master Academic Studies
9.	ZRMI1A	Occupational noise and human vibration in industry	(Z01) Safety at Work, Master Academic Studies
10.	DP001	Design and Research Methods in Production Engineering	(M00) Mechanical Engineering, Doctoral Academic Studies
11.	DP010	Behaviour Modelling and Experimental Testing of Working Systems	(M00) Mechanical Engineering, Doctoral Academic Studies
12.	DP019	Selected topics in technical diagnosis	(M00) Mechanical Engineering, Doctoral Academic Studies
13.	ZRD18A	Behaviour Modelling and Experimental Testing of Working Systems	(Z01) Safety at Work, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1. Antić, A.; Hodolič, J.; Soković, M.: Development of a Neural-Networks Tool-Wear Monitoring System for a Turning Process, Strojniski vestnik – Journal of Mechanical Engineering, 2006, Vol. 52, No. 11, str. 763- 776, ISSN 0039-2480.

2. Kovačević, D., Soković, M., Budak, I., Antić, A., Kosec, B.: Optimal finite elements method (FEM) model for the jib structure of a waterway dredger, Metalurgija 51, 1, 2012, pp 113 -116, ISSN: 0543-5846

3. Antić, A., Petrović, B.P., Zelković, M., Kosec, B., Hodolič, J.: The influence of tool wear on the chip-forming mechanism and tool vibrations, Materijali in tehnologije 46, 3, 2012, pp 279-285, ISSN: 1580-2949

4. Kovačević, D., Budak, I., Antić, A., Kosec, B.: Special finite elements: Theoretical background and application, Tehnički vjesnik- Technical Gazette 18, 4, 2011, pp 649-655, ISSN: 1330-3651

5. Kosec G., Nagode A., Budak I., Antić A., Kosec B.: Failure of the pinion from the drive of a cement mill, Engineering Failure Analysis, 2011, Vol. 18, pp. 450-454, ISSN 1350-6307

6. Kovačević D., Budak I., Antić A., Nagode A., Kosec B.: FEM Modeling and Analysis in Prevention of the Waterway Dredger's Crane Serviceability Failure, Engineering Failure Analysis, 2012, http://dx.doi.org/10.1016/j.engfailanal.2012.10.009, ISSN 1350-6307

7. Antić, A., Hodolič. J., Soković. M.: Development of an Intelligent System for Tool Wear Monitoring Applying Neural Networks, Journal of Achievements in Materials and Manufacturing Engineering, Vol. 14, ISSUE 1-2, pp 146-151, Poland, 2006, ISSN 1734-8412.

8. Antić, A., Kovačević, D., Zeljković, M., Kosec, B., Novak-Marcinčin, J.: Wear level influence on chip segmentation and vibrations of the cutting tool, Materials and Geoenvironment, 58, 1, 2011, pp 15-28, ISSN: 1408-7073

9. Antić, A., Zeljković, M., Novak-Marcinčin, J.: Influence of Tool Wear and Chip Forming Mechanism on Tool Vibration, Journal of Manufacturing Engineering, 10, 3, 2011, pp14-17, ISSN: 1335-7972

10. Antić A., Novak-Marcinčin J., Ungureanu N., Milošević M., Kovačević D.: Influence Tool Wear and Chip Forming Mechanism on Tool Vibrations, Manufacturing and Industrial Engineering, 2012, Vol. 11, No 2, pp. 5-8, ISSN 1335-7972

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	13			
Total of SCI(SSCI) list papers :	6			
Current projects :	Domestic :	1	International :	2

Science, arts and professional qualifications

Name and last name:	Atanacković M. Teodor
Academic title:	Full Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	18.03.1975
Scientific or art field:	Deformable Body Mechanics

Academic carieer	Year	Institution	Field
Academic title election:	1988	Faculty of Technical Sciences - Novi Sad	Deformable Body Mechanics
PhD thesis	1974	Faculty of Technical Sciences - Novi Sad	Deformable Body Mechanics
Magister thesis	1973	Faculty of Technical Sciences - Novi Sad	Deformable Body Mechanics
Bachelor's thesis	1969	Faculty of Technical Sciences - Novi Sad	Thermal Energetics and Thermotechnics

	List of courses being held by the teacher in the accredited study programmes		

	ID	Course name	Study programme name, study type
1.	A237	Material Resistance	(A00) Architecture, Undergraduate Academic Studies
2.	H202	Strength of materials	(H00) Mechatronics, Undergraduate Academic Studies
3.	A002S	Scientific Research Method	(A00) Architecture, Specialised Academic Studies (E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies (GI0) Geodesy and Geomatics, Specialised Academic Studies (I12) Industrial Engineering, Specialised Academic Studies (I22) Engineering Management, Specialised Academic Studies (Z00) Environmental Engineering, Specialised Academic Studies
4.	DAU003	Selected Chapters in Mechanics	(E20) Computing and Control Engineering, Doctoral Academic Studies (H00) Mechatronics, Doctoral Academic Studies (OM1) Mathematics in Engineering, Doctoral Academic Studies
5.	DZ001	Scientific Research Method	(A00) Architecture, Doctoral Academic Studies (AS0) Scenic Design, Doctoral Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies (E20) Computing and Control Engineering, Doctoral Academic Studies (F00) Graphic Engineering and Design, Doctoral Academic Studies (F20) Engineering Animation, Doctoral Academic Studies (G00) Civil Engineering, Doctoral Academic Studies (GI0) Geodesy and Geomatics, Doctoral Academic Studies (H00) Mechatronics, Doctoral Academic Studies (I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies (M00) Mechanical Engineering, Doctoral Academic Studies (M40) Technical Mechanics, Doctoral Academic Studies (OM1) Mathematics in Engineering, Doctoral Academic Studies (S00) Traffic Engineering, Doctoral Academic Studies (Z00) Environmental Engineering, Doctoral Academic Studies (Z01) Safety at Work, Doctoral Academic Studies

	ID	Course name	Study programme name, study type
6.	SID04	Current State in the Field	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies
			(E20) Computing and Control Engineering, Doctoral Academic Studies
			(F00) Graphic Engineering and Design, Doctoral Academic Studies
			(F20) Engineering Animation, Doctoral Academic Studies
			(G00) Civil Engineering, Doctoral Academic Studies
			(GI0) Geodesy and Geomatics, Doctoral Academic Studies
			(H00) Mechatronics, Doctoral Academic Studies
			(I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
			(M00) Mechanical Engineering, Doctoral Academic Studies
			(OM1) Mathematics in Engineering, Doctoral Academic Studies
			(S00) Traffic Engineering, Doctoral Academic Studies
			(Z00) Environmental Engineering, Doctoral Academic Studies
7.	SID04	Present State in the Field	(A00) Architecture, Doctoral Academic Studies
			(AS0) Scenic Design, Doctoral Academic Studies
			(Z01) Safety at Work, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1.	T. M. Atanackovic, Stability Theory of Elastic Rods. World Scientific, 1997.
2.	T. M. Atanackovic, A. Guran, Theory of Elasticity for Scientists and Engineers. Birkhauser, 2000..
3.	B. D Vujanovic, T. M. Atanackovic, An Introduction to Modern Variational Techniques in Mechanics and Engineering. Birkhauser, Boston 2004..
4.	T.M. Atanackovic, Stability of a Compressible Elastic Rod with Imperfections. Acta Mechanica. 76, 203?222 (1989)..
5.	T.M. Atanackovic and M. Achenbach, Moment-curvature relations for a pseudoplastic beam. Continuum Mech. Thermodyn. 1, 73-80 (1989)...
6.	T.M. Atanackovic and I. Müller, A New form of ther Coherency Energy in Pseudoelasticity. Meccanica, 30, 467-474 (1995).
7.	T. M. Atanackovic, Optimal shape of column with own weight: bi and single modal optimization. Meccanica 41, 173-196 (2006).
8.	T. M. Atanackovic, S. Pilipovic, D. Zorica, Diffusion wave equation with two fractional derivatives of different order. J. Phys. A: Math. Theor. 40, 5319-5333 (2007).
9.	T. M. Atanackovic, Optimal shape of an elastic rod in flexural – torsional buckling. Z. Angew. Math. Mech.(ZAMM) 87, No. 6, 399 – 405 (2007).
10.	T. M. Atanackovic and B. N. Novakovic, Optimal Shape of an elastic column on elastic foundation. European J. Mechanics, A/Solids, 25, 154-165 (2006).

Summary data for teacher's scientific or art and professional activity:

Quotation total :	220			
Total of SCI(SSCI) list papers :	120			
Current projects :	Domestic :	1	International :	0

Science, arts and professional qualifications

Name and last name:	Baloš S. Sebastian
Academic title:	Assistant Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	01.04.2001
Scientific or art field:	Material Science and Engineering Materials

Academic carieer	Year	Institution	Field
Academic title election:	2011	Faculty of Technical Sciences - Novi Sad	Material Science and Engineering Materials
PhD thesis	2010	Faculty of Technical Sciences - Novi Sad	Material Science and Engineering Materials
Magister thesis	2009	Faculty of Technical Sciences - Novi Sad	Material Science and Engineering Materials
Bachelor's thesis	2000	Faculty of Technical Sciences - Novi Sad	Material Science and Engineering Materials

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	P206	Welding Technology	(P00) Production Engineering, Undergraduate Academic Studies
2.	P2406	Composite Materials	(P00) Production Engineering, Undergraduate Academic Studies
3.	P2409	Modern Joining Technologies - 1	(P00) Production Engineering, Undergraduate Academic Studies
4.	P2409A	Modern Joining Technologies - 2	(P00) Production Engineering, Undergraduate Academic Studies
5.	P4406	Joining Technology of Modern Materials	(P00) Production Engineering, Undergraduate Academic Studies
6.	II1001	Engineering materials	(I10) Industrial Engineering, Undergraduate Academic Studies
7.	M2062	Mechanical engineering technologies 2	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies (M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
8.	M3203	Technology of machinery	(M30) Energy and Process Engineering, Undergraduate Academic Studies
9.	ZC003	Electromechanical materials	(MR0) Measurement and Control Engineering, Undergraduate Academic Studies (ZC0) Clean Energy Technologies, Undergraduate Academic Studies
10.	P2501	Process Design in Welding Technology	(PM0) Production Engineering, Master Academic Studies
11.	BMIM4G	Biomaterials	(BM0) Biomedical Engineering, Master Academic Studies
12.	PPI106	Joining technologies in precision engineering	(PM0) Production Engineering, Master Academic Studies
13.	PTS01	Technology of sintering	(PM0) Production Engineering, Master Academic Studies
14.	DP001	Design and Research Methods in Production Engineering	(M00) Mechanical Engineering, Doctoral Academic Studies
15.	SAP002	Engineering Materials	(M00) Mechanical Engineering, Doctoral Academic Studies
16.	DP023	Joining technologies - selected topics	(M00) Mechanical Engineering, Doctoral Academic Studies
17.	DP024	Welding technology - selected topics	(M00) Mechanical Engineering, Doctoral Academic Studies
18.	DP025	Materials Corrosion and Protection	(M00) Mechanical Engineering, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1.	Baloš S., Šiđanin (Sidjanin) L.: Metallographic study of non-homogenousarmour impacted by armour-piercing incendiary ammunition, Materials and Design, 2011, Vol. 32, pp. 4022-4029, ISSN 0261-3069
2.	Baloš S., Arlan B., Alan P.: Roman mystery iron blades from Serbia , Materials Characterization, 2009, Vol. 60, No 4, pp. 271-276, ISSN 1044-5803
3.	Baloš S., Šiđanin (Sidjanin) L.: Microdeformation of soft particles in metal matrix composites, Journal of Materials Processing Technology, 2009, pp. 482-487, ISSN 0924-0136
4.	Baloš S., Arlan B., Alan P.: Roman mystery iron blades from Serbia, Microscopy and microanalysis, 2007, Vol. 13, No Supplement S02, pp. 1100-1101, ISSN 1431-9276
5.	Baloš S., Grabulov V., Šiđanin (Sidjanin) L., Pantić M.: Wire fence as applique armor, Materials and Design, 2010, Vol. 31, pp. 1293-1301, ISSN 0261-3069

	Representative refferences (minimum 5, not more than 10)				
6.	Baloš S., Grabulov V., Šiđanin (Sidjanin) L., Pantić M., Radisavljevic I.: Geometry, mechanical properties and mounting of perforated plates for ballistic application, Materials and Design, 2010, Vol. 31, pp. 2916-2924, ISSN 0261-3069				
7.	Vrač D., Šiđanin (Sidjanin) L., Kovač P., Baloš S.: The influence of hohning process parameters on surface quality, productivity, cutting angle and coefficients of friction, Industrial Lubrication and Tribology, 2012, Vol. 64, No 2, pp. 77-83, ISSN 0036-8792				
8.	Lazarević Z., Jovalekić Č., Sekulić D., Slankamenac M., Romčević M., Milutinović A., Baloš S., Romčević N.: Characterization of Nanostructured Spinel NiFe2O4 Obtained by Soft Mechanochemical Synthesis, Science of Sintering, 2012, Vol. 44, No 3				
9.	Vrač D., Šiđanin (Sidjanin) L., Baloš S.: Mechanical finishing honing: cutting regimes and surface texture, Industrial Lubrication and Tribology, 2011, Vol. 63, No 6, pp. 427-432, ISSN 0036-8792				
10.	Baloš S., Balos T., Šiđanin (Sidjanin) L., Marković D., Pilić B., Pavličević J.: Study of PMMA biopolymer properties treated by microwave energy, Materiale Plastice, 2011, Vol. 48, No 02, pp. 127-131, ISSN 0025-5289				
Summary data for teacher's scientific or art and professional activity:					
Quotation total :		15			
Total of SCI(SSCI) list papers :		13			
Current projects :		Domestic :	2	International :	0

Science, arts and professional qualifications

Name and last name:	Borovac A. Branislav
Academic title:	Full Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	01.10.1975
Scientific or art field:	Mechatronics, Robotics and Automation and Integral Systems

Academic carieer	Year	Institution	Field
Academic title election:	1998	Faculty of Technical Sciences - Novi Sad	Mechatronics, Robotics and Automation and Integral Systems
PhD thesis	1986	Faculty of Technical Sciences - Novi Sad	Robotics and Flexible Automation
Magister thesis	1982	Faculty of Technical Sciences - Novi Sad	Robotics and Flexible Automation
Bachelor's thesis	1975	Faculty of Technical Sciences - Novi Sad	Mechanical Engineering

List of courses being held by the teacher in the accredited study programmes			
	ID	**Course name**	**Study programme name, study type**
1.	EM436	Mechatronics	(M30) Energy and Process Engineering, Undergraduate Academic Studies
2.	H102	Fundamentals in Product Development	(H00) Mechatronics, Undergraduate Academic Studies
3.	H1404	Mechatronics	(H00) Mechatronics, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
4.	H308	Industrial Robotics	(H00) Mechatronics, Undergraduate Academic Studies
5.	I600	Industrial Robotics	(F10) Engineering Animation, Undergraduate Academic Studies
			(MR0) Measurement and Control Engineering, Undergraduate Academic Studies
			(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
6.	BM116A	Basics of medical robotics	(BM0) Biomedical Engineering, Undergraduate Academic Studies
7.	EM436A	Mechatronics	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
8.	II1035	Industrial robotics	(I10) Industrial Engineering, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
9.	H1503	Non Industrial Robotics and Automation in Buildings	(H00) Mechatronics, Master Academic Studies
			(I10) Industrial Engineering, Master Academic Studies
10.	HDOK1S	Selected topics in industrial robotics	(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
11.	HDOK2S	Selected topics in non-industrial robotics	(I12) Industrial Engineering, Specialised Academic Studies
12.	IMDR0S	Selected chapters in enterprise's design, organization and control	(I12) Industrial Engineering, Specialised Academic Studies
			(I22) Engineering Management, Specialised Academic Studies
13.	NIT05	Advanced Technology for Material Handling	(NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies
14.	AD0007	Interactive systems in architecture	(AD0) Digital Techniques, Design and Production in Architecture and Urban Planning, Master Academic Studies
15.	H828	Advanced robotics	(H00) Mechatronics, Master Academic Studies
16.	H829	Advanced robotics	(I10) Industrial Engineering, Master Academic Studies
			(M40) Technical Mechanics and Technical Design, Master Academic Studies
17.	IIDS6	Selected chapters in automation	(I12) Industrial Engineering, Specialised Academic Studies
18.	GD018	Automation and Robotics in Construction	(G00) Civil Engineering, Doctoral Academic Studies
			(OM1) Mathematics in Engineering, Doctoral Academic Studies

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
19.	HDOK-1	Selected Chapters in Industrial Robotics	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies (H00) Mechatronics, Doctoral Academic Studies (M40) Technical Mechanics, Doctoral Academic Studies (OM1) Mathematics in Engineering, Doctoral Academic Studies
20.	HDOK-2	Selected Chapters in Non-Industrial Robotics	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies (H00) Mechatronics, Doctoral Academic Studies (I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies (M40) Technical Mechanics, Doctoral Academic Studies (OM1) Mathematics in Engineering, Doctoral Academic Studies
21.	HDOKL1	Selected topics in non-industrial robotics	(H00) Mechatronics, Doctoral Academic Studies (M00) Mechanical Engineering, Doctoral Academic Studies (M40) Technical Mechanics, Doctoral Academic Studies
22.	HDOKL2	Selected topics in non-industrial robotics	(H00) Mechatronics, Doctoral Academic Studies (M40) Technical Mechanics, Doctoral Academic Studies
23.	IMDR0	Science of Industrial Engineering and Management	(I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
24.	IMDR80	Selected chapters in automation	(I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1. M. Vukobratović, V. Potkonjak, K. Babković, B. Borovac, Simulation model of general human and humanoid motion, Multibody System Dynamics, Volume 17, Number 1, (February, 2007), pp. 71-96 (ISSN 1384-5640 (Print) 1573-272X (Online))
2. Vukobratović M., Borovac B., Potkonjak V., Towards a Unified Understanding of Basic Notions and Terms in Humanoid Robotics, Robotica (2007) Vol. 25, pp. 87-101
3. Vukobratović M., Borovac B., Potkonjak V., ZMP: A Review of Some Basic Misunder-standings, Int. Jour. of Humanoid Robotics, Vol. 3, No. 2 (2006), pp. 153-176
4. V. Potkonjak, M. Vukobratović, K. Babković, B. Borovac, General Model of Dynamics of Human and Humanoid Motion: Feasibility, Potentials and Verification, Int. Jour. of Humanoid Robotics, Vol. 3, No. 2 (2006), pp. 21-48
5. Vukobratović M., Borovac B., Babković K., "Contribution to the Study of Anthropomorphism of Humanoid Robots", Int. Jour. of Humanoid Robotics, Vol. 2, No. 3 (2005), pp. 361-387
6. Vukobratović M., Borovac B., Note on the Article "Zero-Moment Point- Thirty Five Years of its Life", Int. Jour. of Humanoid Robotics, Vol. 2, No.2, June 2005, pp. 225-227
7. Vukobratović M., Borovac B., "Zero-Moment Point- Thirty Five Years of its Life", Int. Jour. of Humanoid Robotics, Vol. 1, No.1, March 2004, pp. 157-173
8. M. Vukobratović, D. Andrić, B. Borovac, "How to Achieve Various Gait Patterns from Single Nominal ", International Journal of Advanced Robotic Systems, Vol. 1., No. 2, Page 99-108, 2004
9. L. Juhas, A. Vujanić, N. Adamović, L. Nagy, B. Borovac "A Platform for Micro-Positioning Based on Piezo-Legs", The Journal of Mechatronics, Vol. 11, (2001), pp.869-897
10. M. Vukobratović, D. Andrić, B. Borovac, "Humanoid Robot Motion in Unstructured Environment - Generation of Various Gait Patterns from a Single Nominal ", Cutting Edge Robotics, Edited by V. Kordic, A. Lazanica, M. Merdan, Published by pIV pro literatur Ver-lag Robert Mayer-Scholz, © 2005 Advanced Robotic Systems International, Page 577-598, 2005

Summary data for teacher's scientific or art and professional activity:

Quotation total :	1998			
Total of SCI(SSCI) list papers :	35			
Current projects :	Domestic :	2	International :	1

Science, arts and professional qualifications

Name and last name:	Budak M. Igor
Academic title:	Assistant Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	06.09.2001
Scientific or art field:	Metrology, Quality, Fixtures and Ecological-Engineering Aspects

Academic carieer	Year	Institution	Field
Academic title election:	2010	Faculty of Technical Sciences - Novi Sad	Metrology, Quality, Fixtures and Ecological-Engineering Aspects
PhD thesis	2009	Faculty of Mechanical Engineering - Ljubljana	Metrology, Quality, Fixtures and Ecological-Engineering Aspects
Magister thesis	2004	Faculty of Technical Sciences - Novi Sad	Mechanical Engineering
Bachelor's thesis	1998	Faculty of Technical Sciences - Novi Sad	Mechanical Engineering

	List of courses being held by the teacher in the accredited study programmes		
	ID	**Course name**	**Study programme name, study type**
1.	IA018	3D Digitalization Methods	(F10) Engineering Animation, Undergraduate Academic Studies
2.	P1401	Fixture Design and Measuring Machines	(P00) Production Engineering, Undergraduate Academic Studies
3.	P1508	Reverse Engineering and CAQ	(P00) Production Engineering, Undergraduate Academic Studies
			(SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies
			(SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies
4.	P209	Measurements and Quality	(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
			(P00) Production Engineering, Undergraduate Academic Studies
5.	P306	Fixtures	(P00) Production Engineering, Undergraduate Academic Studies
6.	Z207	Mechanical Engineering in Environmental Engineering	(Z20) Environmental Engineering, Undergraduate Academic Studies
7.	Z207A	Mechanical Engineering in Environmental Engineering	(Z01) Safety at Work, Undergraduate Academic Studies
8.	Z301	Pollution Measurement and Control	(Z01) Safety at Work, Undergraduate Academic Studies
			(Z20) Environmental Engineering, Undergraduate Academic Studies
9.	Z416	EMS Systems	(Z20) Environmental Engineering, Undergraduate Academic Studies
10.	ZRI441	Material handling systems for environmental and labor protection	(Z01) Safety at Work, Undergraduate Academic Studies
11.	Z416	EMS sistemi(uneti naziv na engleskom)	(Z20) Environmental Engineering, Undergraduate Academic Studies
12.	BM119D	Reverse engineering and rapid prototyping in biomedical engineering	(BM0) Biomedical Engineering, Undergraduate Academic Studies
13.	P322	Introduction to Precision Engineering	(P00) Production Engineering, Undergraduate Academic Studies
14.	ZC036	Measurement and control of pollution	(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
15.	P1409	Material Control Systems and CAI	(PM0) Production Engineering, Master Academic Studies
16.	P1501	Ecological Technologies and Systems	(M40) Technical Mechanics and Technical Design, Master Academic Studies
			(PM0) Production Engineering, Master Academic Studies
17.	Z416A	Environment Protection System Management	(PM0) Production Engineering, Master Academic Studies
18.	I907	Automated Assembly Systems for High Accuracy	(H00) Mechatronics, Master Academic Studies
			(PM0) Production Engineering, Master Academic Studies
19.	P321	Reverse Engineering and Rapid Prototyping	(I10) Industrial Engineering, Master Academic Studies
20.	PIP16	Plastics and environmental protection	(PM0) Production Engineering, Master Academic Studies

	ID	Course name	Study programme name, study type
		List of courses being held by the teacher in the accredited study programmes	
21.	PLIS1	Logistics and Simulation in Technologies of Plastics Processing	(PM0) Production Engineering, Master Academic Studies
22.	PP103	Measurement and tools in precision engineering	(PM0) Production Engineering, Master Academic Studies
23.	SM3	Software support for reverse engineering and CAQ	(PM0) Production Engineering, Master Academic Studies
24.	SZSP18	Contemporary scientific approaches in life cycle assessment of products (LCA)	(Z00) Environmental Engineering, Specialised Academic Studies
25.	DM411	Contemporary Approach to Integration of Reverse Engineering of Rapid Prototyping, Tools, Products and Virtual Manufacturing	(M00) Mechanical Engineering, Doctoral Academic Studies
26.	DP001	Design and Research Methods in Production Engineering	(M00) Mechanical Engineering, Doctoral Academic Studies
27.	DP006	State and development trends of metrology, quality and fixtures	(M00) Mechanical Engineering, Doctoral Academic Studies
28.	DP013	Ecological Engineering Aspects	(M00) Mechanical Engineering, Doctoral Academic Studies
29.	DP019	Selected topics in technical diagnosis	(M00) Mechanical Engineering, Doctoral Academic Studies
30.	ZDH1	Modern Methods of Eco-design	(Z00) Environmental Engineering, Doctoral Academic Studies
31.	ZSP18	Modern Scientific Approaches in Product Life Cycle Assessment (LCA)	(Z00) Environmental Engineering, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1. Budak I., Vukelić Đ., Bračun D., Hodolič J., Soković M.: Pre-Processing of Point-Data from Contact and Optical 3D Digitization Sensors, Sensors, 2012, Vol. 12, No 1, pp. 1100-1126, ISSN 1424-8220

2. Tadić B., Jeremić B., Todorović P., Vukelić Đ., Proso U., Mandić V., Budak I.: Efficient workpiece clamping by indenting cone-shaped elements, International Journal of Precision Engineering and Manufacturing, 2012, Vol. 13, No 10, pp. 1725-1735, ISSN 2234-7593

3. Kosec G., Nagode A., Budak I., Antić A., Kosec B.: Failure of the pinion from the drive of a cement mill, Engineering Failure Analysis, 2011, Vol. 18, pp. 450-454, ISSN 1350-6307

4. Budak I., Soković M., Barišić B.: Accuracy improvement of point data reduction with sampling-based methods by Fuzzy logic-based decision-making, MEASUREMENT, 2011, Vol. 44, No 6, pp. 1188-1200, ISSN 0263-2241

5. Budak I., Hodolič J., Soković M.: Development of a programme system for data-point pre-processing in Reverse Engineering, Journal of Materials Processing Technology, 2005, Vol. 162, pp. 730-735, ISSN 0924-0136

6. Jevremović D., Puškar T., Budak I., Vukelić Đ., Kojić V., Eggbeer D., Williams R.: An RE/RM approach to the design and manufacture of removable partial dentures with a biocompatibility analysis of the F75 Co-Cr SLM alloy, Materijali in tehnologije, 2012, Vol. 46, No 2, pp. 123-129, ISSN 1580-2949

7. Trifković B., Budak I., Todorović A., Hodolič J., Puškar T., Jevremović D., Vukelić Đ.: Application of Replica Technique and SEM in Accuracy Measurement of Ceramic Crowns, Measurement Science Review, 2012, Vol. 12, No 3, pp. 90-97, ISSN 1335-8871

8. Agarski B., Kljajin M., Budak I., Tadić B., Vukelić Đ., Bosak M., Hodolič J.: Application of multi-criteria assessment in evaluation of motor vehicles' environmental performances, Tehnički vjesnik/Technical Gazette, 2012, Vol. 19, No 2, pp. 221-226, ISSN 1330-3651

9. Vukelić Đ., Miljanić D., Ranđelović S., Budak I., Džunić D., Erić M., Pantić M.: Burnishing process based on optimal depth of workpiece penetration (Article in press, date of acceptance 28.08.2012, Manuscript Number: MIT-45-2012), Materijali in tehnologije, 2012, ISSN 1580-2949

10. Vukelić Đ., Tadić B., Miljanić D., Budak I., Todorović P., Ranđelović S., Jeremić B.: Novel workpiece clamping method for increased machining performance, Tehnički vjesnik-Technical Gazette, 2012, Vol. 19, No 4, pp. 837-846, ISSN 1330-3651.

Summary data for teacher's scientific or art and professional activity:

Quotation total :	25			
Total of SCI(SSCI) list papers :	20			
Current projects :	Domestic :	4	International :	7

Science, arts and professional qualifications

Name and last name:	Budinski-Petković M. Ljuba
Academic title:	Full Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	01.10.1989
Scientific or art field:	Physics

Academic carieer	Year	Institution	Field
Academic title election:	2009		Physics
PhD thesis	1998	Faculty of Sciences - Novi Sad	Physics
Magister thesis	1996	Faculty of Physics - Beograd	Physics
Bachelor's thesis	1988	Faculty of Sciences - Novi Sad	Physics

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	E215	Physics	(E20) Computing and Control Engineering, Undergraduate Academic Studies
2.	H101	Physics	(F10) Engineering Animation, Undergraduate Academic Studies
			(GI0) Geodesy and Geomatics, Undergraduate Academic Studies
			(H00) Mechatronics, Undergraduate Academic Studies
3.	IAFI01	Colors and Light	(F10) Engineering Animation, Undergraduate Academic Studies
4.	BMI93	Physics	(BM0) Biomedical Engineering, Undergraduate Academic Studies
5.	DZ01FS	Selected Chapters in Physics	(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
			(I12) Industrial Engineering, Specialised Academic Studies
			(I22) Engineering Management, Specialised Academic Studies
			(Z00) Environmental Engineering, Specialised Academic Studies
6.	DZ01F	Selected Chapters in Physics	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies
			(E20) Computing and Control Engineering, Doctoral Academic Studies
			(F00) Graphic Engineering and Design, Doctoral Academic Studies
			(G00) Civil Engineering, Doctoral Academic Studies
			(GI0) Geodesy and Geomatics, Doctoral Academic Studies
			(H00) Mechatronics, Doctoral Academic Studies
			(I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
			(M00) Mechanical Engineering, Doctoral Academic Studies
			(M40) Technical Mechanics, Doctoral Academic Studies
			(OM1) Mathematics in Engineering, Doctoral Academic Studies
			(S00) Traffic Engineering, Doctoral Academic Studies
			(Z00) Environmental Engineering, Doctoral Academic Studies
			(Z01) Safety at Work, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1.	Budinski-Petković Lj., Lončarević I., Petkovic M., Jaksic Z., Vrhovac S.: Percolation in random sequential adsorption of extended objects on a triangular lattice, Physical Review E, 2012, Vol. 85, No 061117, pp. 1-8
2.	Šćepanović J., Lončarević I., Budinski-Petković Lj., Jakšić Z., Vrhovac S.: Relaxation properties in a diffusive model of k-mers with constrained movements on a triangular lattice, Physical Review E, 2011, Vol. 84, No 031109, pp. 1-13
3.	Budinski-Petković Lj., Lončarević I., Jakšić Z., Vrhovac S., Švrakić N.: Simulation study of anisotropic random sequential adsorption of extended objects on a triangular lattice, Physical Review E, 2011, Vol. 84, No 5, pp. 5160-1

	Representative refferences (minimum 5, not more than 10)
4.	Lončarević I., Budinski-Petković Lj., Vrhovac S., Belić A.: Generalized random sequential adsorption of polydisperse mixtures on a one-dimensional lattice, Journal of Statistical Mechanics: Theory and Experiment, 2010, ISSN 1742-5468
5.	Lončarević I., Budinski-Petković Lj., Vrhovac Lj., Belić A.: Adsorption, desorption, and diffusion of k-mers on a one-dimensional lattice, Physical Review E, 2009, Vol. 80, No 2
6.	Budinski-Petković Lj., Vrhovac S., Lončarević I.: Random sequential adsorption of polydisperse mixtures on discrete substrates, Physical Review E, 2008, Vol. 78, No 061603, pp. 1-7
7.	Lončarević I., Budinski-Petković Lj., Vrhovac S.: Simulation study of random sequential adsorption of mixtures on a triangular lattice , The European Physical Journal E, 2007, Vol. 24, pp. 19-26, ISSN 1292-8941
8.	Lončarević I., Budinski-Petković Lj., Vrhovac S.: Reversible random sequential adsorption of mixtures on a triangular lattice, Physical Review E, 2007, Vol. 76, No 031104, pp. 1-9
9.	Arsenović D., Vrhovac S., Jakšić Z., Budinski-Petković Lj., Belić A.: Simulation study of granular compaction dynamics under vertical tapping, Physical Review E, 2006, Vol. 74
10.	Lj. Budinski-Petković and S. B. Vrhovac: Memory effects in vibrated granular systems: Response properties in the generalized random sequential adsorption model, The European Physical Journal E, 2005, Vol. 16, pp. 89-96, ISSN 1292-8941

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	75			
Total of SCI(SSCI) list papers :	30			
Current projects :	Domestic :	1	International :	1

Science, arts and professional qualifications

Name and last name:	Cvetićanin J. Livija
Academic title:	Full Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	12.11.1975
Scientific or art field:	Machine Mechanics

Academic carieer	Year	Institution	Field
Academic title election:	1992	Faculty of Technical Sciences - Novi Sad	Machine Mechanics
PhD thesis	1981	Faculty of Technical Sciences - Novi Sad	Mechanical Engineering
Magister thesis	1977	Faculty of Mathematics - Beograd	Mechanics
Bachelor's thesis	1975	Faculty of Technical Sciences - Novi Sad	Mechanical Engineering

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	IAKI01	Selected Chapters in Kinematics	(F10) Engineering Animation, Undergraduate Academic Studies
2.	M103	Mechanics 1	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
			(M30) Energy and Process Engineering, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
			(P00) Production Engineering, Undergraduate Academic Studies
3.	M107	Mechanics 2	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
			(M30) Energy and Process Engineering, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
			(P00) Production Engineering, Undergraduate Academic Studies
4.	M201	Mechanics 3	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
			(M30) Energy and Process Engineering, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
			(P00) Production Engineering, Undergraduate Academic Studies
5.	M2411	Theory of Oscillation	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
			(P00) Production Engineering, Undergraduate Academic Studies
6.	DM405	Chaos in Dynamic Systems	(M00) Mechanical Engineering, Doctoral Academic Studies
			(M40) Technical Mechanics, Doctoral Academic Studies
			(OM1) Mathematics in Engineering, Doctoral Academic Studies
7.	DM408	Nonlinerar Oscillations	(M00) Mechanical Engineering, Doctoral Academic Studies
			(M40) Technical Mechanics, Doctoral Academic Studies
8.	FDS143	Selected Chapters in Technical Mechanics	(F00) Graphic Engineering and Design, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1.	1.L. Cveticanin, Dynamics of Machines with Variable Mass, Gordon and Breach Science Publishers, London, p.236, 1998.
2.	L. Cveticanin, Particle separation from a four-particle-system, European Journal of Mechanics - A/Solids, Volume 26, Issue 2, March-April 2007, Pages 270-285.

	Representative refferences (minimum 5, not more than 10)
3.	L. Cveticanin, Homotopy-perturbation method for pure non-linear differential equation, Chaos, Solitons and Fractals, Vol.30, 2006, 1221-1230
4.	L. Cveticanin, Free vibration of a Jeffcott rotor with pure cubic non-linear elastic property of the shaft, Mechanism and Machine Theory, Vol.40, 2005, 1330-1344.
5.	L. Cveticanin, Approximate solution of a strongly non-linear complex differential equation, Journal of Sound and Vibration, Vol.284, No.1-2, 2005, pp.503-512.
6.	L. Cveticanin, Vibrations of the non-linear oscillator with quadratic non-linearity, Physica A, Vol.341, 2004, pp.123-135.
7.	M. Zukovic, L. Cveticanin, R. Maretic, Dynamics of the cutting mechanism with flexible support and non-ideal forcing, Mechanism and Machine Theory, Vol.58, 2012, 1-12.
8.	L. Cveticanin, M. KalamiYazdi, H. Askari, Z. Saadatnia, Vibration of a two-mass system with non-integer order nonlinear connection, Mechanics Research Communications 43 (2012) 22-28.
9.	L.Cveticanin, Oscillator with fraction order restoring force, Journal of Sound and Vibration, Vol.320, 2009, 1064-1077.
10.	L. Cveticanin, Pure odd-order oscillators with constant excitation, Journal of Sound and Vibration, Vol.330, 2011, 976-986.

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	706			
Total of SCI(SSCI) list papers :	134			
Current projects :	Domestic :	2	International :	0

Science, arts and professional qualifications

Name and last name:	Čavić M. Maja
Academic title:	Assistant Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	03.11.1988
Scientific or art field:	Machine Elements,Construction Principles, Machine and Mechanizm

Academic carieer	Year	Institution	Field
Academic title election:	2012		Machine Elements,Construction Principles, Machine and Mechanizm Theory, Power and Motion Transfer and Eng.Communication
PhD thesis	2012	Faculty of Technical Sciences - Novi Sad	Machine Elements,Construction Principles, Machine and Mechanizm Theory, Power and Motion Transfer and Eng.Communication
Magister thesis	1994	Faculty of Mechanical Engineering - Beograd	Machine Elements,Construction Principles, Machine and Mechanizm Theory, Power and Motion Transfer and Eng.Communication
Bachelor's thesis	1987	Faculty of Technical Sciences - Novi Sad	Machine Elements,Construction Principles, Machine and Mechanizm Theory, Power and Motion Transfer and Eng.Communication

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	H306	Machine Mechanics	(H00) Mechatronics, Undergraduate Academic Studies
2.	M208	Theory of Mechanisms and Machines	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
3.	M2409	Power and Motion Transmission	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
4.	M2410	Mechanism Synthesis	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
5.	M2525	Mechanisms	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
6.	S012	Descriptive Geometry and Engineering Drawing	(S00) Traffic and Transport Engineering, Undergraduate Academic Studies
			(S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies
7.	H570	Mechanisms in Mechatronics	(H00) Mechatronics, Master Academic Studies
8.	M2653	Power and Motion Transmission in Agricultural Machinery	(M22) Mechanization and Construction Engineering, Master Academic Studies
9.	H797	Mechatronics in mechanization - advanced topics	(H00) Mechatronics, Master Academic Studies
10.	DM215	Seelcted Chapters in Machine and Mechanisms Theory	(M00) Mechanical Engineering, Doctoral Academic Studies
11.	DM409	Selected Chapter in Power and Motion Transmission	(M00) Mechanical Engineering, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)	
1.	Zlokolica M., Čavić M., Kostić M.: ABOUT THE TOOL'S MOTION IN THE POLYGONAL HOLES DRILLING APPLYING CENTRODES, Manufacturing Intelligent Design and Optimization Processes, Journal of Machine Engineering,Vol 7, No 2, 2007, pp 41-50, Editorial Institution of Wroclav Board of Scientific Technical Societies Federation NOT, Wroclaw, Poland, 2007, ISSN 1895-7595
2.	Sorli, M., Ferraresi, C., Kolarski (Cavic), M., Borovac, B., Vukobratović, M.: Mechanics of turin parallel robot, Mechanism and Machine Theory, 1997, Vol. 32, No. 1, pp. 51-77, ISSN: 0094-114X.
3.	Kolarski (Cavic), M., Vukobratović, M., Borovac, B.: Dynamic analysis of balanced robot mechanisms, Mechanism and Machine Theory, 1994, Vol. 29, No. 3, pp. 427-454, ISSN: 0094-114X.
4.	M.Kostić, M. Čavić, M. Zlokolica: ABOUT OPTIMAL SYNTHESIS OF COMPLEX PLANAR MECHANISM, 12th IFToMM World Congress, Besancon, France, 18-21 june, 2007, Proceedings online on www.iftomm.org, www.iftomm2007.com
5.	Čavić M., Kostić M., Zlokolica M.: POSITION ANALYSIS OF THE HIGH CLASS KINEMATIC GROUP MECHANISMS Naziv skupa: 12th IFToMM World Congress , 12. The World Congress in Mechanism and Machine Science - IFToMM, Besancon, 18-21 Jun, 2007, ISBN www.iftomm2007.com

	Representative refferences (minimum 5, not more than 10)
6.	Zlokolica, M., Cavic, M., Kostic, M.: Analytical description of polygonal holes boring - General approach, Strojniski Vestnik - Journal of Mechanical Engineering, 2010, Vol. 56, No. 7-8, pp. 511-520, ISSN: 0039-2480.
7.	Kostić M., Čavić M., Zlokolica M., Veselinović Č.: ABOUT DRIVING-TRANSMISSION SYSTEMS IN THERMOFORMING MACHINES , 2. Power Transmissions, Novi Sad, 25-26 April, 2006, pp. 509-514, ISBN 86-85211-78-6
8.	Čavić M.: MODULARNI PRISTUP ANALIZI I SINTEZI MEHANIZAMA SA KINEMATIČKIM GRUPAMA VIŠE KLASE, Novi Sad, 2012
9.	Čavić M., Kostić M., Zlokolica M.: Dynamical Condition for Mechanism Synthesis, Monografija Machine Design, 2008, pp. 109-114, ISSN ISBN 978-86-7892-105
10.	Kostić M., Čavić M., Zlokolica M.: PERFORMANCE OF LEVER-CAM DWELL MECHANISM, Machine Design, 2009, pp. 115-120, ISSN 1821-1259

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	0			
Total of SCI(SSCI) list papers :	3			
Current projects :	Domestic :	0	International :	0

Science, arts and professional qualifications

Name and last name:	Dorić Ž. Jovan
Academic title:	Assistant Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	01.10.2008
Scientific or art field:	Internal Combustion Engines

Academic carieer	Year	Institution	Field
Academic title election:	2012	Faculty of Technical Sciences - Novi Sad	Internal Combustion Engines
PhD thesis	2012	Faculty of Technical Sciences - Novi Sad	Internal Combustion Engines
Master's thesis	2008	Faculty of Technical Sciences - Novi Sad	Internal Combustion Engines
Bachelor's thesis	2008		Internal Combustion Engines

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	H2421	EC Enginees Mechatroncis	(H00) Mechatronics, Undergraduate Academic Studies
2.	M213	Machine Usage	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
3.	M2403A	IC Engines	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
4.	M2523	IC Engine Equipment	(S00) Traffic and Transport Engineering, Undergraduate Academic Studies
5.	M302	Fundamentals of IC Engines	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
6.	S0I241	Internal Combustion Engines	(S00) Traffic and Transport Engineering, Undergraduate Academic Studies
7.	M2514	Simulation and design of IC engines	(M22) Mechanization and Construction Engineering, Master Academic Studies
8.	M2519	IC Engines and Vehicle Testing	(M22) Mechanization and Construction Engineering, Master Academic Studies
9.	M2553	Selected Chapters of IC Engines and Motor Vehicles	(M22) Mechanization and Construction Engineering, Master Academic Studies
10.	LIM14	Monitoring and Diagnostics of Transportation Means	(LIM) Logistic Engineering and Management, Master Academic Studies
11.	H797	Mechatronics in mechanization - advanced topics	(H00) Mechatronics, Master Academic Studies
12.	DM420	Selected Chapters – Internal Combustion (IC) Engines	(M00) Mechanical Engineering, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1. Dorić J., Klinar I.: Efficiency of a new IC engine concept with variable piston motion, Thermal Science, 2012, doi: 10.2298/TSCI110923020D, ISSN 0354-9836.
2. Dorić J., Klinar I.: Efficiency characteristics of a new Quasi-Constant Volume Combustion spark ignition engine, Thermal Science, 2012, doi: 10.2298/TSCI120530158D, ISSN 0354-9836.
3. Dorić J., Klinar I.: The realisation and analysis of a new thermodynamic cycle for internal combustion engine, Thermal Sciencel, 2011, Vol. 15, No 4, ISSN 0354-9836.
4. Dorić J.: Radijalno-rotacioni bezventilski motor SUS sa potpunijim širenjem radnog tela, Beograd, Zavod za intelektualnu svojinu Republike Srbije, Bilten, 2008, str. 1639-1640, ISBN 0354-771X, UDK: 631.372.
5. Dorić J., Klinar I., Dorić M.: Constant Volume Combustion Cyle for IC Engines, FME Transactions, 2011, Vol. 29, No 3, pp. 97-104, ISSN 1451-2092.
6. Nikolić N., Antonić Ž., Dorić J.: Uporedni prikaz dva analitička postupka konstruisanja polarnog dijagrama opterećenja glavnih ležišta kolenastog vratila, IMK-14 - Istraživanje i razvoj, 2011, Vol. 1, No 38, pp. 3-10, ISSN 0354-6829.
7. Nikolić N., Torović T., Antonić Ž., Dorić J.: An Algorithm for Obtaining Conditional Wear Diagram of IC Engine Crankshaft Main Journals, FME Transactions, 2011, Vol. 39, No 4, pp. 157-164, ISSN 1451-2092.
8. Dorić J., Klinar I.: Efficiency of a Valveless IC engine with more complete expansion, 1. International Conference on Innovative Technologies IN-TECH, Prague, 14-16 Septembar, 2010.
9. Dorić J., Klinar I., Nikolić N., Stojić B.: Use of natural gas in agricultural machinery, 39. 39th INTERNATIONAL SYMPOSIUM: ACTUAL TASKS ON AGRICULTURAL ENGINEERING, Opatija: Sveučilište u Zagrebu Agronomski Fakultet, Hrvatska, 22-25 Februar, 2011, pp. 149-160, ISBN 1333-2651.
10. Nikolić N., Torović T., Antonić Ž., Dorić J.: A Comparative Approach to the Load Determination of IC Engine Main Bearings, 7. Simpozijum o konstruisanju, oblikovanju i dizajnu – KOD, Balatonfured, 24-26 Maj, 2012, pp. 199-204, ISBN 978-86-7892-399-9.

Summary data for teacher's scientific or art and professional activity:	
Quotation total :	0

Science, arts and professional qualifications

Name and last name:			Doroslovački D. Rade	
Academic title:			Full Professor	
Name of the institution where the teacher works full time and starting date:			Faculty of Technical Sciences - Novi Sad	
			01.10.1978	
Scientific or art field:			Mathematics	

Academic carieer	Year	Institution	Field
Academic title election:	2000	Faculty of Technical Sciences - Novi Sad	Mathematics
PhD thesis	1989	Faculty of Sciences - Novi Sad	Mathematical Sciences
Magister thesis	1984	Faculty of Sciences - Novi Sad	Mathematical Sciences
Bachelor's thesis	1976	Faculty of Sciences - Novi Sad	Mathematical Sciences

	List of courses being held by the teacher in the accredited study programmes		

	ID	Course name	Study programme name, study type
1.	E213	Discrete Mathematics and Linear Algebra	(E20) Computing and Control Engineering, Undergraduate Academic Studies (MR0) Measurement and Control Engineering, Undergraduate Academic Studies (SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies (SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies
2.	E101	Discrete Mathematics	(ES0) Power Software Engineering, Undergraduate Academic Studies
3.	E101A	Discrete Mathematics	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
4.	IM1523	Discrete Mathematics	(M30) Energy and Process Engineering, Undergraduate Academic Studies (I20) Engineering Management, Undergraduate Academic Studies
5.	IM1706	Actuerial Mathematics	(I20) Engineering Management, Undergraduate Academic Studies
6.	SE0009	Discrete Mathematics	(SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies (SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies
7.	0M503	Combinatorics and Graph Theory	(OM1) Mathematics in Engineering, Master Academic Studies
8.	0M509	Applied Abstract Algebra	(OM1) Mathematics in Engineering, Master Academic Studies
9.	0M511	Geometry	(OM1) Mathematics in Engineering, Master Academic Studies
10.	0ML503	Combinatorics and Graph Theory	(OM1) Mathematics in Engineering, Master Academic Studies
11.	0ML509	Applaid Abstract Algebra	(OM1) Mathematics in Engineering, Master Academic Studies
12.	0ML511	Geometry	(OM1) Mathematics in Engineering, Master Academic Studies
13.	DZ01MS	Selected Chapters in Mathematics	(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies (I12) Industrial Engineering, Specialised Academic Studies (I22) Engineering Management, Specialised Academic Studies (Z00) Environmental Engineering, Specialised Academic Studies
14.	OM519	Actuerial Mathematics	(OM1) Mathematics in Engineering, Master Academic Studies
15.	OML519	Actuerial Mathematics	(OM1) Mathematics in Engineering, Master Academic Studies

	List of courses being held by the teacher in the accredited study programmes		
	ID	Course name	Study programme name, study type
16.	D0M08	Applied Abstract Algebra	(OM1) Mathematics in Engineering, Doctoral Academic Studies
17.	D0M17	Combinatorics	(OM1) Mathematics in Engineering, Doctoral Academic Studies
18.	D0M20	Graph Theory	(OM1) Mathematics in Engineering, Doctoral Academic Studies
19.	D0M34	Actuarial Mathematics	(OM1) Mathematics in Engineering, Doctoral Academic Studies
20.	DOM31	Combinatorial Matrix Theory	(OM1) Mathematics in Engineering, Doctoral Academic Studies
21.	DZ01M	Selected Chapters in Mathematics	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies (E20) Computing and Control Engineering, Doctoral Academic Studies (F00) Graphic Engineering and Design, Doctoral Academic Studies (F20) Engineering Animation, Doctoral Academic Studies (G00) Civil Engineering, Doctoral Academic Studies (GI0) Geodesy and Geomatics, Doctoral Academic Studies (H00) Mechatronics, Doctoral Academic Studies (I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies (M00) Mechanical Engineering, Doctoral Academic Studies (M40) Technical Mechanics, Doctoral Academic Studies (OM1) Mathematics in Engineering, Doctoral Academic Studies (S00) Traffic Engineering, Doctoral Academic Studies (Z00) Environmental Engineering, Doctoral Academic Studies (Z01) Safety at Work, Doctoral Academic Studies

	Representative refferences (minimum 5, not more than 10)
1.	R. Doroslovački, R. Tošić and I. Stojmenović: Generating and counting triangular system, BIT: 27(1987) 18-24, Kobenhavn, R 54
2.	R. Doroslovački , R . Tošić i J. Gutman: Topological properties of benzenoid systems, XXXVIII, the boundary code, Match in mathematical chemistry (19) (219-228) Max- Plank-Institut fur Stranhlenchemije, Mulheim (1986)
3.	Rade Doroslovački: Binary Sequences without 01...10, Matematički vesnik, Mathematical Society of Serbia, 46 (1994), 93-98.
4.	Rade Doroslovački: On binary n-words with forbidden 4-subwords, (1997/01) Novi Sad Juornal of Mathematics.
5.	R. Doroslovački, J. Pantović, G.Vojvodić: Note on Itersection of Maximal Clones, (1998/02) Novi Sad, Journal of Mathematics.
6.	R. Doroslovački, J. Pantović, G. Vojvodić: Classification of Maps by their Membership in Maximal Clones that contain Minimum and Complement, Matematički vesnik,, Mathematical Society of Serbia, 51, (1999), 21-28
7.	Rade Doroslovački, Jovanka Pantović and Gradimir Vojvodić: One Interval in the Lattice of Partial Hyperclones, Czechoslovaka Mathematical Journal, 55 (130),2005, 719-724, (R52)
8.	O. Bodroža-Pantić, R. Doroslovački, K. Doroslovački, AN ELEMENTARY PROOF OF A THEOREM CONCERNING THE DIVISION OF A REGION INTO TWO," in Rocky Mountain Journal of Mathematics, Vol. 37, No.5, 2007, R 52
9.	O. Bodroža-Pantić, R. Doroslovački, The Gutman formulas for algebraic structure count, Journal of Mathematical Chemistrz Vol.35,No.2, Februar 2004, R 51.
10.	Ratko Tošić, Gradimir Vojvodić, Dragan Mašulović, Rade Doroslovački, Jovanka Rosić: Two examples of relative completeness, Multiple Valued Logic, An International Journal (Journal of Multiple-Valued Logic and Soft Computing), (1996), Vol. 2, pp. 67-78.

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	60			
Total of SCI(SSCI) list papers :	5			
Current projects :	Domestic :	0	International :	0

Science, arts and professional qualifications

Name and last name:	Dragutinović D. Gordan
Academic title:	Associate Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	06.04.1980
Scientific or art field:	Termodynamics and Heat Transfer

Academic carieer	Year	Institution	Field
Academic title election:	2010	Faculty of Technical Sciences - Novi Sad	Termodynamics and Heat Transfer
PhD thesis	1987	Faculty of Technical Sciences - Novi Sad	Thermal Energetics and Thermotechnics
Magister thesis	1983	Faculty of Mechanical Engineering - Beograd	Thermal Energetics and Thermotechnics
Bachelor's thesis	1977	Faculty of Technical Sciences - Novi Sad	Thermal Energetics and Thermotechnics

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	M203	Fundamentals of Thermodynamics	(Z01) Safety at Work, Undergraduate Academic Studies
			(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
			(Z20) Environmental Engineering, Undergraduate Academic Studies
2.	M203L	Fundamentals in Thermodynamics	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
			(M30) Energy and Process Engineering, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
			(MR0) Measurement and Control Engineering, Undergraduate Academic Studies
			(P00) Production Engineering, Undergraduate Academic Studies
3.	M210	Thermodynamics	(M30) Energy and Process Engineering, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
4.	M215	Fundamentals of Heat Transfer	(M30) Energy and Process Engineering, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
			(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
5.	M3303	Fundamentals of Process Engineering	(M30) Energy and Process Engineering, Undergraduate Academic Studies
6.	URZP31	Fundamentals of Thermodynamics with Heat Transfer	(ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies
7.	GS013	Special topics of building physics and thermodynamics	(G10) Energy Efficiency in Buildings, Specialised Academic Studies
8.	BMIM4A	Transport phenomena and Living systems	(BM0) Biomedical Engineering, Master Academic Studies
9.	M3508	Mass Transfer	(M30) Energy and Process Engineering, Master Academic Studies
			(M40) Technical Mechanics and Technical Design, Master Academic Studies
10.	DM307	Selected Chapters in Mass Transfer	(M00) Mechanical Engineering, Doctoral Academic Studies
11.	DM313	Process Kinetics	(M00) Mechanical Engineering, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)	
1.	Dragutinovic, G.D., Baclic, B.S. "Operation of Counterflow Regenerators", Book Vol. 4 in Series "Developments in Heat Transfer", Computational Mechanics Publications, Southampton, 1998.
2.	Baclic, B.S. and Dragutinovic, G.D., "Asymmetric-unbalanced Counterflow Thermal Regenerator Problem: Solution by the Galerkin Method and meaning of dimensional Parameters, Int. J. Heat Mass Transfer, Vol.34, No. 2, 1991, pp. 483-498.

	Representative refferences (minimum 5, not more than 10)			
3.	Dragutinovic, G.D., Baclic, B.S., "Interpolation and collocation methods for prediction of thermal regenerator performances", Thermal Science, Vol. 12, No. 4, 1996. pp. 307-327.			
4.	Baclic, B.S., Heggs, P.J., and Dragutinovic, G.D., "Prediction of the Effectiveness of Unbalanced - Asymmetric Counterflow Regenerators", Publications of the Faculty of Technical Sciences, Vol. 15, 1984, pp. 1-15, University of Novi Sad.			
5.	Baclic, B.S., Gvozdenac, D.D., and Dragutinovic, G.D., "Easy way to calculate the Amzelius-Schumann J function", Thermal Science, Vol. 1, No. 1, 1997, pp. 109-116.			
6.	Dragutinović, D.G., Dimić, M., Sinteza optimalnih mreša toplotnih razmenjivača, Termotehnika, 1, 1998.			
7.	Bašić, Đ., Petrović, J., Marić, M., Dragutinović, G., i dr., Mogućnost korišćenja energetskog potencijala geotermalnih voda u Vojvodini, Novi Sad, Prometej, 2009			
8.	Martinov, M., Dragutinović, G., i dr., Mogućnost kombinovane proizvodnje električne i toplotne energije iz biomase u AP Vojvodini, Novi Sad, PSEMR AP Vojvodina, 2008			
9.	Nedeljkov, M., Dragutinović, G., Mathematical Simulation od Deep-Bed Drying of Grains - A numerical simulation, CHISA, Prag, avgust 1987			
10.	Nedeljkov, M., Dragutinović, G., Mogućnosti i uslovi racionalizacije procesa konvektivnosg sušenja zrnastih poljoprivrednih proizvoda, 7. simpozijum termičara, Ohrid, maj 1984.			
Summary data for teacher's scientific or art and professional activity:				
Quotation total :	11			
Total of SCI(SSCI) list papers :	2			
Current projects :	Domestic :	2	International :	0

Science, arts and professional qualifications

Name and last name:		Đaković D. Damir	
Academic title:		Assistant Professor	
Name of the institution where the teacher works full time and starting date:		Faculty of Technical Sciences - Novi Sad	
		01.12.2001	
Scientific or art field:		Process Technics	
Academic carieer	**Year**	**Institution**	**Field**
Academic title election:	2012	Faculty of Technical Sciences - Novi Sad	Process Technics
PhD thesis	2011	Faculty of Technical Sciences - Novi Sad	Process Technics
Magister thesis	2007	Faculty of Technical Sciences - Novi Sad	Process Technics
Bachelor's thesis	2001	Faculty of Technical Sciences - Novi Sad	Mechanical Engineering

List of courses being held by the teacher in the accredited study programmes			
	ID	**Course name**	**Study programme name, study type**
1.	I079	Modern Energy Technologies	(M50) Energy Management, Master Academic Studies
			(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
2.	M3303	Fundamentals of Process Engineering	(M30) Energy and Process Engineering, Undergraduate Academic Studies
3.	M3406	Heat Apparatus	(M30) Energy and Process Engineering, Undergraduate Academic Studies
4.	M3409A	Modern Energy Technologies	(M30) Energy and Process Engineering, Undergraduate Academic Studies
5.	M3507	Combustion Technology	(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
6.	Z412A	Process apparatus for protecting the environment	(Z20) Environmental Engineering, Undergraduate Academic Studies
7.	Z412	Procesni aparati za zaštitu okoline(uneti naziv na engleskom)	(Z20) Environmental Engineering, Undergraduate Academic Studies
8.	M211	Measurement and Regulation	(M30) Energy and Process Engineering, Undergraduate Academic Studies
			(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
9.	M3031	Engineering Calculations of Energy Technologies Apparatus and Equipment	(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
10.	M3517	Construction in energy and process engineering	(M30) Energy and Process Engineering, Master Academic Studies
			(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
11.	ZRI41A	Security and Safety at Work in Process Plants	(Z01) Safety at Work, Undergraduate Academic Studies
12.	I079	Modern Energy Technologies	(M50) Energy Management, Master Academic Studies
			(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
13.	I915	Energy Transformations	(M30) Energy and Process Engineering, Master Academic Studies
14.	I916	Energy Management in Industry	(M50) Energy Management, Master Academic Studies
15.	GS002	Energy Efficiency of Heating and Air Conditioning Systems	(G10) Energy Efficiency in Buildings, Specialised Academic Studies
16.	I070	Energy efficiency	(M50) Energy Management, Master Academic Studies
17.	I915	Energy Transformations	(M50) Energy Management, Master Academic Studies
18.	M3503	Dinamika i modeliranje termoenergetskih postrojenja(uneti naziv na engleskom)	(M30) Energy and Process Engineering, Master Academic Studies
19.	M3506	Drying Technique	(M30) Energy and Process Engineering, Master Academic Studies
20.	M3508	Mass Transfer	(M30) Energy and Process Engineering, Master Academic Studies
			(M40) Technical Mechanics and Technical Design, Master Academic Studies

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
21.	M3515	Energy Systems	(M30) Energy and Process Engineering, Master Academic Studies
			(M50) Energy Management, Master Academic Studies
22.	M3517	Construction in energy and process engineering	(M30) Energy and Process Engineering, Master Academic Studies
			(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
23.	DM307	Selected Chapters in Mass Transfer	(M00) Mechanical Engineering, Doctoral Academic Studies
24.	DM313	Process Kinetics	(M00) Mechanical Engineering, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1.	Đaković D.: Comments on 'Water sorption isotherms and thermodynamic properties of pearl millet grain', International Journal of Food Science and Technology, 2012, Vol. 47, No. 2, pp. 441-441, ISSN: 0950-5423.
2.	Spasojevic, M. D., Jankovic M.R., Djakovic D.D.: A New Approach to Entropy Production Minimization in Diabatic Distillation Column with Trays, Thermal Science, 2010, Vol. 14, No. 2, pp. 317-328, ISSN: 0354-9836.
3.	Djuric, S. N., Stanojevic, P. C., Djakovic, D. D., Jovovic, A. M.: The Study on the Effect of Fractional Composition and Ash Particle Diameter on the Ash Collection Efficiency at the Electrostatic Precipitator, Chemical Industry & Chemical Engineering Quarterly, 2010, Vol. 16, No. 3, pp. 229-236, ISSN: 1451-9372.
4.	Anđelković A., Cvjetković T., Đaković D., Stojanović I.: Development of Simple Calculation Model for Energy Performance of Double Skin Façades, Thermal Science, 2012, Vol. 16, No Suppl 1, pp. 251-267, ISSN 0354-9836.
5.	Čenejac A., Bjelaković R., Anđelković A., Đaković D.: Covering of Heating Load of Object by Using ground heat as a Renewable Energy Source, Thermal Science, 2012, Vol. 16, No Suppl 1, pp. 225-235, ISSN 0354-9836
6.	Đaković D, Vujić G, Bašić Đ, Dimić M. "Several models of grain drying theory – principles and obstacles", PSU-UNS International Conference on Engineering and Environment - ICEE-2007, Phuket, Thailand: Prince of Songkla University, Faculty of Engineering, 10-11 May, 2007, pp. 614- 617
7.	Đaković D, Dimić M. "Poređenje nekih jednačina konvektivnog sušenja zrnastih materijala u nepokretnom tankom sloju", Zbornik apstrakata, ISBN 86-80587-70-2, s. 62, CD ISBN 978-86-80-587-80-6, 13. Simpozijum termičara Srbije, Sokobanja, Srbija, 16.10.-19.10.2007.
8.	Đaković D, Spasojević M, Štrbac D, Dimić M. "Primena eksergijske analize na proces sušenja kukuruza u tankom sloju", PTEP, 12(4), 233-235, 2008
9.	Đaković D, Dimić M, Spasojević M, Štrbac D, "Possibility of exergy analysis application on drying process", 4th International Conference on Engineering Technologies, ICET 2009, 28-30th April, 2009, ISBN: 978-86-7892-161-2, pp. 376-380, Novi Sad, Serbia
10.	Đaković D, Dimić M. "Pregled pristupa modelovanju fenomena prenosa u sušarama sa kombinovanim tokovima", PTEP , 13(3), 283-287, 2009

Summary data for teacher's scientific or art and professional activity:			
Quotation total :	0		
Total of SCI(SSCI) list papers :	5		
Current projects :	Domestic :	2	International :	1

Science, arts and professional qualifications

Name and last name:	Folić J. Radomir
Academic title:	Emeritus Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	01.03.1980
Scientific or art field:	Constructions in Civil Engineering

Academic carieer	Year	Institution	Field
Academic title election:	2008	Faculty of Technical Sciences - Novi Sad	Constructions in Civil Engineering
PhD thesis	1983	Faculty of Civil Engineering - Beograd	Theory of Construction
Magister thesis	1974	Faculty of Civil Engineering - Zagreb	Theory of Construction
Bachelor's thesis	1963	Faculty of Civil Engineering - Beograd	Constructions in Civil Engineering

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	A002S	Scientific Research Method	(A00) Architecture, Specialised Academic Studies
			(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
			(GI0) Geodesy and Geomatics, Specialised Academic Studies
			(I12) Industrial Engineering, Specialised Academic Studies
			(I22) Engineering Management, Specialised Academic Studies
			(Z00) Environmental Engineering, Specialised Academic Studies
2.	GG505	Concrete Bridges	(G00) Civil Engineering, Master Academic Studies
3.	GS015	Scientific Research Method	(G10) Energy Efficiency in Buildings, Specialised Academic Studies
4.	A120S	Proces, principi i tehnike naučnog istraživanja-odabrana poglavlja	(A00) Architecture, Specialised Academic Studies
5.	GG531	Odabrana poglavlja zidanih konstrukcija	(G00) Civil Engineering, Master Academic Studies
6.	DGI002	Selected Chapters in Engineering Geodesy	(GI0) Geodesy and Geomatics, Doctoral Academic Studies
7.	DZ001	Scientific Research Method	(A00) Architecture, Doctoral Academic Studies
			(AS0) Scenic Design, Doctoral Academic Studies
			(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies
			(E20) Computing and Control Engineering, Doctoral Academic Studies
			(F00) Graphic Engineering and Design, Doctoral Academic Studies
			(F20) Engineering Animation, Doctoral Academic Studies
			(G00) Civil Engineering, Doctoral Academic Studies
			(GI0) Geodesy and Geomatics, Doctoral Academic Studies
			(H00) Mechatronics, Doctoral Academic Studies
			(I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
			(M00) Mechanical Engineering, Doctoral Academic Studies
			(M40) Technical Mechanics, Doctoral Academic Studies
			(OM1) Mathematics in Engineering, Doctoral Academic Studies
			(S00) Traffic Engineering, Doctoral Academic Studies
			(Z00) Environmental Engineering, Doctoral Academic Studies
			(Z01) Safety at Work, Doctoral Academic Studies
8.	A120	Proces, principi i tehnike naučnog istraživanja - odabrana poglavlja(uneti naziv na engleskom)	(A00) Architecture, Doctoral Academic Studies
9.	GD027	Process, principles and techniques of scientific research - selected chapters	(G00) Civil Engineering, Doctoral Academic Studies
Representative refferences (minimum 5, not more than 10)			

	Representative refferences (minimum 5, not more than 10)
1.	Folić, R. (1983): Spojevi i veze montažnih betonskih zgrada. U knjizi Montažni građevinski objekti, (Ed. B. Žeželj, A.Flašar) Ekonomika, Beograd, str. 117-167. (9 autorskih tabaka)
2.	Folić, R. (1983): Statika konstrukcija - Zbirka rešenih zadataka. FTN IIG, Novi Sad, str. 1-486. II izdanje (1987). III izdanje Građevinska knjiga, Beograd (1991).
3.	Folić, R., Tatomirović, M. (1999): Spregnute betonske konstrukcije-I deo. Građevinski kalendar, 1999. str. 289-386; II deo, Građevinski kalendar, 2001, str. 217-290
4.	Folić, R. (1991): Classification of damage and its causes as applied to precast concrete buildings. Material and Structures. RILEM - Journal, Chapman & Hall, Vol. 24, pp. 276-285.
5.	Folić, R., Ivanov, D. (1991): In situ behaviour of concrete structures deterioration of concrete, influence of earthquake and a fire in Diagnosis of Concrete Structures - State of the Art Report, Ed. by T. Javor, Expertcentrum, Bratislava, pp. 135-146.
6.	Folić, R. (1985): Analiza aktivne širine ploče i graničnih stanja kod elemenata od armiranog i prethodno napregnutog betona. FTN IIG Posebno izdanje 7, Novi Sad, str. 1-193.
7.	Folić, R., Radonjanin, V. (1998): Experimental research on polymer modified concrete, Materials Journal, ACI, VOL. 95 No. 4, July/August 1998, pp.463-470.
8.	Folić, R. (1991): A classification of damage to concrete buildings in earthquakes, illustrated by examples. Material and Structures, RILEM - Journal, Chapman & Hall, Vol. 24, pp. 286-292.
9.	Javor, T., Naus, D.J., Folić, R., Zakić, B.: (1992): Diagnosis of Concrete Structures. RILEM - Journal Materials and Structures, Chapman & Hall, Vol. 25, pp. 437-440.
10.	Folić, R., Radonjanin, V. (1998): Experimental research on polymer modified concrete, Materials Journal, ACI, VOL. 95 No. 4, July/August 1998, pp.463-470.

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	11			
Total of SCI(SSCI) list papers :	8			
Current projects :	Domestic :	2	International :	1

Science, arts and professional qualifications

Name and last name:	Georgijević S. Milosav
Academic title:	Full Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	01.02.1977
Scientific or art field:	Machine Constructions, Transport Systems and Logistics

Academic carieer	Year	Institution	Field
Academic title election:	2000	University of Novi Sad - Novi Sad	Machine Constructions, Transport Systems and Logistics
PhD thesis	1989	Faculty of Philosophy - Novi Sad	Machine Constructions, Transport Systems and Logistics
Magister thesis	1982	Faculty of Technical Sciences - Novi Sad	Machine Constructions, Transport Systems and Logistics
Bachelor's thesis	1973	University of Novi Sad - Novi Sad	Machine Constructions, Transport Systems and Logistics

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	H2463	Mechanization Management	(H00) Mechatronics, Undergraduate Academic Studies
2.	M2405	Warehouses and Equipment	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
3.	M308	Engineering Logistics and Simulation	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
4.	S0218	Reload Logistics	(S00) Traffic and Transport Engineering, Undergraduate Academic Studies
5.	S1218	Reload Logistics	(S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies
6.	ZR407A	Occupational safety in internal transport, reloading and warehouse	(Z01) Safety at Work, Undergraduate Academic Studies
7.	M2528	Eurologistics	(M22) Mechanization and Construction Engineering, Master Academic Studies
8.	M2535	Logistic Processes Management	(H00) Mechatronics, Master Academic Studies
			(M22) Mechanization and Construction Engineering, Master Academic Studies
9.	LIM04	Internal Transport and Storage	(LIM) Logistic Engineering and Management, Master Academic Studies
10.	LIM06	Simulation and Optimization in Logistics	(LIM) Logistic Engineering and Management, Master Academic Studies
11.	LIM15	Technical Intralogistics	(LIM) Logistic Engineering and Management, Master Academic Studies
12.	LIM23	Logistic Centers	(LIM) Logistic Engineering and Management, Master Academic Studies
13.	LIM27	Logistics of Warehousing and Commissioning	(LIM) Logistic Engineering and Management, Master Academic Studies
14.	LIM28	Intralogistic System Planning	(LIM) Logistic Engineering and Management, Master Academic Studies
15.	LIM29	Simulation of Large Logistic Systems	(LIM) Logistic Engineering and Management, Master Academic Studies
16.	H797	Mechatronics in mechanization - advanced topics	(H00) Mechatronics, Master Academic Studies
17.	DM213	Contemporary Methods of Designing and Machine Constructing	(M00) Mechanical Engineering, Doctoral Academic Studies
18.	DM331	Selected Chapters in Transport and Construction Machines	(M00) Mechanical Engineering, Doctoral Academic Studies
19.	DOM20	Engineering Analysis Methods	(M00) Mechanical Engineering, Doctoral Academic Studies
20.	DOM27	Logistics and Simulation	(M00) Mechanical Engineering, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)	
1.	Georgijevic M.: Anwendung von Rechenmodellen bei der dynamischen Analyse von Hebezeugen, dhf - deutsche hebe und fördertechnik, 1990, Nr.10, s. 46-53
2.	Georgijevic M.: Einwirkung der konstruktiven Lösung und Antriebsregulierung auf Dynamik von Hafenhebezeugen, dhf-deutsche hebe und fördertechnik, 1991. Nr. 6, s. 64-69

	Representative refferences (minimum 5, not more than 10)
3.	Georgijevic M.: Einfluss der Wippantrieb-Regulierung auf Lastpendel und Dynamik von Wippdrehe Krannen, dhf - deutsche hebe und fördertechnik, 1992, Nr. 3, s. 74-81
4.	Georgijevic M, Milisavljevic B.: Pendeln des Containers bei der Katzenbewegung der Portalkrane, dhf - deutsche hebe und fördertechnik, 1994, Nr.9, s. 41-47
5.	Georgijevic M.: Zur Regelung und Steuerung bei Kranen, dhf- deutsche hebe und fördertechnik, Nr. 1/2-97, s. 58-64,
6.	Georgijević M.: Using Simulation in Material Flow Processes and Machine Design, Simulation News Europe, July 2002, p.18,19
7.	M. Georgijevic, R. Kostic, Erhöhung der Lebensdauer von Fördermaschinen durch mechatronische Systeme, 30. Tagung DVM – Arbeitskreis Betriebsfestigkeit Mechatronik und Betriebsfestigkeit - Stuttgart, 8. und 9. Oktober, 2003, s.139-163 (Predavanje po pozivu)
8.	Georgijevic M, Radanovic R.: Simulation komplexer Systeme und Optimierung 9. Symposium Simulation als betriebliche Entscheidungshilfe: Neuere Werkzeuge und Anwendungen aus der Praxis (Proc. zum 9. Symposium), Goettingen s. 307-320, 2004
9.	Georgijevic M.: Fuzzy Control zur Regelung einer Krananlage, Erfolgsbilanz fur Fuzzy Logik, Ausgburg, 1992
10.	Pap E, Bojanic V, Georgijevic M, Bojanic,: Application of Pseudo-Analysis in the Synchronization of Container Terminal Equipment Operation , ACTA POLYTECHNICA HUNGARICA, (2011), vol. 8 br. 6, str. 5-21.

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	0			
Total of SCI(SSCI) list papers :	1			
Current projects :	Domestic :	2	International :	1

Science, arts and professional qualifications

Name and last name:	Gerić D. Katarina
Academic title:	Full Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	02.12.1976
Scientific or art field:	Material Science and Engineering Materials

Academic carieer	Year	Institution	Field
Academic title election:	2008	Faculty of Technical Sciences - Novi Sad	Material Science and Engineering Materials
PhD thesis	1997	Faculty of Technology and Metallurgy - Beograd	Material Science and Engineering Materials
Magister thesis	1985	Faculty of Technology and Metallurgy - Beograd	Material Science and Engineering Materials
Bachelor's thesis	1974	Faculty of Technology and Metallurgy - Beograd	Metallurgical Engineering

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	H106	Materials in Mechanical Engineering	(H00) Mechatronics, Undergraduate Academic Studies
2.	M105	Mechanical Materials	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
			(M30) Energy and Process Engineering, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
			(MR0) Measurement and Control Engineering, Undergraduate Academic Studies
			(P00) Production Engineering, Undergraduate Academic Studies
3.	P2412	Contemporary Materials	(P00) Production Engineering, Undergraduate Academic Studies
4.	P3401	Characteristics and Application of Plastic Materials	(P00) Production Engineering, Undergraduate Academic Studies
5.	ZC003	Electromechanical materials	(MR0) Measurement and Control Engineering, Undergraduate Academic Studies
			(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
6.	ZRI42A	Safety at work in metallurgy and thermochemical treatment of metal	(Z01) Safety at Work, Undergraduate Academic Studies
7.	P2502	Properties and Selection of Materials	(PM0) Production Engineering, Master Academic Studies
8.	PTS01	Technology of sintering	(PM0) Production Engineering, Master Academic Studies
9.	DM214	Selected Chapters in Working Strength	(M00) Mechanical Engineering, Doctoral Academic Studies
10.	SAP002	Engineering Materials	(M00) Mechanical Engineering, Doctoral Academic Studies
11.	SAP004	Fracture Mechanics	(M00) Mechanical Engineering, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1.	Vratnica, M., Pluvinage, G., Jodin, P., Cvijović, Z., Rakin, M., Burzić, Z., Gerić, K.: Notch fracture toughness of high-strength Al alloys, Materials and Design, 2013, Vol. 44, pp. 303-310, ISSN: 0261-3069.
2.	Cvijovic Z,Vratnica M, Geric K: Fractographic analysis of fatigue damage in 7000 aluminium alloys, Journal of Microscopy, Vol 232, 2008, pp. 589-594
3.	Stasevic, M., Maksimovic, S., Geric, K., Burzic, Z., Vasovic, I.: Fatigue crack propagation models: Numerical and experimental comparisons, Technics Technologies Education Management - TTEM, 2012, Vol. 7, No. 2, pp. 801-810, ISSN: 1840-1503.
4.	Stašević, M., Maksimović, S., Gerić, K., Burzić, Z., Maksimović, M.: Fatigue crack growth prediction from low cycle fatigue properties, Strojarstvo, 2011, Vol. 53, No. 3, pp. 171-178, ISSN: 0562-1887.
5.	Vratnica M, Cvijovic Z, Geric K, The role of Intermetallic Phases in Fatigue Crack Propagation Behavior of Al-Zn-Mg-Cu alloy, Material Science Forum vol. 555, 2007, pp 553-558
6.	Gerić K., Sedmak S., Glavardanov I. : Fracture mechanics parameters of heat affected zone of high strength microalloyed steel, Metallurgy and new materials researches. Vol.II, No.1-2, 1994, 114-125
7.	Sedmak S., Gerić K.: Evaluation of crack significance in velded joint by fracture mechanic approach, Kovine, zlitine tehnologije1-2, 32, 1998, 21-27
8.	Gerić K, Glavardanov I, Sedmak S.: Relability and Structural integrity of advanced materials, deo J integral and Final Strech zone for crack in HSLAof Undermatched and Overmatched weldments, EMAS Publication LTD, pp. 996-1005
9.	Gerić K.: Prsline u zavarenom spoju, monografija, Fakultet tehničkih nauka, Novi Sad, 2005.

Representative refferences (minimum 5, not more than 10)				
10.	Gerić K.: Fractographic Analysis, part of monograph "From fracture mechanics to structural integrity assessment", 8. International fracture mechanics summer-school, Belgrade 2004, pp. 147-158			
Summary data for teacher's scientific or art and professional activity:				
Quotation total :	2			
Total of SCI(SSCI) list papers :	5			
Current projects :	Domestic :	2	International :	0

Science, arts and professional qualifications

Name and last name:	Gilezan K. Silvia
Academic title:	Full Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	01.04.1984
Scientific or art field:	Mathematics

Academic carieer	Year	Institution	Field
Academic title election:	2005	Faculty of Technical Sciences - Novi Sad	Mathematics
PhD thesis	1993	Faculty of Sciences - Novi Sad	Mathematical Sciences
Magister thesis	1988	Faculty of Mathematics - Beograd	Mathematical Sciences
Bachelor's thesis	1981	Faculty of Sciences - Novi Sad	Mathematical Sciences

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	GH404	Mathematical Statistics	(G00) Civil Engineering, Master Academic Studies
			(G00) Civil Engineering, Undergraduate Academic Studies
2.	GI303B	Probability and Mathematical Statistics	(GI0) Geodesy and Geomatics, Undergraduate Academic Studies
3.	IAM003	Formal Mathematical Models	(F10) Engineering Animation, Undergraduate Academic Studies
4.	S011	Mathematics 1	(S00) Traffic and Transport Engineering, Undergraduate Academic Studies
			(S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies
5.	Z203	Statistical Methods	(Z01) Safety at Work, Undergraduate Academic Studies
			(ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies
			(Z20) Environmental Engineering, Undergraduate Academic Studies
6.	IM1012	Probability and Statistics	(I10) Industrial Engineering, Undergraduate Academic Studies
			(I20) Engineering Management, Undergraduate Academic Studies
			(P00) Production Engineering, Undergraduate Academic Studies
7.	0M506	Semantics of Programming Languages	(OM1) Mathematics in Engineering, Master Academic Studies
8.	0M507	Logic in Computer Science	(OM1) Mathematics in Engineering, Master Academic Studies
9.	0M513	Introduction to Functional Programming Languages	(OM1) Mathematics in Engineering, Master Academic Studies
10.	0ML506	Semantics of programming languages	(OM1) Mathematics in Engineering, Master Academic Studies
11.	0ML507	Logic in computer science	(OM1) Mathematics in Engineering, Master Academic Studies
12.	0ML513	Introduction to Functional Programming Languages	(OM1) Mathematics in Engineering, Master Academic Studies
13.	DZ01MS	Selected Chapters in Mathematics	(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
			(I12) Industrial Engineering, Specialised Academic Studies
			(I22) Engineering Management, Specialised Academic Studies
			(Z00) Environmental Engineering, Specialised Academic Studies
14.	GH404	Mathematical Statistics	(G00) Civil Engineering, Master Academic Studies
			(G00) Civil Engineering, Undergraduate Academic Studies
15.	SD0M06	Logic in Computer Science	(GI0) Geodesy and Geomatics, Specialised Academic Studies

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
16.	MPK001	Statistical and Numerical Methods	(MPK) Inženjerstvo tretmana i zaštite voda - TEMPUS(uneti naziv na engledskom), Master Academic Studies
17.	D0M05	Semantics of Programming Languages	(OM1) Mathematics in Engineering, Doctoral Academic Studies
18.	D0M06	Logic in Computer Science	(OM1) Mathematics in Engineering, Doctoral Academic Studies
19.	D0M11	Models of Computation	(OM1) Mathematics in Engineering, Doctoral Academic Studies
20.	D0M12	Introduction to Functional Programming Languages	(OM1) Mathematics in Engineering, Doctoral Academic Studies
21.	D0M13	Theory of Mobile Processes	(OM1) Mathematics in Engineering, Doctoral Academic Studies
22.	D0M14	Process Algebra	(OM1) Mathematics in Engineering, Doctoral Academic Studies
23.	DZ01M	Selected Chapters in Mathematics	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies (E20) Computing and Control Engineering, Doctoral Academic Studies (F00) Graphic Engineering and Design, Doctoral Academic Studies (F20) Engineering Animation, Doctoral Academic Studies (G00) Civil Engineering, Doctoral Academic Studies (GI0) Geodesy and Geomatics, Doctoral Academic Studies (H00) Mechatronics, Doctoral Academic Studies (I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies (M00) Mechanical Engineering, Doctoral Academic Studies (M40) Technical Mechanics, Doctoral Academic Studies (OM1) Mathematics in Engineering, Doctoral Academic Studies (S00) Traffic Engineering, Doctoral Academic Studies (Z00) Environmental Engineering, Doctoral Academic Studies (Z01) Safety at Work, Doctoral Academic Studies
24.	AID05	Theory of Mobile Processes	(F20) Engineering Animation, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1.	"Inhabitation in lambda calculus with intersection and union types", Journal of Logic and Computation 6 (1993) 671-685, Oxford University Press
2.	"Characterizing strong normalization in the Curien-Herbelin symmetric lambda calculus: extending the Coppo-Dezani heritage, (sa D.Dougherty, P.Lescanne) Theoretical Computer Science 2007
3.	"Separating Points by Parallel Hyperplanes " (sa J. Pantovic, J. Zunic), IEEE Transactions of Neural Networks 18(5) (2007) 1356-1363
4.	"Lambda terms for natural deduction, sequent calculus and cut elimination" (sa H.P.Barendregt), Journal of Functional Programming, 10 (2000) 121-134.
5.	"Confluence of untyped lambda calculus via simple types" (with V.Kuncak), ICTCS"01, Lecture Notes in Computer Science 2201, 38-49.
6.	"Full intersection types and topologies in lambda calculus", Journal of Computer and System Sciences, 62 (2001) 1-14.
7.	"Behavioural inverse limit lambda models" (sa M. Dezani-Ciancaglini, S. Likavec), Theoretical Computer Science Vol 316/1-3 (2004) 49-74.
8.	"Strong normalization of the classical sequent calculus" (sa D. Dougherty, P. Lescanne, S.Likavec), Lecture Notes in Computer Science 3835 (2005) 169-183.
9.	"Security types for dynamic web data" (sa M.Dezani-Ciancaglini, J. Pantovic), Trustworthy Global Computing, TGC"06, Lecture Notes in Computer Science 4661 (2007) 263-280.
10.	Zbirka rešenih zadataka iz statistike (sa Z.Lužanin, Z.Ovcin, Lj.Nedović, T.Grbić, B.Mihailović) 2005

Summary data for teacher's scientific or art and professional activity:

Quotation total :		325

Total of SCI(SSCI) list papers :	17			
Current projects :	Domestic :	2	International :	4

Science, arts and professional qualifications

Name and last name:	Glavardanov B. Valentin		
Academic title:	Full Professor		
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad		
	17.05.1990		
Scientific or art field:	Deformable Body Mechanics		
Academic carieer	Year	Institution	Field
Academic title election:	2008	Faculty of Technical Sciences - Novi Sad	Deformable Body Mechanics
PhD thesis	1997	Faculty of Technical Sciences - Novi Sad	Deformable Body Mechanics
Magister thesis	1995	Faculty of Mathematics - Beograd	Deformable Body Mechanics
Bachelor's thesis	1989	Faculty of Technical Sciences - Novi Sad	Deformable Body Mechanics

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	F107	Technical Mechanics	(F00) Graphic Engineering and Design, Undergraduate Academic Studies
2.	H202	Strength of materials	(H00) Mechatronics, Undergraduate Academic Studies
3.	M204	Strength of Materials	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies (M30) Energy and Process Engineering, Undergraduate Academic Studies (M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies (P00) Production Engineering, Undergraduate Academic Studies
4.	M2412	Theory of Elasticity	(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies (P00) Production Engineering, Undergraduate Academic Studies
5.	M4302	Biomechanics and mechanics of sport	(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
6.	M4304	Advanced strength of materials	(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
7.	M4306	Similarity and dimensional methods	(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
8.	M4401	Continuum mechanics	(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
9.	URZP14	Fundamentals of Mechanical Engineering	(ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies
10.	BMI128	Continuum Biomechanics	(BM0) Biomedical Engineering, Undergraduate Academic Studies
11.	II1004	Mechanics and Industrial Engineering	(I10) Industrial Engineering, Undergraduate Academic Studies
12.	M44041	Dynamics of non-smooth mechanical systems	(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
13.	M4504	Thermal Elasticity	(M40) Technical Mechanics and Technical Design, Master Academic Studies
14.	M45991	Biomechanics of cardiovascular system	(M40) Technical Mechanics and Technical Design, Master Academic Studies
15.	DM402	Selected Chapters in Elasticity Theory	(M00) Mechanical Engineering, Doctoral Academic Studies (M40) Technical Mechanics, Doctoral Academic Studies
16.	DM404	Selected Chapters in Mechanics of Continuum	(M00) Mechanical Engineering, Doctoral Academic Studies (M40) Technical Mechanics, Doctoral Academic Studies
17.	DZ003	Selected Chapters in Mechanics	(M00) Mechanical Engineering, Doctoral Academic Studies
18.	FDS143	Selected Chapters in Technical Mechanics	(F00) Graphic Engineering and Design, Doctoral Academic Studies
19.	ZRD16A	Selected chapters in mechanics and elasticity theory	(Z01) Safety at Work, Doctoral Academic Studies

Representative reffences (minimum 5, not more than 10)

	Representative refferences (minimum 5, not more than 10)
1.	Spasic D.T., Glavardanov B.V.: Stability of a rigid sphere supported by a thin elastic column, European Journal of Mechanics A-Solids, vol. 15, No 2, pp 337-350,1996
2.	Atanackovic M.T., Glavardanov B.V.: Twisted axially loaded rod with shear and compressibility, Acta Mechanica, vol.119, pp 119-130, 1996
3.	V. B. Glavardanov and T. M. Atanackovic, Stability of a pipe through which a sring is pulled. Int. J. Non-Linear Mechanics 35, 7–20 (2000).
4.	V. B. Glavardanov and T. M. Atanackovic, Optimal shape of a twisted compressed rod. European Journal of Mechanics A-Solids, 20, 795–809 (2001).
5.	T. M. Atanackovic, V. B. Glavardanov, Buckling of a twisted and compressed rod. International Journal of Solids and Structures, 39, 2987-2999 (2002)
6.	R.B. Maretić, V. B. Glavardanov, Stability of a Rotating Heated Circular Plate With Elastic Edge Support, Journal of Applied Mechanics-Transaction of the ASME, 71, 896-899, (2004)
7.	Valentin Glavardanov: Zbirka rešenih zadataka iz teorije elastičnosti, FTN, Novi Sad, 2003.
8.	T.M. Atanacković, V.B. Glavardanov: "Optimal shape of a heavy compressed column", Structural and Multidisciplinary Optimization, 28, 388-396, (2004)
9.	R. Maretic, V. Glavardanov and V. Mitic, Vibration and Stability of a Heavy and Heated Vertical Circular Plate, International Journal of Structural Stability and Dynamics, vol 10, No 5,1111-1121, 2010
10.	Glavaradnov V, Maretic R, Stability of a twisted and compressed clamped rod, Acta Mechanica, 202, 17-33, 2009

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	2			
Total of SCI(SSCI) list papers :	14			
Current projects :	Domestic :	1	International :	0

Science, arts and professional qualifications

Name and last name:	Gostimirović P. Marin
Academic title:	Full Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	12.10.1982
Scientific or art field:	Processes for Material Removal Processing

Academic carieer	Year	Institution	Field
Academic title election:	2011	Faculty of Technical Sciences - Novi Sad	Processes for Material Removal Processing
PhD thesis	1997	Faculty of Technical Sciences - Novi Sad	Processes for Material Removal Processing
Magister thesis	1989	Faculty of Technical Sciences - Novi Sad	Processes for Material Removal Processing
Bachelor's thesis	1982	Faculty of Technical Sciences - Novi Sad	Processes for Material Removal Processing

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	P1406	Theory of Machining Processes	(P00) Production Engineering, Undergraduate Academic Studies
2.	P1408	Process Databases	(P00) Production Engineering, Undergraduate Academic Studies
3.	P1507	Inovational Technologies	(P00) Production Engineering, Undergraduate Academic Studies
4.	P208	Technology for Cutting Processing	(P00) Production Engineering, Undergraduate Academic Studies
5.	P305	Nonconventional Procedures in Processing	(P00) Production Engineering, Undergraduate Academic Studies
6.	P4410	Design and Product Functionality	(P00) Production Engineering, Undergraduate Academic Studies
7.	M2061	Basics of Manufacturing Technologies 1	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
8.	P316A	Technology for Microcutting Processes	(P00) Production Engineering, Undergraduate Academic Studies
9.	P1505	Modelling and Simulation in Processing	(PM0) Production Engineering, Master Academic Studies
10.	P1509	Highly Productive Processing	(PM0) Production Engineering, Master Academic Studies
11.	P3502	Mold and die machining technology	(PM0) Production Engineering, Master Academic Studies
12.	P4410A	Production Design	(PM0) Production Engineering, Master Academic Studies
13.	PP101	Inteligent Forming Processes	(PM0) Production Engineering, Master Academic Studies
14.	DP001	Design and Research Methods in Production Engineering	(M00) Mechanical Engineering, Doctoral Academic Studies
15.	DP002	State and Trend in Forming by Material Removal	(M00) Mechanical Engineering, Doctoral Academic Studies
16.	DP009	Artificial Intelligence Application in Forming by Material Removal	(M00) Mechanical Engineering, Doctoral Academic Studies
17.	DP020	State and Tendencies in Development of Unconventional Forming Processes	(M00) Mechanical Engineering, Doctoral Academic Studies
18.	DP021	Selected Chapters in Micro and Nano Forming by Material Removal	(M00) Mechanical Engineering, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1.	Gostimirović M., Milikić D.: Upravljanje toplotnim pojavama pri obradi brušenjem, Monografija, Fakultet tehničkih nauka, Novi Sad, 2002.
2.	D. Milikić, M. Gostimirović, M. Sekulić: Osnove tehnologije obrade rezanjem, Fakultet tehničkih nauka, Novi Sad, 2008.
3.	Gostimirović M., Sekulić M., Kopač J., Kovač P.: Optimal control of workpiece thermal state in creep-feed grinding using inverse heat conduction analysis, Strojniški vestnik – Journal of Mechanical Engineering, DOI: 10.5545/sv-jme.2010.075, Slovenia, Vol 57(2011), No. 10, 2011., pp. 730-738
4.	Gostimirović M., Kovač P., Sekulić M.: An inverse heat transfer problem for optimization of the thermal process in machining, Sadhana-Academy Proceedings in Engineering Sciences, Vol 36(2011), Part 4, India, 2011., DOI: 10.1007/s12046-011-0034-4, pp. 489-504, ISSN 0256-2499
5.	Gostimirović M., Kovač P., Ješić D., Škorić B., Savković B.: Surface layer properties of the workpiece material in high performance grinding, Metalurgija, Croatia, Vol. 51, No 1, 2012, pp. 105-108

	Representative refferences (minimum 5, not more than 10)
6.	Kovač P., Rodić D., Pucovsky V., Savković B., Gostimirović M.: Application of fuzzi logic and regression analysis for modeling surface roughness in face milling, Journal of Intelligent Manufacturing, 2012, ISSN 0956-5515, UDK: DOI 10.1007/s10845-012-0623-z
7.	Gostimirović M., Kovač P., Sekulić M., Škorić B.: Influence of discharge energy on machining characteristics in EDM, Journal of Mechanical Science and Technology, DOI: 10.1007/s12206-011-0922-x, Korea, Vol 26(1), 2012., pp. 173-179, ISSN 1738-494X
8.	Gostimirović M., Kovač P., Škorić B., Sekulić M.: Effect of electrical pulse parameters on the machining performance in EDM, Indian Journal of Engineering and Materials Sciences, India, Vol 18, 2012., pp. 411-415
9.	Gostimirović M.: Nekonvencionalni postupci obrade, Fakultet tehničkih nauka, Novi Sad, 2012.
10.	Sekulić M., Kovač P., Gostimirović M.: Drilling cuting forces monitoring using virtual instrumentation, Central Europen Exchange Program for University Studies, Cracow University of Technology, Technical University of Košice, 2009, str. 31-36, ISBN 978-83-7242-509-6

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	5			
Total of SCI(SSCI) list papers :	12			
Current projects :	Domestic :	1	International :	3

Science, arts and professional qualifications

Name and last name:	Grahovac M. Nenad
Academic title:	Assistant Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	29.12.2004
Scientific or art field:	Mechanics

Academic carieer	Year	Institution	Field
Academic title election:	2012	Faculty of Technical Sciences - Novi Sad	Mechanics
PhD thesis	2011	Faculty of Technical Sciences - Novi Sad	Mechanics
Magister thesis	2005	Faculty of Technical Sciences - Novi Sad	Continuum Mechanics
Bachelor's thesis	2002	Faculty of Technical Sciences - Novi Sad	Deformable Body Mechanics

	List of courses being held by the teacher in the accredited study programmes		

	ID	Course name	Study programme name, study type
1.	A207	Mechanics	(A00) Architecture, Undergraduate Academic Studies
			(F10) Engineering Animation, Undergraduate Academic Studies
2.	E104	Mechanics	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
			(MR0) Measurement and Control Engineering, Undergraduate Academic Studies
3.	GG07	Mechanics 1	(G00) Civil Engineering, Undergraduate Academic Studies
4.	H112	Mechanics 1 – Fundamentals	(H00) Mechatronics, Undergraduate Academic Studies
			(S00) Traffic and Transport Engineering, Undergraduate Academic Studies
5.	H201	Mechanics 2 - General	(H00) Mechatronics, Undergraduate Academic Studies
6.	H303	Mechatronics 3 – Further Chapters	(H00) Mechatronics, Undergraduate Academic Studies
7.	M204	Strength of Materials	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
			(M30) Energy and Process Engineering, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
			(P00) Production Engineering, Undergraduate Academic Studies
8.	M4401	Continuum mechanics	(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
9.	BMI127	Biomechanics	(BM0) Biomedical Engineering, Undergraduate Academic Studies
			(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
10.	II1004	Mechanics and Industrial Engineering	(I10) Industrial Engineering, Undergraduate Academic Studies
11.	M44041	Dynamics of non-smooth mechanical systems	(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
12.	M44061	Optimization of mechanical systems	(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
13.	BMIM4A	Transport phenomena and Living systems	(BM0) Biomedical Engineering, Master Academic Studies
14.	M45991	Biomechanics of cardiovascular system	(M40) Technical Mechanics and Technical Design, Master Academic Studies
15.	SZD051	Applications of optimal control theory in living environment protection	(Z00) Environmental Engineering, Specialised Academic Studies
16.	DM801	Biomedical mechanics	(M40) Technical Mechanics, Doctoral Academic Studies
17.	DTM02	Theory of impact	(H00) Mechatronics, Doctoral Academic Studies
			(M00) Mechanical Engineering, Doctoral Academic Studies
			(M40) Technical Mechanics, Doctoral Academic Studies
			(S00) Traffic Engineering, Doctoral Academic Studies

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
18.	DTM03	Biomechanical models and analysis of impact	(M40) Technical Mechanics, Doctoral Academic Studies
19.	ZRD16A	Selected chapters in mechanics and elasticity theory	(Z01) Safety at Work, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1.	Grahovac N., Žigić M., Spasić D.: On impact scripts with both fractional and dry friction type of dissipation, INT J BIFURCAT CHAOS, 2012, Vol. 22, No 4, pp. 1-10, ISSN 0218-1274
2.	Grahovac N., Žigić M.: Modelling of the hamstring muscle group by use of fractional derivatives, Computers and Mathematics with Apllications, 2010, Vol. 59, No 5, pp. 1695-1700, ISSN 0898-1221.
3.	Glavardanov V., Maretić R., Grahovac N.: Buckling of a twisted and compressed rod supported by Cardan joints , European Journal of Mechanics - A: Solids, 2009, Vol. 28, pp. 131-140, ISSN 0997-7538
4.	N. M. Grahovac, M. M. Zigić, and D. T. Spasić: On multiple impacts with fractional type of dissipation, 1st International Congress of Serbian Society of Mechanics, Beograd: Serbian Society of Mechanics, 10-13 April, 2007, str. 173- 180
5.	Grahovac N., Žigić M: Fractional derivative viscoelastic model of the hamstring muscle group, 3rd IFAC Workshop on Fractional Differentiation and its Applications, Ankara, Turkey: 05-07 november, 2008
6.	Žigić M., Grahovac N.: Dynamical behavior of a polymer gel during impact. Fractional derivative viscoelastic model, 3. International Congress of Serbian Society of Mechanics, Vlasinsko jezero, 5-8 Jul, 2011, pp. 871-878, ISBN 978-86-909973-3-6, UDK: 531/534(082)
7.	Grahovac N., Žigić M., Spasić D.: On impact scripts with both fractional and dry friction type of dissipation, 4. IFAC Workshop on Fractional Differentiation and Its Applications, Badajoz, 18-20 Oktobar, 2010
8.	Grahovac N.: Generalized Zener model in the analysis of free vibration of a viscoelastic oscillator, 2. International Congress of Serbian Society of Mechanics, Palić: Serbian Society of Mechanics, 1-5 Jun, 2009, pp. 145-153, ISBN 978-86-7892-173-5, UDK: 531/534(082)
9.	Žigić M., Grahovac N., Spasić D.: A simplified earthquake dynamics of a column like structure with fractional type of dissipation , 1. International Congress of Serbian Society of Mechanics, Kopaonik: Serbian Society of Mechanics, 10-13 April, 2007, pp. 165-172, ISBN 978-86-909973-0-5, UDK: 531/534(082)
10.	Kovinčić N., Žigić M., Grahovac N., Spasić D.: On Impact in Biomechanical Systems, International scientific conference on mechanics, 6. International Scientific Conference on Mechanics - Sixth Polyakhov`s Reading, Saint Petersburg, 31-3 Januar, 2012, pp. 251-251, ISBN 978-5-91563-101-3

Summary data for teacher's scientific or art and professional activity:

Quotation total :	5			
Total of SCI(SSCI) list papers :	3			
Current projects :	Domestic :	1	International :	0

Science, arts and professional qualifications

Name and last name:	Grbić P. Tatjana
Academic title:	Assistant Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	15.12.1995
Scientific or art field:	Mathematics

Academic carieer	Year	Institution	Field
Academic title election:	2009	Faculty of Technical Sciences - Novi Sad	Mathematics
PhD thesis	2008	Faculty of Sciences - Novi Sad	Mathematical Sciences
Magister thesis	1999	Faculty of Sciences - Novi Sad	Mathematical Sciences
Bachelor's thesis	1993	Faculty of Sciences - Novi Sad	Mathematical Sciences

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	E135	Probability, Statistics and Stochastic Processes	(MR0) Measurement and Control Engineering, Undergraduate Academic Studies
			(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
2.	E212	Mathematical Analysis 1	(E20) Computing and Control Engineering, Undergraduate Academic Studies
			(SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies
			(SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies
3.	GI303B	Probability and Mathematical Statistics	(GI0) Geodesy and Geomatics, Undergraduate Academic Studies
4.	Z104	Mathematics 1	(Z01) Safety at Work, Undergraduate Academic Studies
			(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
			(ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies
			(Z20) Environmental Engineering, Undergraduate Academic Studies
5.	Z203	Statistical Methods	(Z01) Safety at Work, Undergraduate Academic Studies
			(ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies
			(Z20) Environmental Engineering, Undergraduate Academic Studies
6.	BMI91	Mathematics 1	(BM0) Biomedical Engineering, Undergraduate Academic Studies
7.	BMI92	Mathematics 2	(BM0) Biomedical Engineering, Undergraduate Academic Studies
8.	IA001	Algebra	(F10) Engineering Animation, Undergraduate Academic Studies
9.	IA002	Mathematical Analysis	(F10) Engineering Animation, Undergraduate Academic Studies
10.	P216	Numerical Analysis	(P00) Production Engineering, Undergraduate Academic Studies
11.	S01361	Business decision making	(S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies
12.	0M505	Stochastic Processes	(OM1) Mathematics in Engineering, Master Academic Studies
13.	0ML505	Stochastic Processes	(OM1) Mathematics in Engineering, Master Academic Studies

	ID	Course name	Study programme name, study type
		List of courses being held by the teacher in the accredited study programmes	
14.	DZ01MS	Selected Chapters in Mathematics	(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies (I12) Industrial Engineering, Specialised Academic Studies (I22) Engineering Management, Specialised Academic Studies (Z00) Environmental Engineering, Specialised Academic Studies
15.	ZR503	Statistical Advanced Models	(Z01) Safety at Work, Master Academic Studies
16.	MPK001	Statistical and Numerical Methods	(MPK) Inženjerstvo tretmana i zaštite voda - TEMPUS(uneti naziv na engledskom), Master Academic Studies
17.	SDOM30	Probability, Statistics and Theory of Engineering Experiment	(Z00) Environmental Engineering, Specialised Academic Studies
18.	D0M01	Functional Analysis 1	(OM1) Mathematics in Engineering, Doctoral Academic Studies
19.	D0M07	Mathematical Foundations of Fuzzy Systems	(OM1) Mathematics in Engineering, Doctoral Academic Studies
20.	D0M19	Functional Analysis 2	(OM1) Mathematics in Engineering, Doctoral Academic Studies
21.	D0M21	Fuzzy Systems and Their Applications	(OM1) Mathematics in Engineering, Doctoral Academic Studies
22.	D0M50	Fuzzy Measures and Integrals	(OM1) Mathematics in Engineering, Doctoral Academic Studies
23.	D0M51	Large Deviations Principles	(OM1) Mathematics in Engineering, Doctoral Academic Studies
24.	D0M52	Random Sets	(OM1) Mathematics in Engineering, Doctoral Academic Studies
25.	D0M53	Statistical Processing of Fuzzy Data	(OM1) Mathematics in Engineering, Doctoral Academic Studies
26.	DOM30	Probability, Statistics and Theory of Engineering Experiment	(M00) Mechanical Engineering, Doctoral Academic Studies (M40) Technical Mechanics, Doctoral Academic Studies (Z00) Environmental Engineering, Doctoral Academic Studies (Z01) Safety at Work, Doctoral Academic Studies
27.	DZ01M	Selected Chapters in Mathematics	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies (E20) Computing and Control Engineering, Doctoral Academic Studies (F00) Graphic Engineering and Design, Doctoral Academic Studies (F20) Engineering Animation, Doctoral Academic Studies (G00) Civil Engineering, Doctoral Academic Studies (GI0) Geodesy and Geomatics, Doctoral Academic Studies (H00) Mechatronics, Doctoral Academic Studies (I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies (M00) Mechanical Engineering, Doctoral Academic Studies (M40) Technical Mechanics, Doctoral Academic Studies (OM1) Mathematics in Engineering, Doctoral Academic Studies (S00) Traffic Engineering, Doctoral Academic Studies (Z00) Environmental Engineering, Doctoral Academic Studies (Z01) Safety at Work, Doctoral Academic Studies
		Representative refferences (minimum 5, not more than 10)	
1.		Ralević, N.M., Nedović, Lj., Grbić, T., :"The pseudo-linear superposition principle for nonlinear partial differential equations and representation of their solution by the pseudo-integral", Fuzzy sets and systems, 2005, No.155, 89-101	

	Representative refferences (minimum 5, not more than 10)
2.	Nedović, Lj., Ralević, N. M., Grbić, T.,: " Large deviation principle with generated pseudo measures", Fuzzy sets and systems, 2005, No. 105, 65-76
3.	Štajner-Papuga, I., Grbić, T., Dankova, M., "Pseud-Riemann-Stieltjes integral ", Information Sciences 179, 2009, 2923-2933
4.	M. Štrboja, T. Grbić, I. Štajner-Papuga, G. Grujić, S. Medić, Jensen and Chebyshev inequalities for pseudo-integrals of set-valued functions, FSS, doi:10.101016/j.fss.2012.07.011
5.	Grbić, T., Pap, E., : "Generalization Of Portamnteau theorem with respect to the pseudo-weak convergence of random closed sets", Theory of Probability and its Applications, 2009, 97-115
6.	T. Grbić, I. Štajner-Papuga, M. Štrboja, an approach to pseudo-integration of set-valued functions, Information Sciences 181 (2011), 2278-2292
7.	T. Grbić, S. Medić, I. Štajner-Papuga, T. Došenović, Inequalities of Jensen and Chebyshev type for interval-valued measures based on pseudo-integrals. In: Intelligent Systems: Models and Applications, E. Pap, Ed., Springer-Verlag, pp 23-41, DOI:10.1007/978-3-642-33959-2_2
8.	Štajner-Papuga, I., Grbić, T., Dankova, M., "Riemann-Stieltjes type integral based on generated pseudo-operations", NS J. Mathe., Vol. 36, No. 2, 111-124
9.	Nedović, Lj., Grbić, T., "The pseudo-probability", Journal of Electrical Engineering, 2002, Vol. 53, No. 12/s, 27-30
10.	Mihailović, B., Nedović, T., Grbić, T., "The induced Sugeno integral-based operator w.r.t. bi-fuzzy measures", Journal of Electrical engineering, Vol. 54, No. 12/s, 76-79

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	17			
Total of SCI(SSCI) list papers :	6			
Current projects :	Domestic :	2	International :	0

Science, arts and professional qualifications

Name and last name:	Grković R. Vojin
Academic title:	Full Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	01.06.1994
Scientific or art field:	Thermal Energetics and Thermotechnics

Academic carieer	Year	Institution	Field
Academic title election:	1993	Faculty of Technical Sciences - Novi Sad	Thermal Energetics and Thermotechnics
PhD thesis	1984	Faculty of Mechanical Engineering - Beograd	Mechanical Engineering
Magister thesis	1974	Faculty of Mechanical Engineering - Beograd	Mechanical Engineering
Bachelor's thesis	1970	Faculty of Mechanical Engineering - Beograd	Mechanical Engineering

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	EOS38	Energetski menadžment	(E01) Power Engineering - Renewble Sources of Electrical Energy, Undergraduate Professional Studies
2.	M3302	Thermoenergy Plants	(M30) Energy and Process Engineering, Undergraduate Academic Studies
3.	M3405	Thermal Turbines 1	(M30) Energy and Process Engineering, Undergraduate Academic Studies
4.	M3501	Refrigeration Devices	(M30) Energy and Process Engineering, Undergraduate Academic Studies
5.	Z206	Alternative Power Engineering	(Z20) Environmental Engineering, Undergraduate Academic Studies
6.	Z206A	Alternative Energy Sources	(Z01) Safety at Work, Undergraduate Academic Studies
7.	ZOI312	Thermal Power Plants	(Z20) Environmental Engineering, Undergraduate Academic Studies
8.	ZOI31A	Thermal power plants	(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
9.	M211	Measurement and Regulation	(M30) Energy and Process Engineering, Undergraduate Academic Studies
			(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
10.	M3495	Therma Energy Ekuipment	(M30) Energy and Process Engineering, Undergraduate Academic Studies
11.	I938	Energy and Society	(M50) Energy Management, Master Academic Studies
12.	M3505	Processes and Constructions of Multistage Turbine	(M30) Energy and Process Engineering, Master Academic Studies
13.	I939	Merenje, nadzor i upravljanje	(M50) Energy Management, Master Academic Studies
14.	M3503	Dinamika i modeliranje termoenergetskih postrojenja(uneti naziv na engleskom)	(M30) Energy and Process Engineering, Master Academic Studies
15.	M3515	Energy Systems	(M30) Energy and Process Engineering, Master Academic Studies
			(M50) Energy Management, Master Academic Studies
16.	M5022	Renewable energy sources	(M50) Energy Management, Master Academic Studies
17.	M5025	Energy audits	(M50) Energy Management, Master Academic Studies
18.	DM216	Energy Systems	(M00) Mechanical Engineering, Doctoral Academic Studies
19.	DM217	Energy Management in Idustry	(M00) Mechanical Engineering, Doctoral Academic Studies
20.	DM219	Energy Politics	(M00) Mechanical Engineering, Doctoral Academic Studies
21.	DM302	Engineering Experimental Methods	(H00) Mechatronics, Doctoral Academic Studies
			(M00) Mechanical Engineering, Doctoral Academic Studies
22.	DM310	Mathematical Process Modelling	(M00) Mechanical Engineering, Doctoral Academic Studies
23.	DM318	Contemporary Methods for Turbomachine Design	(M00) Mechanical Engineering, Doctoral Academic Studies
24.	DM319	Optimization of Power Machine and Thermal Equipment	(M00) Mechanical Engineering, Doctoral Academic Studies
25.	DM333	Renewable Energy Resoruces	(M00) Mechanical Engineering, Doctoral Academic Studies
26.	DM334	Optimization of Energy Systems Operation	(M00) Mechanical Engineering, Doctoral Academic Studies

	Representative refferences (minimum 5, not more than 10)
1.	Grković V.: "Energy-Efficiency Improvements by Joint Oeration of Two DH Systems Using Old Condensing Turbines", ENERGY, the International Journal, Vol.22, (1997), No. 11, pp. 1099-1102.
2.	Grković V.: "Selection of the Optimal Extraction Pressure for Steam from a Condensation-Extraction Turbine", ENERGY, the International Journal, Vol.15, (1990) No. 5, pp. 459-465.
3.	Grković V:: "Optimisations for District Heating of Belgrade from the Kolubara Energy and Industrial Complex", ENERGY, the International Journal, Vol. 14, (1989) No.11, pp. 747-756.
4.	Grković V.: "Optimizacija parametrov otbora u kondensacionih turbin s promežutočnim otborom para", TEPLOENERGETIKA, 1989, No. 6, s. 72-75.
5.	Grković V.: "Simulation stationaerer Betriebszustaende von Kondensationsturbinen mit Fernwaermeauskoppelung, BWK, 39, (1987), No. 7/8, S. 349.
6.	Grković V.: "Mathematisches Modell zur Optimierung des Auslegungsentnahmedruckes an der einer Kondensationsturbine mit Fernwaermeauskopplung", FERNWAERME INTERNATIOAL FWI, Vol. 20, (1991), Nr. 11, S. 616-626.
7.	Grković V. and Nedeljković Lj.: "Possibilities and Limitations of Fracture Mechanics Methods in Fitness-for-Purpose Evaluation of a Turbine Rotor with a Large Ultrasonic Indication Zone", STRENGTH OF MATERIALS, the International Journal, 1995, No. 1-2, pp.39-52.
8.	Grković V.: "A Method for Calculation of Forces Acting on the Gas Turbine Blades with Film and Effusion Cooling", XIV Brazilian Congress of Mechanical Engineering, Obeid Plaza Hotel Convention Center - Bauru - SP Brazil, Dec. 08-12th 1997, Procedings (on CD ROM), Paper Code 1100.
9.	Grković V.: " Tehniloške osnove regulisanja parnih turbina za spregnutu proizvodnju električne i toplotne energije", Futura-publikacije, Novi Sad, 1995, ISBN 86-7188-001-X.
10.	Grković V.: "Hladjenje gasnih turbina", Dečje Novine, Gornji Milan-ovac, 1994
	Summary data for teacher's scientific or art and professional activity:

Quotation total :	12			
Total of SCI(SSCI) list papers :	5			
Current projects :	Domestic :	1	International :	1

Science, arts and professional qualifications

Name and last name:			Gvozdenac D. Dušan	
Academic title:			Full Professor	
Name of the institution where the teacher works full time and starting date:			Faculty of Technical Sciences - Novi Sad	
			01.06.1973	
Scientific or art field:			Thermal Energetics and Thermotechnics	
Academic carieer	Year	Institution		Field
Academic title election:	1993	Faculty of Technical Sciences - Novi Sad		Thermal Energetics and Thermotechnics
PhD thesis	1981	Faculty of Mechanical Engineering - Beograd		Thermal Energetics and Thermotechnics
Magister thesis	1978	Faculty of Technical Sciences - Novi Sad		Thermal Energetics and Thermotechnics
Bachelor's thesis	1973	Faculty of Technical Sciences - Novi Sad		Thermal Energetics and Thermotechnics

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	EOS38	Energetski menadžment	(E01) Power Engineering - Renewble Sources of Electrical Energy, Undergraduate Professional Studies
2.	M119	Energy Transformations	(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
3.	M222A	Energy System Engineering	(M30) Energy and Process Engineering, Undergraduate Academic Studies
4.	M3311	Renewable Energy Sources	(M30) Energy and Process Engineering, Undergraduate Academic Studies (ZC0) Clean Energy Technologies, Undergraduate Academic Studies
5.	M3501	Refrigeration Devices	(M30) Energy and Process Engineering, Undergraduate Academic Studies
6.	Z206	Alternative Power Engineering	(Z20) Environmental Engineering, Undergraduate Academic Studies
7.	Z206A	Alternative Energy Sources	(Z01) Safety at Work, Undergraduate Academic Studies
8.	Z206	Alternativna energetika(uneti naziv na engleskom)	(Z20) Environmental Engineering, Undergraduate Academic Studies
9.	E2313	Fundamentals of Process and Energy Engineering	(E20) Computing and Control Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
10.	II1044	Energy flows and energy efficiency	(I10) Industrial Engineering, Undergraduate Academic Studies
11.	M211	Measurement and Regulation	(M30) Energy and Process Engineering, Undergraduate Academic Studies (ZC0) Clean Energy Technologies, Undergraduate Academic Studies
12.	M3031	Engineering Calculations of Energy Technologies Apparatus and Equipment	(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
13.	M3494	Energy efficiency	(M30) Energy and Process Engineering, Undergraduate Academic Studies (ZC0) Clean Energy Technologies, Undergraduate Academic Studies
14.	I939	Merenje, nadzor i upravljanje	(M50) Energy Management, Master Academic Studies
15.	IMDS78	Odabrana poglavlja iz energetskog menadžmenta(uneti naziv na engleskom)	(I22) Engineering Management, Specialised Academic Studies
16.	M3503	Dinamika i modeliranje termoenergetskih postrojenja(uneti naziv na engleskom)	(M30) Energy and Process Engineering, Master Academic Studies
17.	M3M07	Energy storage	(ZC0) Clean Energy Technologies, Master Academic Studies
18.	M5022	Renewable energy sources	(M50) Energy Management, Master Academic Studies
19.	SZSP24	Savremeni principi energetskog menadžmenta	(Z00) Environmental Engineering, Specialised Academic Studies
20.	DM216	Energy Systems	(M00) Mechanical Engineering, Doctoral Academic Studies
21.	DM217	Energy Management in Idustry	(M00) Mechanical Engineering, Doctoral Academic Studies

	ID	Course name	Study programme name, study type
		List of courses being held by the teacher in the accredited study programmes	
22.	DM218	Contemporary Energy Technologies	(M00) Mechanical Engineering, Doctoral Academic Studies
23.	DM219	Energy Politics	(M00) Mechanical Engineering, Doctoral Academic Studies
24.	DM302	Engineering Experimental Methods	(H00) Mechatronics, Doctoral Academic Studies
			(M00) Mechanical Engineering, Doctoral Academic Studies
25.	DM309	Energy Management Methods	(M00) Mechanical Engineering, Doctoral Academic Studies
26.	DM332	Energy Management in Buildings	(M00) Mechanical Engineering, Doctoral Academic Studies
27.	DM333	Renewable Energy Resoruces	(M00) Mechanical Engineering, Doctoral Academic Studies
28.	ZSP24	Modern Principles of Energy Management	(Z00) Environmental Engineering, Doctoral Academic Studies
29.	IMDR78	Odabrana poglavlja iz energetskog menadžmenta(uneti naziv na engleskom)	(I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1. Energy Efficiency in Food Processing Industry – East European Experience, edited by D. Gvozdenac, UNDP/UNIDO Project DP/RER/83/003, Novi Sad, pp. 123, 1991.

2. Conterporary problems in Power Engineering (monograph), Novi Sad/Thesaloniki, Gvozdenac D, Xypteras J, Dimić M. 1996.

3. Measurement and regulation (Selected chapters for operators of large power plants), Institute of energy and process engineering, Novi Sad, Gvozdenac, D, Pešenjanski, I,1980. (in Serbian).

4. Measurement and Regulation in Thermal Engineering, Faculty of Technical Sciences, Gvozdenac, D, Novi Sad, 2000. (in Serbian).

5. Bilansiranje energetskih tokova, Pokrajinski centar za energetku efikasnost, Gvozdenac, D., Marić, M., Petrović, J., Novi Sad, 2006.

6. Gvozdenac D, Menke C, Vallikul P, Petrovic J, Gvozdenac B: Assessment of potential for natural gas-based cogeneration in Thailand, Energy, Volume 34, Issue 4, 2009, pp 465-475

7. A Mathematical Model for Heat Transfer in Combustion Chambers of Steam Generators, Gulič, M, Gvozdenac, D, Transactions of the ASME Journal of Engineering for Power, Vol. 103, 1981, pp. 545 – 551.

8. Somcharoenwattana W, Menke C, Kamolpus D, Gvozdenac D: Study of Operational Parameters Improvement of Natural-Gas Cogeneration Plant in Public Buildings in Thailand, Energy and Buildings, Vol. 43, Issue 4, April, 2011. p. 925-934

9. Two-pass counter cross-flow heat exchangers with both fluids unmixed throughout, Gvozdenac, D, Waerme - und Stoffuebertragung, Vol. 20, 1986, pp. 151 – 161.

10. Analytical Solution of the Transient Response of Gas-to-Gas Cross-flow Heat Exchanger With Both Fluids Unmixed, Gvozdenac, D.D, ASME Journal of Heat Transfer, Vol. 108, 1986, pp. 722-727.

Summary data for teacher's scientific or art and professional activity:

Quotation total :	71			
Total of SCI(SSCI) list papers :	26			
Current projects :	Domestic :	2	International :	1

Science, arts and professional qualifications

Name and last name:		Hadžistević J. Miodrag	
Academic title:		Associate Professor	
Name of the institution where the teacher works full time and starting date:		Faculty of Technical Sciences - Novi Sad	
		01.02.1993	
Scientific or art field:		Metrology, Quality, Fixtures and Ecological-Engineering Aspects	
Academic carieer	Year	Institution	Field
Academic title election:	2010	Faculty of Technical Sciences - Novi Sad	Metrology, Quality, Fixtures and Ecological-Engineering Aspects
PhD thesis	2004	Faculty of Technical Sciences - Novi Sad	Metrology, Quality, Fixtures and Ecological-Engineering Aspects
Magister thesis	1999	Faculty of Technical Sciences - Novi Sad	Metrology, Quality, Fixtures and Ecological-Engineering Aspects
Bachelor's thesis	1992	Faculty of Technical Sciences - Novi Sad	Cutting Processing Tools and Tribology

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	P1401	Fixture Design and Measuring Machines	(P00) Production Engineering, Undergraduate Academic Studies
2.	P1508	Reverse Engineering and CAQ	(P00) Production Engineering, Undergraduate Academic Studies (SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies (SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies
3.	P209	Measurements and Quality	(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies (P00) Production Engineering, Undergraduate Academic Studies
4.	P306	Fixtures	(P00) Production Engineering, Undergraduate Academic Studies
5.	URZP15	Work safety during interventions	(ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies
6.	Z207	Mechanical Engineering in Environmental Engineering	(Z20) Environmental Engineering, Undergraduate Academic Studies
7.	Z207A	Mechanical Engineering in Environmental Engineering	(Z01) Safety at Work, Undergraduate Academic Studies
8.	Z301	Pollution Measurement and Control	(Z01) Safety at Work, Undergraduate Academic Studies (Z20) Environmental Engineering, Undergraduate Academic Studies
9.	Z416	EMS Systems	(Z20) Environmental Engineering, Undergraduate Academic Studies
10.	ZR101	Introduction and Principles of Occupational Safety	(Z01) Safety at Work, Undergraduate Academic Studies
11.	ZR404	Occupational Safety Systems, Means and Equipment	(Z01) Safety at Work, Undergraduate Academic Studies
12.	Z207	Mašinstvo u inženjerstvu zaštite životne sredine(uneti naziv na engleskom)	(Z20) Environmental Engineering, Undergraduate Academic Studies
13.	Z416	EMS sistemi(uneti naziv na engleskom)	(Z20) Environmental Engineering, Undergraduate Academic Studies
14.	IM1714	Introduction and principles of occupational occupational health and safety	(I20) Engineering Management, Undergraduate Academic Studies
15.	ZC036	Measurement and control of pollution	(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
16.	P1409	Material Control Systems and CAI	(PM0) Production Engineering, Master Academic Studies
17.	P1501	Ecological Technologies and Systems	(M40) Technical Mechanics and Technical Design, Master Academic Studies (PM0) Production Engineering, Master Academic Studies
18.	Z416A	Environment Protection System Management	(PM0) Production Engineering, Master Academic Studies
19.	Z452	Design and maintenance of quality control in environmental engineering	(M40) Technical Mechanics and Technical Design, Master Academic Studies

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
20.	PLIS1	Logistics and Simulation in Technologies of Plastics Processing	(PM0) Production Engineering, Master Academic Studies
21.	PP103	Measurement and tools in precision engineering	(PM0) Production Engineering, Master Academic Studies
22.	SDOM30	Probability, Statistics and Theory of Engineering Experiment	(Z00) Environmental Engineering, Specialised Academic Studies
23.	SM3	Software support for reverse engineering and CAQ	(PM0) Production Engineering, Master Academic Studies
24.	SZSP18	Contemporary scientific approaches in life cycle assessment of products (LCA)	(Z00) Environmental Engineering, Specialised Academic Studies
25.	ZCM09	Occupational Health and Safety	(ZC0) Clean Energy Technologies, Master Academic Studies
26.	ZR406A	System Regulations and EU Practice in Occupational Health and Safety	(Z01) Safety at Work, Master Academic Studies
27.	DOM30	Probability, Statistics and Theory of Engineering Experiment	(M00) Mechanical Engineering, Doctoral Academic Studies (M40) Technical Mechanics, Doctoral Academic Studies (Z00) Environmental Engineering, Doctoral Academic Studies (Z01) Safety at Work, Doctoral Academic Studies
28.	DP001	Design and Research Methods in Production Engineering	(M00) Mechanical Engineering, Doctoral Academic Studies
29.	DP006	State and development trends of metrology, quality and fixtures	(M00) Mechanical Engineering, Doctoral Academic Studies
30.	DP013	Ecological Engineering Aspects	(M00) Mechanical Engineering, Doctoral Academic Studies
31.	DP019	Selected topics in technical diagnosis	(M00) Mechanical Engineering, Doctoral Academic Studies
32.	ZSP18	Modern Scientific Approaches in Product Life Cycle Assessment (LCA)	(Z00) Environmental Engineering, Doctoral Academic Studies
33.	ZRD211	Sustainable design and product safety	(Z01) Safety at Work, Doctoral Academic Studies
34.	ZRD213	Current state and development tendencies of quality management of work environment	(Z01) Safety at Work, Doctoral Academic Studies
35.	ZRD235	Systemic regulation in the field of occupational safety and health	(Z01) Safety at Work, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1. Matin I., Hadžistević M., Hodolič J., Vukelić Đ., Lukić D.: A CAD/CAE Integrated Injection Mold Design System for Plastic Products, International Journal of Advanced Manufacturing Technology, 2012, Vol. 63, No 5-8, pp. 595-607, ISSN 0268-3768

2. Brajlih T., Tasić T., Drštvenšek I., Valentan B., Hadžistević M., Pogačar V., Balić J., Ačko B.: Possibilities of Using Three-Dimensional Optical Scanning in Complex Geometrical Inspection, Strojniski vestnik = Journal of Mechanical Engineering, 2011, Vol. 57, No 11, pp. 826-833, ISSN 0039-2480

3. Sekulić M., Jurković Z., Hadžistević M., Gostimirović M.: The influence of mechanical properties of workpiece material on the main cutting force in face milling, Metalurgija, 2010, Vol. 49, No 4, pp. 339-342, ISSN 0543-5846, UDK: 669.14/15:620.171.70/178:620.18 = 111

4. Morača S., Hadžistević M., Drstvenšek I., Radaković N.: Application of Group Technology in Complex Cluster type Organizational Systems, Strojniski vestnik = Journal of Mechanical Engineering, 2010, Vol. 56, No 10, pp. 663-675, ISSN 0039-2480

5. Radlovački V., Kamberović B., Delić M., Hadžistević M., Pečujlija M.: ARE QUALITY MANAGEMENT SYSTEM AND INFORMATION TECHNOLOGIES MANAGEMENT TOOLS - ESTIMATES OF SERBIAN QUALITY MANAGERS, INTERNATIONAL JOURNAL ADVANCED QUALITY, 2012, Vol. 40, No 1, pp. 33-36, ISSN 2217-8155, UDK: 658.5

6. Stević, M.: Povećanje tačnosti merenja numerički upravljanih mernih mašina, edicija tehničke nauke - monografija, FTN izdavaštvo, ISBN 86-7892-028-9, Novi Sad, 2006.

7. Hadžistević M., Morača S.: Networks and Quality Improvement, International Journal for Quality Research, 2009, Vol. 3, No 4, pp. 353-361, ISSN 1800-6450

8. Lomen, I., Cvetićanin, L., Hodolič, J., Stević, M.: Softwarova aplikacia na určenie hladiny hluku v priemyselnych podnikoch, Časopis Acta Mechanica Slovaca, 2/2002, Ročník 6., pp. 165-168, Košice, Slovačka, 2002.

9. Hodolič J., Budak I., Vukelić Đ., Agarski B., Hadžistević M.: Less Formal Tools for Environmental Management in Production Industry, 2. International Symposium on Environmental and Material Flow Management - EMFM, Zenica: Faculty of Mechanical Engineering in Zenica, University of Zenica, 7-9 Jun, 2012, pp. 1-15, ISBN 978-9958-617-46-1

10. Agarski B., Budak I., Puškar T., Vukelić Đ., Marković D., Hadžistević M., Hodolič J.: Multi-criteria assessment of environmental and occupational safety measures in dental prosthetics laboratories, Journal of Production Engineering, 2012, Vol. 15, No 1, pp. 53-56, ISSN 1821-4932

Summary data for teacher's scientific or art and professional activity:

Quotation total :	20			
Total of SCI(SSCI) list papers :	9			
Current projects :	Domestic :	2	International :	2

Science, arts and professional qualifications

Name and last name:	Hodolič J. Janko
Academic title:	Full Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	06.12.1974
Scientific or art field:	Metrology, Quality, Fixtures and Ecological-Engineering Aspects

Academic carieer	Year	Institution	Field
Academic title election:	1997	Faculty of Technical Sciences - Novi Sad	Metrology, Quality, Fixtures and Ecological-Engineering Aspects
PhD thesis	1989	Faculty of Technical Sciences - Novi Sad	Mechanical Engineering
Magister thesis	1979	Faculty of Technical Sciences - Novi Sad	Mechanical Engineering
Bachelor's thesis	1974	Faculty of Technical Sciences - Novi Sad	Mechanical Engineering

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	IA018	3D Digitalization Methods	(F10) Engineering Animation, Undergraduate Academic Studies
2.	P1401	Fixture Design and Measuring Machines	(P00) Production Engineering, Undergraduate Academic Studies
3.	P1508	Reverse Engineering and CAQ	(P00) Production Engineering, Undergraduate Academic Studies
			(SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies
			(SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies
4.	P209	Measurements and Quality	(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
			(P00) Production Engineering, Undergraduate Academic Studies
5.	P2617	Planning Methods and Experiment Processing	(P00) Production Engineering, Undergraduate Academic Studies
6.	P306	Fixtures	(P00) Production Engineering, Undergraduate Academic Studies
7.	Z207	Mechanical Engineering in Environmental Engineering	(Z20) Environmental Engineering, Undergraduate Academic Studies
8.	Z207A	Mechanical Engineering in Environmental Engineering	(Z01) Safety at Work, Undergraduate Academic Studies
9.	Z301	Pollution Measurement and Control	(Z01) Safety at Work, Undergraduate Academic Studies
			(Z20) Environmental Engineering, Undergraduate Academic Studies
10.	Z416	EMS Systems	(Z20) Environmental Engineering, Undergraduate Academic Studies
11.	ZR320	Experimental Analysys of Safety and Health on Workplace	(Z01) Safety at Work, Undergraduate Academic Studies
12.	ZRI441	Material handling systems for environmental and labor protection	(Z01) Safety at Work, Undergraduate Academic Studies
13.	Z207	Mašinstvo u inženjerstvu zaštite životne sredine(uneti naziv na engleskom)	(Z20) Environmental Engineering, Undergraduate Academic Studies
14.	Z416	EMS sistemi(uneti naziv na engleskom)	(Z20) Environmental Engineering, Undergraduate Academic Studies
15.	ZC036	Measurement and control of pollution	(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
16.	P1409	Material Control Systems and CAI	(PM0) Production Engineering, Master Academic Studies
17.	P1501	Ecological Technologies and Systems	(M40) Technical Mechanics and Technical Design, Master Academic Studies
			(PM0) Production Engineering, Master Academic Studies
18.	P3501	Tool Designing for Plastic	(PM0) Production Engineering, Master Academic Studies
19.	Z416A	Environment Protection System Management	(PM0) Production Engineering, Master Academic Studies
20.	PIP16	Plastics and environmental protection	(PM0) Production Engineering, Master Academic Studies
21.	PLIS1	Logistics and Simulation in Technologies of Plastics Processing	(PM0) Production Engineering, Master Academic Studies

	ID	Course name	Study programme name, study type
22.	SDOM30	Probability, Statistics and Theory of Engineering Experiment	(Z00) Environmental Engineering, Specialised Academic Studies
23.	SZDH1	Modern Methods of Eco-design	(Z00) Environmental Engineering, Specialised Academic Studies
24.	SZSP18	Contemporary scientific approaches in life cycle assessment of products (LCA)	(Z00) Environmental Engineering, Specialised Academic Studies
25.	DM411	Contemporary Approach to Integration of Reverse Engineering of Rapid Prototyping, Tools, Products and Virtual Manufacturing	(M00) Mechanical Engineering, Doctoral Academic Studies
26.	DOM30	Probability, Statistics and Theory of Engineering Experiment	(M00) Mechanical Engineering, Doctoral Academic Studies (M40) Technical Mechanics, Doctoral Academic Studies (Z00) Environmental Engineering, Doctoral Academic Studies (Z01) Safety at Work, Doctoral Academic Studies
27.	DP001	Design and Research Methods in Production Engineering	(M00) Mechanical Engineering, Doctoral Academic Studies
28.	DP006	State and development trends of metrology, quality and fixtures	(M00) Mechanical Engineering, Doctoral Academic Studies
29.	DP013	Ecological Engineering Aspects	(M00) Mechanical Engineering, Doctoral Academic Studies
30.	ZDH1	Modern Methods of Eco-design	(Z00) Environmental Engineering, Doctoral Academic Studies
31.	ZSP18	Modern Scientific Approaches in Product Life Cycle Assessment (LCA)	(Z00) Environmental Engineering, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1. Budak I., Vukelić Đ., Bračun D., Hodolič J., Soković M.: Pre-Processing of Point-Data from Contact and Optical 3D Digitization Sensors, Sensors, 2012, Vol. 12, No 1, pp. 1100-1126, ISSN 1424-8220

2. Bešić I., Van Gestel N., Kruth J., Bleys P., Hodolič J.: Accuracy improvement of laser line scanning for feature measurements on CMM, Optics and Lasers in Engineering, 2011, Vol. 49, No 11, pp. 1274-1280, ISSN 0143-8166

3. Matin I., Hadžistević M., Hodolič J., Vukelić Đ., Lukić D.: A CAD/CAE Integrated Injection Mold Design System for Plastic Products, International Journal of Advanced Manufacturing Technology, 2012, Vol. 63, No. 5-8, pp. 595-607, ISSN 0268-3768

4. Jakovljević Ž., Petrović P., Hodolič J.: Contact states recognition in robotic part mating based on support vector machines, International Journal of Advanced Manufacturing Technology, 2012, Vol. 59, No 1-4, pp. 377-395, ISSN 0268-3768

5. Mrkajić V., Stamenković M., Maleš M., Vukelić Đ., Hodolič J.: Proposal for reducing problems of the air pollution and noise in the urban environment, Carpathian Journal of Earth and Environmental Sciences, 2010, Vol. 5, No 1, pp. 49-56, ISSN 1842-4090

6. Vukelić Đ., Zuperl U., Hodolič J.: Complex system for fixture selection, modification, and design, International Journal of Advanced Manufacturing Technology, 2009, Vol. 45, No 7-8, pp. 731-748, ISSN 0268-3768

7. Budak I., Hodolič J., Soković M.: Development of a programme system for data-point pre-processing in Reverse Engineering, Journal of Materials Processing Technology, 2005, Vol. 162, pp. 730-735, ISSN 0924-0136

8. Agarski B., Budak I., Kosec B., Hodolič J.: An Approach to Multi-criteria Environmental Evaluation with Multiple Weight Assignment, Environmental Modeling & Assessment, 2012, Vol. 17, No 3, pp. 255-266, ISSN 1420-2026.

9. Trifković B., Budak I., Todorović A., Hodolič J., Puškar T., Jevremović D., Vukelić Đ.: Application of Replica Technique and SEM in Accuracy Measurement of Ceramic Crowns, Measurement Science Review, 2012, Vol. 12, No 3, pp. 90-97, ISSN 1335-8871.

10. Agarski B., Kljajin M., Budak I., Tadić B., Vukelić Đ., Bosak M., Hodolič J.: Application of multi-criteria assessment in evaluation of motor vehicles' environmental performances, Tehnički vjesnik/Technical Gazette, 2012, Vol. 19, No 2, pp. 221-226, ISSN 1330-3651.

Summary data for teacher's scientific or art and professional activity:

Quotation total :	42			
Total of SCI(SSCI) list papers :	22			
Current projects :		Domestic :	3	International :	6

Science, arts and professional qualifications

Name and last name:	Jeličić D. Zoran
Academic title:	Associate Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	01.11.1995
Scientific or art field:	Automatic Control and System Engineering

Academic carieer	Year	Institution	Field
Academic title election:	2008	Faculty of Technical Sciences - Novi Sad	Automatic Control and System Engineering
PhD thesis	2003	Faculty of Technical Sciences - Novi Sad	Automatic Control and System Engineering
Magister thesis	1999	Faculty of Technical Sciences - Novi Sad	Automatic Control and System Engineering
Bachelor's thesis	1995	Faculty of Technical Sciences - Novi Sad	Automatic Control and System Engineering

	List of courses being held by the teacher in the accredited study programmes		

	ID	Course name	Study programme name, study type
1.	AU41	Digital Control Systems	(E20) Computing and Control Engineering, Undergraduate Academic Studies
			(MR0) Measurement and Control Engineering, Undergraduate Academic Studies
2.	E237	Optimization Methods	(E20) Computing and Control Engineering, Undergraduate Academic Studies
			(MR0) Measurement and Control Engineering, Undergraduate Academic Studies
			(SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies
			(SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies
3.	E237A	Optimization Methods	(GI0) Geodesy and Geomatics, Undergraduate Academic Studies
4.	F404	Modelling, Simulation and Control	(F00) Graphic Engineering and Design, Undergraduate Academic Studies
5.	GI005	Intelligent Control Systems	(GI0) Geodesy and Geomatics, Undergraduate Academic Studies
6.	H1405	Optimization Methods	(H00) Mechatronics, Undergraduate Academic Studies
7.	H302	Control Systems 2	(H00) Mechatronics, Undergraduate Academic Studies
8.	BM118A	Nonlinear programming and optimal control	(BM0) Biomedical Engineering, Undergraduate Academic Studies
9.	BM130A	Digital control systems in bioengineering	(BM0) Biomedical Engineering, Undergraduate Academic Studies
10.	E2316	Real-time control systems	(E20) Computing and Control Engineering, Undergraduate Academic Studies
11.	SEAU01	Nonlinear programming and evolutionary computations	(SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies
12.	SEAU03	Real-time control algorithms	(SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies
13.	AU511	Adaptive and Advanced Control	(E20) Computing and Control Engineering, Master Academic Studies
			(MR0) Measurement and Control Engineering, Master Academic Studies
14.	AT03	Optimization and control techniques in architectural design	(AH0) Architecture, Master Academic Studies
15.	E2532	Automatic Control Systems Project Management	(E20) Computing and Control Engineering, Master Academic Studies
16.	DAU005	Selected Chapters in Optimization Methods	(M00) Mechanical Engineering, Doctoral Academic Studies
17.	DAU010	Selected Chapters in Nonlinear Control Systems	(E20) Computing and Control Engineering, Doctoral Academic Studies
			(OM1) Mathematics in Engineering, Doctoral Academic Studies
18.	DGI016	Selected Chapters in Systems and Signals	(GI0) Geodesy and Geomatics, Doctoral Academic Studies

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
19.	DAU005	Selected Chapters in Optimization Methods	(E20) Computing and Control Engineering, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)
1. Jeličić Z., Kulić F., Čongradac V., Kanović Ž., Živković S.,Praktikum Savremena merenja i instrumentacija iz programa Lifelong Learning, INDAS, 2003.
2. Jeličić Zoran; Petrovački Nebojša; Optimality Conditions and a Solution Scheme For Fractional Optimal Control Problems, Structural and Multidisciplinary Optimization ISSN: 1615-147X ,Vol. 38, No. 6, Str. 571-581, Springer;
3. Rapaić Milan; Pisano Alessandro; Jeličić Zoran; Usai Elio; Sliding mode control approaches to the robust regulation of linear multivariable fractional order dynamics - International Journal of Robust and Nonlinear Control Volume 20, Issue 18, pages 2045–2056, December 2010
4. Rapaić Milan; Jeličić Zoran; Optimal control of a class of fractional heat diffusion systems , Nonlinear Dynamics Volume 62, Numbers 1-2, 39-51, DOI: 10.1007/s11071-010-9697-3 , Springer;
5. Z. D. Jeličić, T. M. Atanacković, Optimal shape of a vertical rotating column, International Journal of Non-Linear Mechanics, 42, 172 – 179, (2007) .
6. Zeljko Kanovic, Milan R Rapaic, Zoran D Jelicic, Generalized particle swarm optimization algorithm-Theoretical and empirical analysis with application in fault detection, Applied mathematics and computation, Volume 217, Issue 24, 15 August 2011, Pages 10175–10186.
7. Jeličić, Z. D. Atanacković, T. M.,On an optimization problem for elastic rods, STRUCTURAL AND MULTIDISCIPLINARY OPTIMIZATION, (2006) vol.32 br.1 str. 59-64
8. Milena Petković, Milan R Rapaić, Zoran D Jeličić, Alessandro Pisano, On-line adaptive clustering for process monitoring and fault detection, Expert Systems with Applications, Volume 39, Issue 11, 1 September 2012, Pages 10226–10235.
9. T. M. Atanacković, Z. D. Jeličić, Optimal shape and deformations of a lifting line with winglets. Bulletin de l"Académie Serbe des Sciences et des Arts. Classe des Sciences techniques 29, 57-79 (2003).
10. T. M. Atanackovic, Y. Huo, Z. Jelicic, I. Mueller, Phase diagrams modified by interfacial penalties, Theoret. Appl. Mech., Vol.34, No.4, pp. 301-338, Belgrade 2007.

Summary data for teacher's scientific or art and professional activity:			
Quotation total :	105		
Total of SCI(SSCI) list papers :	7		
Current projects :	Domestic :	2	International :	1

Science, arts and professional qualifications

Name and last name:	Jovanović S. Aleksandar
Academic title:	Full Professor
Name of the institution where the teacher works full time and starting date:	-
Scientific or art field:	Thermal Energetics and Thermotechnics

Academic carieer	Year	Institution	Field
Academic title election:	2001	Faculty of Technical Sciences - Novi Sad	Thermal Energetics and Thermotechnics
PhD thesis	1986	Faculty of Mechanical Engineering - Beograd	Mechanical Engineering
Education Specialist Thesis	1983	Faculty of Mechanical Engineering - Beograd	Mechanical Engineering
Magister thesis	1982	Faculty of Mechanical Engineering - Beograd	Mechanical Engineering
Bachelor's thesis	1977	Faculty of Mechanical Engineering - Beograd	Mechanical Engineering

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	I079	Modern Energy Technologies	(M50) Energy Management, Master Academic Studies (ZC0) Clean Energy Technologies, Undergraduate Academic Studies
2.	M3302	Thermoenergy Plants	(M30) Energy and Process Engineering, Undergraduate Academic Studies
3.	M3405	Thermal Turbines 1	(M30) Energy and Process Engineering, Undergraduate Academic Studies
4.	M3409A	Modern Energy Technologies	(M30) Energy and Process Engineering, Undergraduate Academic Studies
5.	M3045	Life cycle optimisation of the energy and process equipment	(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
6.	M3495	Therma Energy Ekuipment	(M30) Energy and Process Engineering, Undergraduate Academic Studies
7.	I079	Modern Energy Technologies	(M50) Energy Management, Master Academic Studies (ZC0) Clean Energy Technologies, Undergraduate Academic Studies
8.	I916	Energy Management in Industry	(M50) Energy Management, Master Academic Studies
9.	I939	Merenje, nadzor i upravljanje	(M50) Energy Management, Master Academic Studies
10.	M3M04	Risk Management	(ZC0) Clean Energy Technologies, Master Academic Studies
11.	DM218	Contemporary Energy Technologies	(M00) Mechanical Engineering, Doctoral Academic Studies
12.	DM308	Optimization of Operation Life of Energy and Process Equipment	(M00) Mechanical Engineering, Doctoral Academic Studies
13.	DM315	Expert Systems	(M00) Mechanical Engineering, Doctoral Academic Studies
14.	DM316	Risk Technologies	(M00) Mechanical Engineering, Doctoral Academic Studies
15.	DM332	Energy Management in Buildings	(M00) Mechanical Engineering, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)	
1.	Jovanovic, A., Kussmaul, K. F., Lucia; A. C., Bonissone, P.: Expert Systems in Structural Safety Assessment: Proceedings of an International Course October 2-4, 1989, Stuttgart, FRG (Lecture Notes in Engineering), vol. 53, Springer-Verlag, 1989, p. 493, ISBN: 978-3-540-51823-5.
2.	Jovanovic, A., Renn, O., Schröter, R.: Social Unrest, OECD Reviews of Risk Management Policies, OECD Publishing, Paris, France, 2012, ISBN: 978-92-64-17345-3.
3.	Filipovic, N., Jovanovic, A., Petrovic, D., Obradovic, M., Jovanovic, S., Balos, D., Kojic, M.: Modelling of self-healing materials using discrete and continuum methods, Surface Coatings International, 2012, Vol. 95, No. 2, pp. 74-79, ISSN: 1754-0925.
4.	Jovanovic, A., Balos, D.: iNTeg-Risk project: concept and first results, Journal of Risk Research, 2012, DOI: 10.1080/13669877.2012.729516, ISSN: 1366-9877.
5.	Jovanovic, A. Renn, O.: Search for the 'European way' of taming the risks of new technologies: the EU research project iNTeg-Risk, Journal of Risk Research, 2012, DOI:10.1080/13669877.2012.743162., ISSN: 1366-9877.
6.	Jovanović, A. Pilić, V.: Dealing with risk-risk interdependencies and tradeoffs in relation to development and use of new technologies, Journal of Risk Research, 2012, DOI:10.1080/13669877.2012.729528., ISSN: 1366-9877.
7.	Jovanovic, A.: Overview of RIMAP project and its deliverables in the area of power plants, International Journal of Pressure Vessels and Piping, 2004, Vol. 81, No. 10-11, pp. 815-824, ISSN: 0308-0161.

	Representative refferences (minimum 5, not more than 10)
8.	Bareiß, J., Buck, P., Matschecko, B, Jovanovic, A., Balos, D., Perunicic, M.: RIMAP demonstration project. Risk-based life management of piping system in power plant Heilbronn, International Journal of Pressure Vessels and Piping, 2004, Vol. 81, No.10-11, pp. 807-813, ISSN: 0308-0161.
9.	Jovanovic, A., Maile, K., Wagemann, G., Le Mat-Hamata, N., Gampe, U., Andersson, P., Segle, S., Gelineau, O.: Assessment of cracks in power plant components by means of the HIDA knowledge-based system (KBS), International Journal of Pressure Vessels and Piping, 2001, Vol. 78, No. 11-12, pp. 1053-1069, ISSN: 0308-0161.
10.	Jovanovic, A.: Risk-based inspection and maintenance in power and process plants in Europe, Nuclear Engineering and Design, 2003, Vol. 226, No. 2, pp. 165-182, ISSN: 0029-5493.

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	59			
Total of SCI(SSCI) list papers :	18			
Current projects :	Domestic :	2	International :	5

Science, arts and professional qualifications

Name and last name:	Kakaš I. Damir
Academic title:	Full Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	01.09.1971
Scientific or art field:	Surface Engineering, Micro and Nano Technologies

Academic carieer	Year	Institution	Field
Academic title election:	1994	Faculty of Technical Sciences - Novi Sad	Surface Engineering, Micro and Nano Technologies
PhD thesis	1982	Faculty of Technical Sciences - Novi Sad	Casting and Thermal Processing Technology and Surface Engineering, Micro and Nano
Magister thesis	1976	Faculty of Technical Sciences - Novi Sad	Casting and Thermal Processing Technology and Surface Engineering, Micro and Nano
Bachelor's thesis	1971	Faculty of Technical Sciences - Novi Sad	Mechanical Engineering

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	P105	Heat Processing	(P00) Production Engineering, Undergraduate Academic Studies
2.	P110	Casting Technology	(P00) Production Engineering, Undergraduate Academic Studies
3.	P210	Surface Engineering	(P00) Production Engineering, Undergraduate Academic Studies
4.	P211	Devices and Plasma Procedures in Mechanical Engineering	(P00) Production Engineering, Undergraduate Academic Studies
5.	P2402	Designing of Thermal Processing Technologies	(P00) Production Engineering, Undergraduate Academic Studies
6.	P2403	Contemporary Casting Technologies	(P00) Production Engineering, Undergraduate Academic Studies
7.	P3405	Thermal Processing of Contemporary Tools	(P00) Production Engineering, Undergraduate Academic Studies
8.	M2061	Basics of Manufacturing Technologies 1	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
9.	P2503	Process Design in Casting Technology	(PM0) Production Engineering, Master Academic Studies
10.	P2507	Nanotechnologies	(M40) Technical Mechanics and Technical Design, Master Academic Studies
			(PM0) Production Engineering, Master Academic Studies
11.	PP2I11	Mechanical Engineering in Medicine and Bioengineering	(PM0) Production Engineering, Master Academic Studies
12.	SMI002	Modeling and simulation of thermo chemical and metallurgical processes	(PM0) Production Engineering, Master Academic Studies
13.	DP001	Design and Research Methods in Production Engineering	(M00) Mechanical Engineering, Doctoral Academic Studies
14.	DP004	Advanced Technologies in Casting and Heat Treatment	(M00) Mechanical Engineering, Doctoral Academic Studies
15.	DP007	Procedures of Plasma Depozition	(M00) Mechanical Engineering, Doctoral Academic Studies
16.	DP011	Nanotechnologies and Nanomaterials Forming	(M00) Mechanical Engineering, Doctoral Academic Studies
17.	DP014	Nano and Micro Layers Characterization	(M00) Mechanical Engineering, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)	
1.	Kovačević L., Terek P., Kakaš D., Miletić A.: A correlation to describe interfacial heat transfer coefficient during solidification of Al–Si alloy casting, Journal of Materials Processing Technology, 2012, Vol. 212, No 9, pp. 1856-1861, ISSN 0924-0136.
2.	Kakaš D., Škorić B., Rakita M.: Tribological behavior of duplex coating improved by ion implantation , Thin Solid Films,, 2004, Vol. 459, No 1-2, pp. 152-155, ISSN 0040-6090
3.	Kakaš D., Škorić B., Gredić T.: Influence of plasma nitriding on mechanical and Tribological Properties Of Steel with subsequent PVD Surface Treatments., Thin Solid Films,, 1998, Vol. 317, No 1-2, pp. 486-489, ISSN 0040-6090
4.	Zlatanović M., Kakaš D., Mazibrada LJ., Kunosić A., Münz W.: Influence of plasma nitriding on wear performance of TiN coating , Surface and Coating Technology, 1994, Vol. 64, No 3, pp. 173-181
5.	Kakaš D., Škorić B., Bibić N., Rakita M.: Microstructural studies of TiN coatings prepared by PVD and IBAD , Surface Science, 2004, Vol. 566, No 1-3, pp. 40-44, ISSN 0039-6028

	Representative refferences (minimum 5, not more than 10)
6.	Škorić B., Kakaš D., Rakita M., Bibić N., Peruškob D.: Structure, hardness and adhesion of TiN coatings deposited by PVD and IBAD on nitrided steels, Vacuun,, 2004, Vol. 76, No 2-3, pp. 169-172, ISSN 0042-207X
7.	Kakaš D., Terek P., Kovačević L., Miletić A., Škorić B.: Influence of interfacial layer thickness and substrate roughness on adhesion of TiN coatings deposited at low temperatures by IBAD, SURF REV LETT, 2011, Vol. 18, No 3-4, pp. 83-90, ISSN 0218-625X.
8.	Škorić B., Kakaš D., Ješić D., Gostimirović M., Miletić A.: Characterization of duplex hard coatings with additional ion implantation, Metalurgija, 2012, Vol. 51, No 1, pp. 87-90, ISSN 0543-5846.
9.	Škorić B., Kakaš D., Miletić A., Arsenović M., Gostimirović M.: Tribochemical Characterization of Duplex Hard Coatings with Additional Ion Implantation, Oxidation Communication, 2011, Vol. 34, No 2, pp. 326-338, ISSN 0209-4541.
10.	Škorić B., Kakaš D., Gostimirović M., Miletić A.: Nanoscale modification of hard coatings with ion implantation, Materijali in tehnologije, 2011, Vol. 45, No 5, pp. 447-450, ISSN 1580-2949.

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	31			
Total of SCI(SSCI) list papers :	12			
Current projects :	Domestic :	2	International :	1

Study Programme Accreditation - PhD Studies

Science, arts and professional qualifications

Name and last name:	Katić A. Vladimir
Academic title:	Full Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	01.10.1978
Scientific or art field:	Power Electronics, Machines and Facilities

Academic carieer	Year	Institution	Field
Academic title election:	2002	Faculty of Technical Sciences - Novi Sad	Power Electronics, Machines and Facilities
PhD thesis	1991	School of Electrical Engineering - Beograd	Electrical and Computer Engineering
Magister thesis	1981	School of Electrical Engineering - Beograd	Electrical and Computer Engineering
Bachelor's thesis	1978	Faculty of Technical Sciences - Novi Sad	Electrical and Computer Engineering

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	EE305	Power Electronics 1	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
2.	EE308	Power Electronics 2	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
3.	Z107	Electrical Engineering, Environment and Protection	(Z01) Safety at Work, Undergraduate Academic Studies (Z20) Environmental Engineering, Undergraduate Academic Studies
4.	EE0406	Electric Power Quality	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
5.	EE431	Renewable Sources and Small Power Plants	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
6.	EZ300	Clean Electrical Energy Sources	(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
7.	EZ400	Clean Energy Sources Design	(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
8.	DE209S	Energy Converters in Renewable Energy Sources	(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
9.	DE413S	Integration of Distributed Energy Resources	(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
10.	DE505S	Power Quality in Distribution Networks	(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
11.	DE506S	Renewable Electrical Energy Sources	(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
12.	DE509S	Effects of Power Converters on Network and Environment	(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
13.	EE406	Electric Power Quality	(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies
14.	EE509	Market and Deregulation in Electric Power Industry	(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies
15.	S0I51Ž	Electrical Substation and Electric Traction	(S00) Traffic and Transport Engineering, Master Academic Studies
16.	EE544	Renewable energy sources	(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies
17.	EE564	Distributed Energy Resources	(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies
18.	ZCM02	Clean technologies for electrical vehicles	(ZC0) Clean Energy Technologies, Master Academic Studies
19.	ZCM08	Renewable and Distributed Electrical Energy Sources	(ZC0) Clean Energy Technologies, Master Academic Studies
20.	DE108	FACTS Devices and Electric Power Quality	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies
21.	DE113	Application of Power Electronics in Power Systems	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies
22.	DE209	Energy Converters in Renewable Power Sources	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies

	ID	Course name	Study programme name, study type
		List of courses being held by the teacher in the accredited study programmes	
23.	DE413	Integration of Distributed Energy Resources	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies
24.	DE505	Power Quality in Distribution Networks	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies
25.	DE506	Renewable Electrical Energy Sources	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies
26.	DE509	Effects of Power Converters on Network and Environment	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies
27.	SID04	Current State in the Field	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies (E20) Computing and Control Engineering, Doctoral Academic Studies (F00) Graphic Engineering and Design, Doctoral Academic Studies (F20) Engineering Animation, Doctoral Academic Studies (G00) Civil Engineering, Doctoral Academic Studies (GI0) Geodesy and Geomatics, Doctoral Academic Studies (H00) Mechatronics, Doctoral Academic Studies (I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies (M00) Mechanical Engineering, Doctoral Academic Studies (OM1) Mathematics in Engineering, Doctoral Academic Studies (S00) Traffic Engineering, Doctoral Academic Studies (Z00) Environmental Engineering, Doctoral Academic Studies
28.	MSID04	Present State in the Field	(M40) Technical Mechanics, Doctoral Academic Studies
29.	SID04	Present State in the Field	(A00) Architecture, Doctoral Academic Studies (AS0) Scenic Design, Doctoral Academic Studies (Z01) Safety at Work, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1. Vladimir Katić: "Kvalitet električne energije – viši harmonici", Univerzitet u Novom Sadu - Fakultet tehničkih nauka, Edicija Tehničke nauke - Monografije, Br. 6, Novi Sad, 2002., ISBN 86-80249-57-2.

2. Vladimir Katić: "Energetska elektronika - Zbirka rešenih zadataka", Univerzitet u Novom Sadu-Fakultet tehničkih nauka, Edicija Univerzitetski udžbenik, Broj 66, Novi Sad, 1998, tiraž 500 primeraka, strana 430, Pomoćni udžbenik, ISBN 86-499-0017-8.

3. Vladimir Katić, Darko Marčetić, Dušan Graovac: "Energetska elektronika – Praktikum laboratorijskih vežbi", Univerzitet u Novom Sadu-Fakultet tehničkih nauka, Edicija Univerzitetski udžbenik, Broj 124, Novi Sad, 2000, tiraž 300 primeraka, strana 85, Pomoćni udžbenik, ISBN 86-499-0081-X.

4. Vladimir Katić, Vlado Porobić, Darko Marčetić: "Primena mikroprocesora u energetici – Praktikum laboratorijskih vežbi", Univerzitet u Novom Sadu-Fakultet tehničkih nauka, Edicija: Tehničke nauke - Udžbenici, Broj 149, Novi Sad, Dec. 2006, tiraž 300 primeraka, strana 122, Pomoćni udžbenik, ISBN 86-7892-013-0.

5. Vladimir Katić: „Upravljanje energetskim pretvaračima", Fakultet tehničkih nauka – WUS, Novi Sad, 2006, tiraž 20 primeraka, str.175, Skripta.

6. Dušan Graovac, Vladimir Katić, Alfred Rufer: "Power Quality Problems Compensation with Universal Power Quality Conditioning System", IEEE Transaction on Power Delivery, USA, ISSN 0885-8977, Vol.22, No.2, April 2007, pp.968-976.

7. Vladimir Katić, Jovan Knežević, Dušan Graovac: "Application-Oriented Comparison of the Methods for AC/DC Converter Harmonics Analysis", IEEE Transaction on Industrial Electronics, USA, ISSN 0278-0046, Vol.50, No.6, December 2003, pp.1100-1108.

8. Vladimir Katić, Dušan Graovac: "A Method for PWM Rectifier Line Side Filter Optimization in Transient and Steady States", IEEE Transaction on Power Electronics, USA, ISSN 0885-8993, Vol.17, No.3, May 2002, pp.342-352.

9. Dušan Graovac, Vladimir Katić: "On-Line Control Of Current Source Type Active Rectifier Using Transfer Function Approach", IEEE Transaction on Industrial Electronics, USA, ISSN 0278-0046, Vol.48, No.3, June 2001, pp.526-535.

10. Vladimir Katić: "Modern Power Electronics Technologies for Wind Power Plants", Invited Paper, Electronics/Elektronika, Banja Luka (BIH-R.Srpska), Vol.10, No.2, Dec.2006, YU ISSN 1450-5843, pp.3-9.

Summary data for teacher's scientific or art and professional activity:

Quotation total :	122
Total of SCI(SSCI) list papers :	19

Science, arts and professional qualifications

Name and last name:	Klinar J. Ivan
Academic title:	Full Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	01.02.1972
Scientific or art field:	Internal Combustion Engines

Academic carieer	Year	Institution	Field
Academic title election:	1999	Faculty of Technical Sciences - Novi Sad	Internal Combustion Engines
PhD thesis	1988	Faculty of Technical Sciences - Novi Sad	Internal Combustion Engines
Magister thesis	1978	Faculty of Agriculture - Novi Sad	Motor Vehicles
Bachelor's thesis	1971	Faculty of Technical Sciences - Novi Sad	Internal Combustion Engines

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	M213	Machine Usage	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
2.	M2418	Mechatronics of Motors and Road Vehicles	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
3.	M2523	IC Engine Equipment	(S00) Traffic and Transport Engineering, Undergraduate Academic Studies
4.	S0I241	Internal Combustion Engines	(S00) Traffic and Transport Engineering, Undergraduate Academic Studies
5.	H2403	Equipment and IC Engines Mechatronics	(H00) Mechatronics, Master Academic Studies
6.	M2403	IC Engines	(M40) Technical Mechanics and Technical Design, Master Academic Studies
7.	M2547	Equipment of IC engines and motor vehicles	(M22) Mechanization and Construction Engineering, Master Academic Studies
8.	M2548	Diagnostics and maintenance of IC engines and vehicles	(M22) Mechanization and Construction Engineering, Master Academic Studies
9.	LIM14	Monitoring and Diagnostics of Transportation Means	(LIM) Logistic Engineering and Management, Master Academic Studies
10.	DM420	Selected Chapters – Internal Combustion (IC) Engines	(M00) Mechanical Engineering, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)	
1.	Dorić J., Klinar I.: The realisation and analysis of a new thermodynamic cycle for internal combustion engine, Thermal Science, 2011, Vol. 15, No 4, ISSN 0354-9836.
2.	Dorić J., Klinar I.: Efficiency characteristics of a new Quasi-Constant Volume Combustion spark ignition engine, Thermal Science, 2012, doi:10.2298/TSCI120530158D, ISSN 0354-9836
3.	Dorić J., Klinar I.: Efficiency of a new IC engine concept with variable piston motion, Thermal Science, 2012, doi:10.2298/TSCI110923020D, ISSN 0354-9836.
4.	Klinar I., Stefanović A., Rajković M.: Possibilities of piston-cylinder diagnostics of fits of engines, Tribology in industry, vol.21, No.1, p 12-17, 1999.
5.	Klinar I., Dorić J.: One method vor determining the limit values of diagnostic parameters of I.C. engine piston-cylinder assemblies, 6. Simpozijum o konstruisanju, oblikovanju i dizajnu – KOD, Palić: Fakultet tehničkih nauka, 29-30 Septembar, 2010, pp. 305-310, ISBN 978-86-7892-278-7
6.	Klinar I., Ličen H., Stefanović A., Bošnjaković S.:Influence of special additives for fuel on efektiveness of engine, 38. International Petroleum Conference, Proceedings, A7-1-13, Bratislava, 1997.
7.	Dorić J., Klinar I., Nikolić N., Stojić B.: Use of natural gas in agricultural machinery, 39. 39th INTERNATIONAL SYMPOSIUM: ACTUAL TASKS ON AGRICULTURAL ENGINEERING, Opatija: Sveučilište u Zagrebu Agronomski Fakultet, Hrvatska, 22-25 Februar, 2011, pp. 149-160, ISBN 1333-2651, UDK: 631
8.	Dorić J., Klinar I., Dorić M.: Constant Volume Combustion Cyle for IC Engines, FME Transactions, 2011, Vol. 29, No 3, pp. 97-104, ISSN 1451-2092.
9.	Dorić J., Nikolić N., Klinar I.: Unconventional variable displacement internal combustion engine, 2. International Conference on Innovative Technologies IN-TECH, Bratislava: Faculty of Engineering University of Rijeka, 1-3 Septembar, 2011, pp. 35-39, ISBN 978-953-6326-77-8.
10.	Dorić J., Klinar I., Nikolić N.: Realisation of dwell motion mechanism with non-circular gears, 7. Simpozijum o konstruisanju, oblikovanju i dizajnu – KOD, Balatonfured: Faculty of technical sciences, 24-26 Maj, 2012, pp. 345-348, ISBN 978-86-7892-399-9.

Summary data for teacher's scientific or art and professional activity:	
Quotation total :	0
Total of SCI(SSCI) list papers :	3

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	Study Programme Accreditation - PhD Studies	
	DOCTORAL ACADEMIC STUDIES	Mechanical Engineering

Current projects :	Domestic :	0	International :	0

Science, arts and professional qualifications

Name and last name:	Kopač I. Janez
Academic title:	Guest Professor
Name of the institution where the teacher works full time and starting date:	-
Scientific or art field:	Processes for Material Removal Processing

Academic carieer	Year	Institution	Field
Academic title election:	2010	Faculty of Technical Sciences - Novi Sad	Processes for Material Removal Processing
PhD thesis	1986	University of Ljubljana - Ljubljana	Processes for Material Removal Processing
Magister thesis	1980	University of Ljubljana - Ljubljana	Processes for Material Removal Processing
Bachelor's thesis	1973	University of Ljubljana - Ljubljana	Processes for Material Removal Processing

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	DP002	State and Trend in Forming by Material Removal	(M00) Mechanical Engineering, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1.	KRAMAR, Davorin, KRAJNIK, Peter, KOPAČ, Janez. Capability of high pressure cooling in the turning of surface hardened piston rods. J. mater. process. technol.. [Print ed.], Jan. 2010, vol. 210, iss. 2, str. 212-218, doi: 10.1016/j.jmatprotec.2009.09.002.
2.	DRAŽUMERIČ, Radovan, KRAJNIK, Peter, VRABIČ, Rok, MEYER, Bernd, BUTALA, Peter, KOSEL, Franc, KOPAČ, Janez. Modelling of grinding gap macro geometry and workpiece kinematics in throughfeed centreless grinding. J. mater. process. technol.. [Print ed.], Jan. 2010, vol. 210, iss. 1, str. 104-109, ilustr.
3.	COURBON, Cedric, KRAMAR, Davorin, KRAJNIK, Peter, PUŠAVEC, Franci, RECH, Joel, KOPAČ, Janez. Investigation of machining performance in high-pressure jet assisted turning of Inconel 718 : an experimental study. Int. j. mach. tools manuf.. [Print ed.], Nov. 2009, vol. 49, iss. 14, str. 1114-1125, doi: doi:10.1016/j.ijmachtools.2009.07.010.
4.	KOROŠEC, Marjan, KOPAČ, Janez. Improved surface roughness as a result of free-form surface machining using self-organized neural network. J. mater. process. technol.. [Print ed.], 2008, letn. 204, št. 1/3, str. 94-102. http://dx.doi.org/10.1016/j.matprotec.2007.10.080, doi: 10.1016/j.matprotec.2007.10.080.
5.	KRAJNIK, Peter, DRAŽUMERIČ, Radovan, MEYER, Bernd, KOPAČ, Janez, ZEPPENFELD, C. Simulation of workpiece forming and centre displacement in plunge centreless grinding. Int. j. mach. tools manuf.. [Print ed.], 2008, letn. 48, št. 7/8, str. 824-831. http://dx.doi.org/10.1016/j.ijmachtools.2007.12.008.
6.	KOPAČ, Janez, KRAJNIK, Peter. Robust design of flank milling parameters based on grey-Taguchi method. J. mater. process. technol.. [Print ed.], 2007, letn. 191, št. 1/3, str. 400-403.http://dx.doi.org/10.1016/j.jmatprotec.2007.03.051.
7.	JURKOVIČ, Jože, KOROŠEC, Marjan, KOPAČ, Janez. New approach in tool wear measuring technique using CCD vision system. Int. j. mach. tools manuf.. [Print ed.], 2005, letn. 45, št. 9, str. 1023-1030. http://dx.doi.org/10.1016/j.ijmachtools.2004.11.030.
8.	KOROŠEC, Marjan, BALIČ, Jože, KOPAČ, Janez. Neural network based manufacturability evaluation of free form machining. Int. j. mach. tools manuf.. [Print ed.], January 2005, vol. 45, iss. 1, str. 13-20. http://dx.doi.org/10.1016/j.ijmachtools.2004.06.022.
9.	PUŠAVEC, Franci, KRAJNIK, Peter, KOPAČ, Janez. Transitioning to sustainable production - Part I: application on machining technologies. J. clean. prod.. [Print ed.], Jan. 2010, vol. 18, iss. 2, str. 174-184, ilustr., doi: doi:10.1016/j.jclepro.2009.08.010.
10.	SOKOVIĆ, Mirko, KOPAČ, Janez. RE (reverse engineering) as necessary phase by rapid product development. J. mater. process. technol.. [Print ed.], 2006, letn. 175, št. 1/3, str. 398-403.http://dx.doi.org/10.1016/j.jmatprotec.2005.04.047.

Summary data for teacher's scientific or art and professional activity:

Quotation total :	900			
Total of SCI(SSCI) list papers :	110			
Current projects :		Domestic :	1	International :	3

Science, arts and professional qualifications

Name and last name:	Kostić Z. Marko
Academic title:	Associate Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	15.10.1999
Scientific or art field:	Mathematics

Academic carieer	Year	Institution	Field
Academic title election:	2010	Faculty of Technical Sciences - Novi Sad	Mathematics
PhD thesis	2004	Faculty of Sciences - Novi Sad	Mathematical Sciences
Magister thesis	2001	Faculty of Sciences - Novi Sad	Mathematical Sciences
Bachelor's thesis	1999	Faculty of Sciences - Novi Sad	Mathematical Sciences

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	E121	Mathematical Analysis 2	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
2.	E135B	Mathematical Analysis 2	(GI0) Geodesy and Geomatics, Undergraduate Academic Studies
3.	E212	Mathematical Analysis 1	(E20) Computing and Control Engineering, Undergraduate Academic Studies
			(SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies
			(SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies
4.	EOS07	Mathematics 2	(E01) Power Engineering - Renewble Sources of Electrical Energy, Undergraduate Professional Studies
5.	F101	Mathematics	(F00) Graphic Engineering and Design, Undergraduate Academic Studies
6.	GI107	Mathematical Analysis 1	(GI0) Geodesy and Geomatics, Undergraduate Academic Studies
7.	M106	Mathematics 2	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
			(M30) Energy and Process Engineering, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
			(P00) Production Engineering, Undergraduate Academic Studies
8.	M4202	Applied Mathematical Analysis	(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
9.	ISIT06	Matematika 2	(SII) Software and Information Technologies (Inđija), Undergraduate Professional Studies
10.	0M501	Functional Analysis	(OM1) Mathematics in Engineering, Master Academic Studies
11.	0ML501	Functional Analysis	(OM1) Mathematics in Engineering, Master Academic Studies
12.	DZ01MS	Selected Chapters in Mathematics	(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
			(I12) Industrial Engineering, Specialised Academic Studies
			(I22) Engineering Management, Specialised Academic Studies
			(Z00) Environmental Engineering, Specialised Academic Studies
13.	Z506	20BAdvanced Course in Mathematics 1	(ZP1) Disaster Risk Management and Fire Safety, Master Academic Studies
			(Z20) Environmental Engineering, Master Academic Studies
14.	Z506	Viši kurs matematike 1(uneti naziv na engleskom)	(Z20) Environmental Engineering, Master Academic Studies
15.	D0M01	Functional Analysis 1	(OM1) Mathematics in Engineering, Doctoral Academic Studies

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
16.	D0M19	Functional Analysis 2	(OM1) Mathematics in Engineering, Doctoral Academic Studies
17.	DZ01M	Selected Chapters in Mathematics	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies (E20) Computing and Control Engineering, Doctoral Academic Studies (F00) Graphic Engineering and Design, Doctoral Academic Studies (F20) Engineering Animation, Doctoral Academic Studies (G00) Civil Engineering, Doctoral Academic Studies (GI0) Geodesy and Geomatics, Doctoral Academic Studies (H00) Mechatronics, Doctoral Academic Studies (I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies (M00) Mechanical Engineering, Doctoral Academic Studies (M40) Technical Mechanics, Doctoral Academic Studies (OM1) Mathematics in Engineering, Doctoral Academic Studies (S00) Traffic Engineering, Doctoral Academic Studies (Z00) Environmental Engineering, Doctoral Academic Studies (Z01) Safety at Work, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)	
1.	Kostić, Marko, Distribution cosine functions. Taiwanese J. Math. 10 (2006), no. 3, 739--775.
2.	Kostić Marko, On analytic integrated semigroups. Novi Sad J. Math. 35 (2005), no. 1, 127--135.
3.	Kostić Marko, Convoluted C-cosine functions and convoluted C-semigroups. Bull. Cl. Sci. Math. Nat. Sci. Math. No. 28 (2003), 75--92.
4.	Kostić Marko, On a class of quasi-distribution semigroups, Novi Sad J. Math 36 (2), 137-152
5.	M. Kostić, P. J. Miana, Relations between distribution cosine functions and almost-distribution cosine functions, Taiwanese Journal of Mathematics 11 (2007), 531--543.
6.	M. Kostić, S. Pilipović, Global convoluted semigroups, accepted in Math. Nachr.
7.	M. Kostić, S. Pilipović: Convoluted C-cosine functions and semigroups. Relations with ultradistribution and hyperfunction sines, accepted in J. Math. Anal. Appl.
8.	M. Kostić: Complex powers of operators, accepted in Publications De"l Institute Mathematique
9.	M. Kostić: C-Distribution semigroups, Studia Math. 185 (2008), 201--217.
10.	M. Kostić: Convoluted operator families and abstract Cauchy problems, accepted in Kragujevac Journal of Mathematics

Summary data for teacher's scientific or art and professional activity:			
Quotation total :	32		
Total of SCI(SSCI) list papers :	15		
Current projects :	Domestic :	1	International :	0

Science, arts and professional qualifications

Name and last name:	Kovač P. Pavel
Academic title:	Full Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	01.12.1975
Scientific or art field:	Processes for Material Removal Processing

Academic carieer	Year	Institution	Field
Academic title election:	1998	Faculty of Technical Sciences - Novi Sad	Processes for Material Removal Processing
PhD thesis	1987	Faculty of Technical Sciences - Novi Sad	Processes for Material Removal Processing
Magister thesis	1980	Faculty of Technical Sciences - Novi Sad	Processes for Material Removal Processing
Bachelor's thesis	1975	Faculty of Technical Sciences - Novi Sad	Machine Tools, Flexible Technological Systems and Automatization Processes Design

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	P1406	Theory of Machining Processes	(P00) Production Engineering, Undergraduate Academic Studies
2.	P1507	Inovational Technologies	(P00) Production Engineering, Undergraduate Academic Studies
3.	P208	Technology for Cutting Processing	(P00) Production Engineering, Undergraduate Academic Studies
4.	P2617	Planning Methods and Experiment Processing	(P00) Production Engineering, Undergraduate Academic Studies
5.	P305	Nonconventional Procedures in Processing	(P00) Production Engineering, Undergraduate Academic Studies
6.	P4410	Design and Product Functionality	(P00) Production Engineering, Undergraduate Academic Studies
7.	ZR320	Experimental Analysys of Safety and Health on Workplace	(Z01) Safety at Work, Undergraduate Academic Studies
8.	P316A	Technology for Microcutting Processes	(P00) Production Engineering, Undergraduate Academic Studies
9.	P1501	Ecological Technologies and Systems	(M40) Technical Mechanics and Technical Design, Master Academic Studies
			(PM0) Production Engineering, Master Academic Studies
10.	P1505	Modelling and Simulation in Processing	(PM0) Production Engineering, Master Academic Studies
11.	P1509	Highly Productive Processing	(PM0) Production Engineering, Master Academic Studies
12.	P3502	Mold and die machining technology	(PM0) Production Engineering, Master Academic Studies
13.	PIP16	Plastics and environmental protection	(PM0) Production Engineering, Master Academic Studies
14.	PP101	Inteligent Forming Processes	(PM0) Production Engineering, Master Academic Studies
15.	SDOM30	Probability, Statistics and Theory of Engineering Experiment	(Z00) Environmental Engineering, Specialised Academic Studies
16.	DOM30	Probability, Statistics and Theory of Engineering Experiment	(M00) Mechanical Engineering, Doctoral Academic Studies
			(M40) Technical Mechanics, Doctoral Academic Studies
			(Z00) Environmental Engineering, Doctoral Academic Studies
			(Z01) Safety at Work, Doctoral Academic Studies
17.	DP001	Design and Research Methods in Production Engineering	(M00) Mechanical Engineering, Doctoral Academic Studies
18.	DP002	State and Trend in Forming by Material Removal	(M00) Mechanical Engineering, Doctoral Academic Studies
19.	DP009	Artificial Intelligence Application in Forming by Material Removal	(M00) Mechanical Engineering, Doctoral Academic Studies
20.	DP013	Ecological Engineering Aspects	(M00) Mechanical Engineering, Doctoral Academic Studies
21.	DP020	State and Tendencies in Development of Unconventional Forming Processes	(M00) Mechanical Engineering, Doctoral Academic Studies
22.	DP021	Selected Chapters in Micro and Nano Forming by Material Removal	(M00) Mechanical Engineering, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1.	Kovač P., Milikić D.:Rezanje metala, Univerzitet u Novom Sadu, 1998

	Representative refferences (minimum 5, not more than 10)
2.	Kovač P., Milikić D.,Gostimirović M.,Sekulić M., Savkovic.,B.: Zbirka zadataka iz tehnologije obrade rezanjem , Fakultet tehničkih nauka, Novi Sad, 2011.
3.	Kovač Pavel, Metode planiranja i obrade eksperimenata, FTN Novi Sad, 2011
4.	Kovač P. : Podloge za upravljanje procesom čeonog glodanja, FTN, IPM, Novi Sad, 1988
5.	Kovač P.: Modeliranje procesa obrade-faktorni planovi eksperimenta, Fakultet tehničkih nauka, Novi Sad, 2006
6.	Kovač P.: Teorija obradnih procesa -praktikum za vežbe, Fakultet tehničkih nauka , Novi Sad, 2007
7.	Kovač P., Rodić D., Pucovsky V., Savković B., Gostimirović M.: APPLICATION OF FUZZY LOGIC AND REGRESSION ANALYSIS FOR MODELING SURFACE ROUGHNESS IN FACE MILLIING, Journal of Intelligent Manufacturing, 2012, ISSN 0956-5515, UDK: DOI 10.1007/s10845-012-0623-z
8.	Šiđanin L., Kovač P.: Fracture mechanisms in chip formation processes, Materials Science and Technology, Vol. 13, 1997, pp. 439-444
9.	Pavel Kovač, Zuzana Palkova, Proizvodno mašinstvo i obnovljivi izvori energije, FTN Novi Sad 2011
10.	Kovač P., Šiđanin L.: Investigation of chip formation during milling, Int. J. Production Economic, 51, 1997, pp. 149-153

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	7			
Total of SCI(SSCI) list papers :	15			
Current projects :	Domestic :	1	International :	7

Science, arts and professional qualifications

Name and last name:	Kovačević M. Ilija	
Academic title:	Full Professor	
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad	
	01.09.1972	
Scientific or art field:	Mathematics	

Academic carieer	Year	Institution	Field
Academic title election:	1990	Faculty of Technical Sciences - Novi Sad	Mathematics
PhD thesis	1979	Faculty of Mathematics - Beograd	Mathematical Sciences
Magister thesis	1975	Faculty of Mathematics - Beograd	Mathematical Sciences
Bachelor's thesis	1971	Faculty of Sciences - Novi Sad	Mathematical Sciences

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	E212	Mathematical Analysis 1	(E20) Computing and Control Engineering, Undergraduate Academic Studies
			(SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies
			(SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies
2.	EE204	Selected Chapters in Mathematics	(MR0) Measurement and Control Engineering, Undergraduate Academic Studies
			(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
3.	E102	Mathematical Analysis 1	(ES0) Power Software Engineering, Undergraduate Academic Studies
			(MR0) Measurement and Control Engineering, Undergraduate Academic Studies
4.	E102A	Mathematical Analysis 1	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
5.	IM1423	Financial Mathematics	(I20) Engineering Management, Undergraduate Academic Studies
6.	0M501	Functional Analysis	(OM1) Mathematics in Engineering, Master Academic Studies
7.	0ML501	Functional Analysis	(OM1) Mathematics in Engineering, Master Academic Studies
8.	DZ01MS	Selected Chapters in Mathematics	(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
			(I12) Industrial Engineering, Specialised Academic Studies
			(I22) Engineering Management, Specialised Academic Studies
			(Z00) Environmental Engineering, Specialised Academic Studies
9.	I004/S	Statistical Quantitative Methods	(I20) Engineering Management, Specialised Professional Studies
			(IB0) Engineering Management - MBA, Specialised Professional Studies
10.	GS012	Selected Chapters in Mathematics	(G10) Energy Efficiency in Buildings, Specialised Academic Studies
11.	MPK001	Statistical and Numerical Methods	(MPK) Inženjerstvo tretmana i zaštite voda - TEMPUS(uneti naziv na engledskom), Master Academic Studies
12.	SDOM30	Probability, Statistics and Theory of Engineering Experiment	(Z00) Environmental Engineering, Specialised Academic Studies
13.	D0M01	Functional Analysis 1	(OM1) Mathematics in Engineering, Doctoral Academic Studies
14.	D0M19	Functional Analysis 2	(OM1) Mathematics in Engineering, Doctoral Academic Studies

	ID	Course name	Study programme name, study type
15.	DOM30	Probability, Statistics and Theory of Engineering Experiment	(M00) Mechanical Engineering, Doctoral Academic Studies
			(M40) Technical Mechanics, Doctoral Academic Studies
			(Z00) Environmental Engineering, Doctoral Academic Studies
			(Z01) Safety at Work, Doctoral Academic Studies
16.	DZ01M	Selected Chapters in Mathematics	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies
			(E20) Computing and Control Engineering, Doctoral Academic Studies
			(F00) Graphic Engineering and Design, Doctoral Academic Studies
			(F20) Engineering Animation, Doctoral Academic Studies
			(G00) Civil Engineering, Doctoral Academic Studies
			(GI0) Geodesy and Geomatics, Doctoral Academic Studies
			(H00) Mechatronics, Doctoral Academic Studies
			(I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
			(M00) Mechanical Engineering, Doctoral Academic Studies
			(M40) Technical Mechanics, Doctoral Academic Studies
			(OM1) Mathematics in Engineering, Doctoral Academic Studies
			(S00) Traffic Engineering, Doctoral Academic Studies
			(Z00) Environmental Engineering, Doctoral Academic Studies
			(Z01) Safety at Work, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1. I.Kovačević, Some properties of Mn subsets and almost closed mappings, Indian J.pure appl. Math., 27(9), 1996., 875-881.
2. I.Kovačević, On almost closed mapping, paracompactness and partial equivalence relatuions, Indian Journal of Pure and Applied mathematics,25(9), 1994., 949-954.
3. I.Kovačević, On alfa-Hausdorff subsets, almost closed mappings and almost upper semicontinuous decomposition, Indian Jurnal of Pure and Applied mathematics 20 (4) 1989., 334-340.
4. Kiurski J., Oros I., Ralević N., Kovačević I., Adamović (Majkić) S., Krstić J., Čomić L.: Cluster and principal component analysis in the assessment of fountain solution quality, Carpathian Journal of Earth and Environmental Sciences, 2013, Vol. 8, No 1, pp. 19-23, ISSN 1842-4090
5. N. Adžić, I. Kovačević, V. Marić, V. Ungar, Matematička analiza 2, FTN (Edicija tehničke nauke-udžbenici), Novi Sad, 1996., 1-299.
6. I. Kovačević, N. Ralević, Funkcionalna analiza,FTN (Edicija tehničke nauke-udžbenici), Novi Sad, (Ponovljeno i dopunjeno izdanje)2004., 1-203.
7. I. Kovačević, N. Ralević, B.Carić,V.Marić,M.Novković,S.Medić,Matematička analiza 1- uvodni pojmovi i granični procesi ,(Ponovljeno i dopunjeno izdanje), FTN (Edicija tehničke nauke-udžbenici) Novi Sad, 2012,1-155.
8. I.Kovačević, V.Marić, M.Novković, B.Carić, N.Ralević,S.Medić, Matematička analiza 1 - diferencijalni i integralni račun, obične diferencijalne jednačine (Ponovljeno i dopunjeno izdanje),FTN (Edicija tehničke nauke-udžbenici), Novi Sad,2012., 1-280.
9. I. Kovačević, Algebra, Naučna knjiga, Beograd, 1990., 1-116.
10. M.Novković,B.Carić,I.Kovačević, Zbirka rešenih zadataka iz verovatnoće i statistike, FTN (Edicija tehničke nauke-udžbenici), Novi Sad, (Ponovljeno i dopunjeno izdanje) 2012., 1-169.

Summary data for teacher's scientific or art and professional activity:

Quotation total :	28			
Total of SCI(SSCI) list papers :	7			
Current projects :	Domestic :	3	International :	2

Science, arts and professional qualifications

Name and last name:		Kovačić N. Ivana	
Academic title:		Associate Professor	
Name of the institution where the teacher works full time and starting date:		Faculty of Technical Sciences - Novi Sad	
		21.05.1998	
Scientific or art field:		Mechanics	

Academic carieer	Year	Institution	Field
Academic title election:	2009	Faculty of Technical Sciences - Novi Sad	Mechanics
PhD thesis	2002	Faculty of Technical Sciences - Novi Sad	Mechanics
Magister thesis	1999	Faculty of Technical Sciences - Novi Sad	Mechanics
Bachelor's thesis	1995	Faculty of Technical Sciences - Novi Sad	Mechanics

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	F107	Technical Mechanics	(F00) Graphic Engineering and Design, Undergraduate Academic Studies
2.	GG14	Mechanics 2	(G00) Civil Engineering, Undergraduate Academic Studies
3.	M103	Mechanics 1	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
			(M30) Energy and Process Engineering, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
			(P00) Production Engineering, Undergraduate Academic Studies
4.	M107	Mechanics 2	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
			(M30) Energy and Process Engineering, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
			(P00) Production Engineering, Undergraduate Academic Studies
5.	M201	Mechanics 3	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
			(M30) Energy and Process Engineering, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
			(P00) Production Engineering, Undergraduate Academic Studies
6.	M44071	Noise, Vibration and Design	(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
7.	DM401	Selected chapters in Analytical Mechanics	(M00) Mechanical Engineering, Doctoral Academic Studies
			(M40) Technical Mechanics, Doctoral Academic Studies
			(OM1) Mathematics in Engineering, Doctoral Academic Studies
8.	DM408	Nonlinerar Oscillations	(M00) Mechanical Engineering, Doctoral Academic Studies
			(M40) Technical Mechanics, Doctoral Academic Studies
9.	DZ003	Selected Chapters in Mechanics	(M00) Mechanical Engineering, Doctoral Academic Studies
10.	FDS143	Selected Chapters in Technical Mechanics	(F00) Graphic Engineering and Design, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)	
1.	Metod polja u neholonomnoj mehanici i teoriji nelinearnih oscilacija, Fakultet tehničkih nauka, Novi Sad, 2002
2.	Samopobudne oscilacije u procesu rezanja, Fakultet tehničkih nauka, Novi Sad, 1999
3.	Zbirka rešenih zadataka iz Statike I, Edicija„Tehničke knjige-udžbenici" 127 , Fakultet tehničkih nauka, Novi Sad, 2006.
4.	Zbirka rešenih zadataka iz Statike II, Edicija„Tehničke knjige-udžbenici" 128 , Fakultet tehničkih nauka, Novi Sad, 2006.

	Representative refferences (minimum 5, not more than 10)
5.	Cveticanin, L., Kovacic, I., Parametrically excited vibrations of the oscillator with strong cubic negative noin-linearity, Journal of Sound and Vibration, 2007, Vol. 304, No 1-2, pp. 201-212.
6.	Kovacic I., Adiabatic invariants of some time-dependent oscillators, Journal of Physics A: Mathematical and General, 2007, Vol. 40, No 3, pp. 455-470.
7.	Cveticanin, L., Kovacic, I., On the dynamics of bodies with continual mass variation, Journal of Applied Mechanics-TRANSACTIONS OF THE ASME, 2007, Vol. 74, pp. 810-815.
8.	Kovacic I., Adiabatic invariants of oscilltors with one degree of freedom, Journal of Sound and Vibration, 2007, Vol. 300, No 3-5, pp. 695-708.
9.	Kovacic I., Conservation laws of two coupled non-linear oscillators, International Journal of Non-Linear Mechanics, 2006, Vol. 41, No. 5, pp 751-760.
10.	Kovacic, I., Analysis of a weakly non-linear autonomous oscillator by means of the field method, International Journal of Nonlinear Mechanics, 2005, Vol. 40. No 5, pp 775-784.

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	181			
Total of SCI(SSCI) list papers :	39			
Current projects :	Domestic :	2	International :	1

Science, arts and professional qualifications

Name and last name:	Kozmidis-Luburić F. Uranija
Academic title:	Full Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	01.09.1975
Scientific or art field:	Physics

Academic carieer	Year	Institution	Field
Academic title election:	2000	Faculty of Technical Sciences - Novi Sad	Physics
PhD thesis	1988	Faculty of Sciences - Novi Sad	Physical Science
Magister thesis	1986	Faculty of Physics - Beograd	Physical Science
Bachelor's thesis	1974	Faculty of Sciences - Novi Sad	Physical Science

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	E103	Physics	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
			(MR0) Measurement and Control Engineering, Undergraduate Academic Studies
2.	EOS06	Physics	(E01) Power Engineering - Renewble Sources of Electrical Energy, Undergraduate Professional Studies
3.	S014	Physics	(S00) Traffic and Transport Engineering, Undergraduate Academic Studies
			(S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies
4.	A401	Architectural Physics	(A00) Architecture, Undergraduate Academic Studies
5.	DZ01FS	Selected Chapters in Physics	(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
			(I12) Industrial Engineering, Specialised Academic Studies
			(I22) Engineering Management, Specialised Academic Studies
			(Z00) Environmental Engineering, Specialised Academic Studies
6.	DZ01F	Selected Chapters in Physics	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies
			(E20) Computing and Control Engineering, Doctoral Academic Studies
			(F00) Graphic Engineering and Design, Doctoral Academic Studies
			(G00) Civil Engineering, Doctoral Academic Studies
			(GI0) Geodesy and Geomatics, Doctoral Academic Studies
			(H00) Mechatronics, Doctoral Academic Studies
			(I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
			(M00) Mechanical Engineering, Doctoral Academic Studies
			(M40) Technical Mechanics, Doctoral Academic Studies
			(OM1) Mathematics in Engineering, Doctoral Academic Studies
			(S00) Traffic Engineering, Doctoral Academic Studies
			(Z00) Environmental Engineering, Doctoral Academic Studies
			(Z01) Safety at Work, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)	
1.	U.F.Kozmidis-Luburić and B.S.Tošić, "NON-LINEAR OPTICAL EFFECTS AND THE DIELECTRIC PROPERTIES OF CRYSTALS", Physica B 112, 331(1982)
2.	D.Mirjanić, U.F.Kozmidis-Luburić, M.M.Marinković and B.S.Tošić, "COMBINED EFFECT OF EXCITION-EXCITION AND EXCITION-PHONON INTERACTION ON CRYSTALS DIELECTIC PROPERTIES", Can. J. Phys. 60, 1838(1982)
3.	U.F. Kozmidis-Luburić and B.S. Tošić, "KINEMATICAL INTERACTION OF OPTICAL EXCITATION AND CONSEQUENCES", Physica A 153, 266(1988)

	Representative refferences (minimum 5, not more than 10)
4.	LJ. Budinski-Petković and U.Kozmidis-Luburić, "J AMING CONFIGURATIONS FOR IRREVERSIBLE DEPOSITION ON A SQUARE LATTICE", Psysica A 236, 211(1997)
5.	Lj. Budinski-Petković and U. Kozmidis-Luburić, "RANDOM SEQUENTIAL ADSORPTION ON A TRIANGULAR LATTICE", Psysical Review E 56, 6904(1997)
6.	V.Sajfert,B.S.Tošić,M.Marinković and U.F.KOZMIDIS-LUBURIĆ,"SURFACE DEFORMATION IN FILMS AND EXCITON CONCETRATION", Physica A 166, 430(1990)
7.	B.S.Tošić, Lj.Mašković, U. F. KOZMIDIS-LUBURIĆ, V.Jovovic and G. Davidovic, "Transition FROM THE DEFORMED STRUCTURE TO THE STATISTICALLY EQUIVALENT IDEAL STRUCTURE AND AN ESTIMATE OF THE BASIS PHYSICAL CHARACTERISTICS OF THE DEFORMED STRUCTURE", Physica A 216, 478(1995)
8.	V.Jovović, G.Davidović, B.S.Tošić,Lj.Mašković, U.F.KOZMIDIS-LUBURIĆ and D.Ćirić,"MASS DISTRIBUTION IN HETEROGENEOUS STRUCTURES", Physica A 223,263(1996)
9.	Lj. Budinski-Petković and U. KOZMIDIS-LUBURIĆ, "IRREVERSIBLE DEPOSITION ON DISORDERED SUBSTRATES: LINE SEGMENTS ON A SQUARE LATTICE", Physica A 245,261(1997)
10.	Lj. Budinski-Petković and U. KOZMIDIS-LUBURIĆ, "IRREVERSIBLE DEPOSITION OF DIRECTED SELF-AVOIDING RANDOM WALKS ON A SQUARE LATTICE", Physica A 262,388(1999)

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	68			
Total of SCI(SSCI) list papers :	23			
Current projects :	Domestic :	1	International :	0

Science, arts and professional qualifications

Name and last name:		Kozmidis-Petrović F. Ana	
Academic title:		Full Professor	
Name of the institution where the teacher works full time and starting date:		Faculty of Technical Sciences - Novi Sad	
		01.09.1975	
Scientific or art field:		Physics	
Academic carieer	Year	Institution	Field
Academic title election:	1997	Faculty of Technical Sciences - Novi Sad	Physics
PhD thesis	1984	Faculty of Sciences - Novi Sad	Physics
Magister thesis	1980	Faculty of Mathematics - Beograd	Physical Science
Bachelor's thesis	1972	Faculty of Sciences - Novi Sad	Physical Science

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	E103	Physics	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
			(MR0) Measurement and Control Engineering, Undergraduate Academic Studies
2.	GG06	Civil Engineering Physics	(G00) Civil Engineering, Undergraduate Academic Studies
3.	M101	Technical Physics	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
			(M30) Energy and Process Engineering, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
			(P00) Production Engineering, Undergraduate Academic Studies
			(ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies
4.	ZR440	Influence of radiation on health and occupational safety	(Z01) Safety at Work, Undergraduate Academic Studies
5.	ZC008	Technical physics	(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
6.	DZ01FS	Selected Chapters in Physics	(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
			(I12) Industrial Engineering, Specialised Academic Studies
			(I22) Engineering Management, Specialised Academic Studies
			(Z00) Environmental Engineering, Specialised Academic Studies
7.	SZD017	Solid Materials in the Environment	(Z00) Environmental Engineering, Specialised Academic Studies

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
8.	DZ01F	Selected Chapters in Physics	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies
			(E20) Computing and Control Engineering, Doctoral Academic Studies
			(F00) Graphic Engineering and Design, Doctoral Academic Studies
			(G00) Civil Engineering, Doctoral Academic Studies
			(GI0) Geodesy and Geomatics, Doctoral Academic Studies
			(H00) Mechatronics, Doctoral Academic Studies
			(I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
			(M00) Mechanical Engineering, Doctoral Academic Studies
			(M40) Technical Mechanics, Doctoral Academic Studies
			(OM1) Mathematics in Engineering, Doctoral Academic Studies
			(S00) Traffic Engineering, Doctoral Academic Studies
			(Z00) Environmental Engineering, Doctoral Academic Studies
			(Z01) Safety at Work, Doctoral Academic Studies
9.	FDS141	Selected Chapters in Colour Management	(F00) Graphic Engineering and Design, Doctoral Academic Studies
10.	ZD017	Solid Materials in the Environment	(Z00) Environmental Engineering, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)	
1.	D. M. Petrović, A. F. Petrović, V. M. Leovac, S. R. Lukić: Thermal decomposition of Cu(II) complexes with salicyladehyde S-methylthiosemicarbazone, Journal of Thermal Analysis, 42, 1165-1170, 1994.
2.	S.R. Lukić, D. M. Petrović, A. F. Petrović, F. Skuban, I.I. Turyanitsa: Tendency towards crystallization of Ge-As-Te system glasses, Journal of Materials Science Lett., 15,.
3.	A. F. Petrović, S. R. Lukić, D. M. Petrović, E. Z. Ivegeš, V. M. Leovac: Metal complex with pyrazole derived ligands. Part IV. Thermal decomposition of Cobalt(II) complexes with 3(5)-amino-4-acetyl 5(3) mathylpyrazole, Journal of Thermal Analysis, 47, 879-886,
4.	S. R. Lukić, D. M. Petrović, A. F. Petrović: Effect of copper on conductivity of amorphous AsSeyIz, Journal of Non-Crystalline Solids, 241, 74-77, 1998.
5.	S. R. Lukić, V. M. Leovac, A. F. Petrović, S. J. Skuban, V. I. Češljević, M. M.Garić: Metal Complexes with Pyrazole-derived Ligands. XIII. Synthesis and Thermal Studies of Zn(II) Complexes with 3-amino-4-acetyl-5-methylpyrazole, Synth.React.Inorg. Met.-Org.Chem.,2002
6.	S. R. Lukić, S. J. Skuban, D. M. Petrović, A. F. Petrović, M. Garić, Characteristics of complex non-crystalline chalcogenides from the Ge-As-S-Se-I system, Journal of Optoelectronics & Advanced Materials, 6(3), 755-768, 2004.
7.	A. F. Petrović, S.R. Lukić, D.D. Štrbac: Critical rate of cooling glassy melts under conditions of continuous nucleation.The application to some chalcogenide glasses, Journal of Optoelectronics & Advanced Materials, 6(4) 1167-1177, 2004.
8.	S. R. Lukić, D. M. Petrović, Ž. N. Cvejić,.A F. Petrović, F. Skuban: Thermally-induced Structural Changes in Copper-containing Chalcogenide Thin Films, Journal of Optoelectronics & Advanced Materials, 3(2), 337-340, 2001.
9.	S.R. Lukić, D.M. Petrović, G.R.Štrbac, A.F.Petrović, M Šiljegović : Effect of sulfur atom substitute with selenium on stability of glassy Ge20As14SxSe52-xI14, Journal of Physics and Chemistry of Solids 66, 1683-1686 (2005)
10.	A.F.Kozmidis-Petrovic, G.R.Strbac, D.D.Strbac, Kinetics of non-isothermal crystallization of chalcogenide, J.Non-Cyst.Solids, 2014–2019, 353(2007)2014

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	153			
Total of SCI(SSCI) list papers :	25			
Current projects :	Domestic :	1	International :	0

Science, arts and professional qualifications

Name and last name:	Kulić J. Filip
Academic title:	Associate Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	01.09.1994
Scientific or art field:	Automatic Control and System Engineering

Academic carieer	Year	Institution	Field
Academic title election:	2008	Faculty of Technical Sciences - Novi Sad	Automatic Control and System Engineering
PhD thesis	2003	Faculty of Technical Sciences - Novi Sad	Automatic Control and System Engineering
Magister thesis	1999	Faculty of Technical Sciences - Novi Sad	Automatic Control and System Engineering
Bachelor's thesis	1994	Faculty of Technical Sciences - Novi Sad	Electroenergetics

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	AU44	Control Systems Design	(E20) Computing and Control Engineering, Undergraduate Academic Studies
			(MR0) Measurement and Control Engineering, Undergraduate Academic Studies
2.	E226	Automatic Control Systems	(E20) Computing and Control Engineering, Undergraduate Academic Studies
			(H00) Mechatronics, Undergraduate Academic Studies
			(MR0) Measurement and Control Engineering, Undergraduate Academic Studies
			(SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies
3.	E238A	Control Systems Technology	(BM0) Biomedical Engineering, Undergraduate Academic Studies
			(E20) Computing and Control Engineering, Undergraduate Academic Studies
			(MR0) Measurement and Control Engineering, Undergraduate Academic Studies
4.	EEI302	Systems of Automatic Control in Power Engineering	(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
			(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
5.	H1405	Optimization Methods	(H00) Mechatronics, Undergraduate Academic Studies
6.	H302	Control Systems 2	(H00) Mechatronics, Undergraduate Academic Studies
7.	M325	Automatic Control Systems	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
8.	BMI125	Biological Control Systems	(BM0) Biomedical Engineering, Undergraduate Academic Studies
9.	E2315	Electrical Machines in Automatic Control Systems	(E20) Computing and Control Engineering, Undergraduate Academic Studies
			(MR0) Measurement and Control Engineering, Undergraduate Academic Studies
			(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
10.	EMSAU1	Automatic Control Systems in Electronics	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
11.	SEAU01	Nonlinear programming and evolutionary computations	(SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies
12.	SEAU03	Real-time control algorithms	(SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies
13.	DE410S	Selected Topics in the Field of Automatic Control	(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
14.	E2515	Intelligent Control Systems	(E20) Computing and Control Engineering, Master Academic Studies (MR0) Measurement and Control Engineering, Master Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies
15.	M2550	Automatic Control Systems in Motor Vehicles	(M22) Mechanization and Construction Engineering, Master Academic Studies
16.	E2532	Automatic Control Systems Project Management	(E20) Computing and Control Engineering, Master Academic Studies
17.	SEAM01	Intelligent Control Systems	(SE0) Software Engineering and Information Technologies, Master Academic Studies
18.	DAU007	Selected Topics in Artificial Intelligence in Control and Signal Processing	(E20) Computing and Control Engineering, Doctoral Academic Studies
19.	DE410	Selected Topics in the Field of Automatic Control	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies (OM1) Mathematics in Engineering, Doctoral Academic Studies
20.	SID04	Current State in the Field	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies (E20) Computing and Control Engineering, Doctoral Academic Studies (F00) Graphic Engineering and Design, Doctoral Academic Studies (F20) Engineering Animation, Doctoral Academic Studies (G00) Civil Engineering, Doctoral Academic Studies (GI0) Geodesy and Geomatics, Doctoral Academic Studies (H00) Mechatronics, Doctoral Academic Studies (I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies (M00) Mechanical Engineering, Doctoral Academic Studies (OM1) Mathematics in Engineering, Doctoral Academic Studies (S00) Traffic Engineering, Doctoral Academic Studies (Z00) Environmental Engineering, Doctoral Academic Studies
21.	DAU017	Selected Topics from Totally Integrated Automatic Control Systems	(E20) Computing and Control Engineering, Doctoral Academic Studies
22.	SID04	Present State in the Field	(A00) Architecture, Doctoral Academic Studies (AS0) Scenic Design, Doctoral Academic Studies (Z01) Safety at Work, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)	
1.	Dragan Kukolj, Vesna Bengin, Filip Kulić: Osnovi klasične teorije automatskog upravljanja kroz rešene probleme, Sombor, Somel, 1995. 241str., UDK: 681.5(075.8),
2.	Dragan Kukolj, Filip Kulić: Projektovanje sistema automatskog upravljanja u prostoru stanja, Novi Sad, Fakulet tehničkih nauka, 1995. 232str., UDK: 681.5(075.8),
3.	D.Kukolj, F.Kulić, E.Levi: Design Of The Speed Controller For Sensorless Electric Drives Based On AI Techniques: A Comparative Study, Artificial Intelligence in Engineering, 2000, Vol. 14, str. 165- 174
4.	D.Kukolj, S.Kuzmanović, E.Levi, F.Kulić: Design of Near Optimal, Wide Range Fuzzy Logic Controller, Fuzzy Sets and Systems, 2001, Vol. 120, No. 1, str. 17- 34
5.	D.Kukolj, F.Kulić, D.Popović, Z.Gorečan: Determining Topological Changes and Critical Load Levels of a Power System by Means of Artificial Neural Network, Electric Machines and Power Systems, 1997, Vol. 25, No. 8, str. 917- 926, ISSN 0731-356x.
6.	D.Kukolj, D.Popović, F.Kulić, Z.Gorečan: Fast Dynamic Stability Analysis of a Power System Using Artificial Neural Networks, European Transactions on Electrical Power (ETEP), 1998, Vol. 8, No. 3, str. 207- 212, ISSN 1430-144X.
7.	D.Popović, D.Kukolj, F.Kulić: Monitoring and Assessment of Voltage Stability Margins Using Artificial Neural Networks with a Reduced Input Set, IEE Proc. -Gener. Transm. Distrib, 1998, Vol. 145, No. 4, str. 355- 362, ISSN 1350-2360.

Representative refferences (minimum 5, not more than 10)	
8.	Matić Dragan, Kulić Filip, Pineda-Sanchez Manuel, Kamenko Ilija: "Support vector machine classifier for diagnosis in electrical machines: Application to broken bar", Expert Systems With Applications, vol.39 br.10, str. 8681-8689, 2012.
9.	Čongradac Velimir, Kulić Filip: "Recognition of the importance of using artificial neural networks and genetic algorithms to optimize chiller operation", Energy and Buildings, vol. 47, str. 651-658; April 2012.
10.	Ilić Slobodan; Vukmirović Srđan; Erdeljan Aleksandar; Kulić Filip: "Hybrid Artificial Neural Network System for Short-Term Load Forecasting, Thermal Science, vol.16, br. , str. S215-S224, 2012

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	32			
Total of SCI(SSCI) list papers :	12			
Current projects :	Domestic :	2	International :	0

Science, arts and professional qualifications

Name and last name:	Kuzmanović B. Siniša
Academic title:	Full Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	01.10.1975
Scientific or art field:	Machine Elements,Construction Principles, Machine and Mechanizm

Academic carieer	Year	Institution	Field
Academic title election:	1996	Faculty of Technical Sciences - Novi Sad	Machine Elements,Construction Principles, Machine and Mechanizm Theory, Power and Motion Transfer and Eng.Communication
PhD thesis	1980	Faculty of Mechanical Engineering - Beograd	Machine Elements,Construction Principles, Machine and Mechanizm Theory, Power and Motion Transfer and Eng.Communication
Magister thesis	1976	Faculty of Mechanical Engineering - Beograd	Machine Elements,Construction Principles, Machine and Mechanizm Theory, Power and Motion Transfer and Eng.Communication
Bachelor's thesis	1973	Faculty of Mechanical Engineering - Beograd	Thermal Energetics and Thermotechnics

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	F408	Industrial Design	(F00) Graphic Engineering and Design, Undergraduate Academic Studies
2.	H205	Mecahnical Elements 1	(H00) Mechatronics, Undergraduate Academic Studies
3.	H208	Mechanical Elements 2	(H00) Mechatronics, Undergraduate Academic Studies
4.	M202	Mechanical Elements	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies (M30) Energy and Process Engineering, Undergraduate Academic Studies (M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies (P00) Production Engineering, Undergraduate Academic Studies
5.	M2419	Product Development	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
6.	URZP14	Fundamentals of Mechanical Engineering	(ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies
7.	F510I1	Design of industrial products	(F00) Graphic Engineering and Design, Master Academic Studies
8.	M2654	Specific Machine Elements of Agricultural Machinery	(M22) Mechanization and Construction Engineering, Master Academic Studies
9.	M2656	Industrial design of agricultural machines	(M22) Mechanization and Construction Engineering, Master Academic Studies
10.	DM213	Contemporary Methods of Designing and Machine Constructing	(M00) Mechanical Engineering, Doctoral Academic Studies
11.	DM215	Seelcted Chapters in Machine and Mechanisms Theory	(M00) Mechanical Engineering, Doctoral Academic Studies
12.	DOM23	Product Development	(M00) Mechanical Engineering, Doctoral Academic Studies
13.	FDS211	Selected Chapters in Design	(F00) Graphic Engineering and Design, Doctoral Academic Studies
14.	FDS214	Selected Chapters in Industrial Product Modelling	(F00) Graphic Engineering and Design, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1.	Miltenović, V. A., Kuzmanović, B. S., Miltenović, Đ. V., Tica, M. M., Rackov, J. M.: Thermal stability of crossed helical gears with wheels made from sintered steel, Thermal Science, 2012, Vol. 16, Suppl. 2, pp. S607-S619, doi:10.2298/TSCI120503190M.
2.	Kuzmanović, S.: Konstruisanje, oblikovanje i dizajn - 1. deo, Fakultet tehničkih nauka, Novi Sad, 2006, str.357, ISBN 86-85211-82-4
3.	Kuzmanović, S.: Konstruisanje, oblikovanje i dizajn - 2. deo, Fakultet tehničkih nauka, Novi Sad, 2005, str.181, ISBN 86-85211-57-3
4.	Kuymanović, S.: Menadžment proizvodima, Univerzitet u Novom Sadu, Novi Sad, 2007, str.301, ISBN 978-86-499-0149-0
5.	Kuzmanović, S.: Mašinski elementi - oblikovanje, proračun i primena, Fakultet tehničkih nauka, Novi Sad, 2012, str.394, ISBN 978-86-7892-282-4

	Representative refferences (minimum 5, not more than 10)
6.	Kuzmanović, S.: Industrijski dizajn, Fakultet tehnickih nauka, Novi Sad, 2012, str.329, ISBN 978-86-7892-404-0
7.	Kuzmanović, S., Trbojević, R., Rackov, M.: Zbirka zadataka iz mašinskih elemenata, Fakultet tehničkih nauka, Nobi Sad, 2009, str.198, ISBN 978-86-7892-154-4
8.	Kuzmanović, S.: Univerzalni zupčasti reduktori sa cilindričnim zupčanicima, Fakultet tehničkih nauka, Novi Sad, 2009, str.231, ISBN 978-86-7892-202-2
9.	Kuzmanović, S., Rackov, M.: Bezazorni prenosnici u vojnom mašinstvu, Vojnotehnički institut, Beograd, 2012, str.101, ISBN 978-86-81123-51-5
10.	Vereš, M., Harman, B., Kuzmanović, S., Rackov, M.: Determination of the Correct Mating Cylindrical Teeth Flanks Profiles When the Path of Contact is Given, Slovak University of Technology in Bratislava, Faculty of Mechanical Engineering, Bratislava, 2009, str. 145-151, ISBN 978-80-227-3326-7

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	0			
Total of SCI(SSCI) list papers :	1			
Current projects :	Domestic :	1	International :	2

Science, arts and professional qualifications

Name and last name:	Lužanin B. Ognjan
Academic title:	Assistant Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad 09.11.1992
Scientific or art field:	Plastic Deformation Technology, Rapid Prototyping, Virtual

Academic carieer	Year	Institution	Field
Academic title election:	2009	Faculty of Technical Sciences - Novi Sad	Plastic Deformation Technology, Rapid Prototyping, Virtual
PhD thesis	2009	Faculty of Technical Sciences - Novi Sad	Plastic Deformation Technology, Rapid Prototyping, Virtual
Magister thesis	2002	Faculty of Technical Sciences - Novi Sad	Machine Tools, Flexible Technological Systems and Automatization Processes Design
Bachelor's thesis	1992	Faculty of Technical Sciences - Novi Sad	Machine Tools, Flexible Technological Systems and Automatization Processes Design

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	IA016	Introduction to Virtual Reality Technology	(F10) Engineering Animation, Undergraduate Academic Studies
2.	P2411	Virtual Production in Technologies of Plastic Deforming	(P00) Production Engineering, Undergraduate Academic Studies
3.	BM119D	Reverse engineering and rapid prototyping in biomedical engineering	(BM0) Biomedical Engineering, Undergraduate Academic Studies
4.	F402	Electronic Publishing	(F00) Graphic Engineering and Design, Master Academic Studies
5.	F504I0	3D Printing	(F00) Graphic Engineering and Design, Master Academic Studies
6.	NIT01	Innovative Product Development	(NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies
7.	P321	Reverse Engineering and Rapid Prototyping	(I10) Industrial Engineering, Master Academic Studies
8.	SM1061	Iintegrated VR development environments for engineering applications	(PM0) Production Engineering, Master Academic Studies
9.	DM411	Contemporary Approach to Integration of Reverse Engineering of Rapid Prototyping, Tools, Products and Virtual Manufacturing	(M00) Mechanical Engineering, Doctoral Academic Studies
10.	DP001	Design and Research Methods in Production Engineering	(M00) Mechanical Engineering, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)	
1.	Tadić B., Todorović P., Lužanin O., Miljanić D., Jeremić B., Bogdanović B., Vukelić Đ.: Using specially designed high-stiffness burnishing tool to achieve high-quality surface finish, DOI: 10.1007/s00170-012-4508-2, International Journal of Advanced Manufacturing Technology, 2012, ISSN 0268-3768
2.	Plančak M., Hartley P., Esssa K., Vilotić D., Movrin D., Lužanin O.: Deformation analysis during bi-metallic coining operations, Steel Research International, 2012, pp. 1247-1250, ISSN 978-3-514-00754-3
3.	Ostojić G., Tadić B., Lužanin O., Stankovski S., Vukelić Đ., Budak I., Miladinović Lj.: An integral system for automated cutting tool selection, Scientific Research and Essays, 2011, Vol. 6, No 15, pp. 3240-3251, ISSN 1992-2248
4.	Vukelić Đ., Tadić B., Lužanin O., Budak I., Križan P., Hodolič J.: A rule-based system for fixture design, Scientific Research and Essays, 2011, Vol. 6, No 27, pp. 5787-5802, ISSN 1992-2248
5.	Lužanin O., Plančak M.: Enhancing Gesture Dictionary of a Commercial Data Glove Using Complex Static Gestures and an MLP Ensemble , Strojniski vestnik - Journal of Mechanical Engineering, 2009, Vol. 55, No 4, pp. 230-236, ISSN 0039-2480
6.	Vukelić Đ., Tadić B., Jocanović M., Lužanin O., Simeunović N.: A System for Computer-Aided Selection of Cutting Tools, Acta Technica Corviniensis, 2011, Vol. 4, No 4, pp. 89-92, ISSN 2067-3809
7.	Lužanin O., Plančak M.: Virtual reality technologies in virtual manufacturing-notes on current trends and applications , Journal for technology of Plasticity, 2008, Vol. 33, No 1-2, pp. 103-111.
8.	Vilotić D., Plančak M., Kuzman K., Milutinović M., Movrin D., Skakun P., Lužanin O.: Application of net shape and near-net shape forming technologies in manufacture of roller bearing components and cardan shafts , Journal for technology of Plasticity, 2007, Vol. 32, No 1-2, pp. 87-104.
9.	Milutinović M., Vilotić D., Plančak M., Trbojević I., Čupković Đ., Lužanin O.: Hot ring rolling in bearing production , Journal for Technology of Plasticity, 2005, Vol. 30, No 1-2, pp. 61-73, ISSN 0354-3870.
10.	Novaković D., Lužanin O., Zeljković Ž., Hodolič J.: Enhancement of Tribological Characteristics of Gears by Application of Software Package for Gear Trains Design, Journals Tribology in industry, 1998, Vol. 20, No 2, pp. 47-51, ISSN 0351-1642.

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	0			
Total of SCI(SSCI) list papers :	5			
Current projects :	Domestic :	1	International :	1

Science, arts and professional qualifications

Name and last name:	Lužanin L. Zorana
Academic title:	Full Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Sciences - Novi Sad
	01.10.2012
Scientific or art field:	Mathematical Sciences

Academic carieer	Year	Institution	Field
Academic title election:	2007	Faculty of Sciences - Novi Sad	Mathematical Sciences
PhD thesis	1997	Faculty of Sciences - Novi Sad	Mathematical Sciences
Magister thesis	1994	Faculty of Sciences - Novi Sad	Mathematics

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	SDOM30	Probability, Statistics and Theory of Engineering Experiment	(Z00) Environmental Engineering, Specialised Academic Studies
2.	DOM30	Probability, Statistics and Theory of Engineering Experiment	(M00) Mechanical Engineering, Doctoral Academic Studies
			(M40) Technical Mechanics, Doctoral Academic Studies
			(Z00) Environmental Engineering, Doctoral Academic Studies
			(Z01) Safety at Work, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)	
1.	Krejic Natasa Luzanin Zorana Ovcin Zoran B , Stochastic Newton-like methods for computing equilibria in general equilibrium models, COMPUTATIONAL & APPLIED MATHEMATICS, (2011), vol. 30 br. 1, str. 127-149
2.	Buhmiler Sandra Krejic Natasa Luzanin Zorana , Practical Quasi-Newton algorithms for singular nonlinear systems, NUMERICAL ALGORITHMS, (2010), vol. 55 br. 4, str. 481-502
3.	Krejic Natasa Luzanin Zorana Rapajic Sanja Dj , Jacobian smoothing Brown's method for NCP (Article), NONLINEAR ANALYSIS-THEORY METHODS & APPLICATIONS, (2009), vol. 70 br. 2, str. 642-657
4.	Krejic Natasa Luzanin Zorana Stojkovska Irena , Gauss-Newton-based BFGS method with filter for unconstrained minimization, APPLIED MATHEMATICS AND COMPUTATION, (2009), vol. 211 br. 2, str. 354-362
5.	Krejic Natasa Luzanin Zorana Radeka Ivana , Newton-like method for nonlinear banded block diagonal system, APPLIED MATHEMATICS AND COMPUTATION , (2007), vol. 189 br. 2 , str. 1705 -1711
6.	Krejic Natasa Luzanin Zorana Rapajic Sanja Dj , Iterative method with modification of the right-hand side vector for nonlinear complementarity problems, INTERNATIONAL JOURNAL OF COMPUTER MATHEMATICS, (2006), vol. 83 br. 2, str. 193-201
7.	Krejic Natasa Luzanin Zorana , Newton-like method with modification of the right-hand-side vector, MATHEMATICS OF COMPUTATION, (2002), vol. 71 br. 237, str. 237-250
8.	Lužanin, Z., Herceg, D., Krejić, N., Parameter selection for inexact Newton methods, NONLINEAR ANALYSIS 30 (1997), 17-24.
9.	Lužanin, Z., Rapajić, S.: Convergence acceleration of a general Newton method for system of nonlinear equations, Scientiae Mathematicae Japonica 54, 3 (2001), 513-519
10.	A. Tepavčević, Z. Lužanin: Matematičke medote u taksonomiji, PMF, 198 str, 2006, udžbenik

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	18			
Total of SCI(SSCI) list papers :	8			
Current projects :	Domestic :	2	International :	2

Science, arts and professional qualifications

Name and last name:	Malešev T. Petar
Academic title:	Associate Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	12.11.1975
Scientific or art field:	Machine Constructions, Transport Systems and Logistics

Academic carieer	Year	Institution	Field
Academic title election:	2009	Faculty of Technical Sciences - Novi Sad	Machine Constructions, Transport Systems and Logistics
PhD thesis	1993	Faculty of Technical Sciences - Novi Sad	Machine Constructions, Transport Systems and Logistics
Magister thesis	1987	Faculty of Technical Sciences - Novi Sad	Machine Constructions, Transport Systems and Logistics
Bachelor's thesis	1975	Faculty of Technical Sciences - Novi Sad	Machine Constructions, Transport Systems and Logistics

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	H2464	Building Machines Mechatronics	(H00) Mechatronics, Undergraduate Academic Studies
2.	M2406	Construction and Utility Machines	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
3.	M315	Hydraulic Transmissions in Mechanization	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
4.	ZRI413	Occupational Safety and Protection in Working with Civil Engineering and Utility Mechanization	(Z01) Safety at Work, Undergraduate Academic Studies
5.	M2530	Food Processing Machines 1	(M22) Mechanization and Construction Engineering, Master Academic Studies
6.	M2532	Packaging Machines	(M22) Mechanization and Construction Engineering, Master Academic Studies
7.	M2534	Food Processing Machines 2	(M22) Mechanization and Construction Engineering, Master Academic Studies
8.	M2542	Hydraulic Power Transmission in Mechanisation 2	(M22) Mechanization and Construction Engineering, Master Academic Studies
9.	LIM13	Packaging Techniques and Packaging	(LIM) Logistic Engineering and Management, Master Academic Studies
10.	DM331	Selected Chapters in Transport and Construction Machines	(M00) Mechanical Engineering, Doctoral Academic Studies
11.	DM410	Selected Chapters in Food Processing Machines and Equipment	(M00) Mechanical Engineering, Doctoral Academic Studies
12.	DOM25	Contemporary Procedures for Mobile Machine Designing	(M00) Mechanical Engineering, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1. Vladić J., Malešev P., Šostakov R., Brkljač N.: Dynamic analysis of the load lifting mechanisms, STROJNIsKI VESTNIK - JOURNAL OF MECHANICAL ENGINEERING, 54(10), pp. 655-661, 2008.

2. P.Malešev, J.Vladić, M.Plavšić: Influence of boom cylinder diameter in the duration of lifting hydraulic excavator working device with loaded bucket, XIII Mežnarodnaja naučno-tehničeskaja konferencija "Razvitie sproitelnih mašin...", Moskva, 1996. godine, zbornik radova, strane 292-295

3. J.Vladić, P. Malešev: Charakteristics of modeling the transport and civil engineering machines from the aspect of the application of universal programme packages, XIV Međunarodni naučno-stručni skup Transport u industriji, Beograd, 1996. godine, Zbornik radova, strane 4.8-4.13

4. P.Malešev, M.Plavšić, J.Vladić: Primena kvazistatičke simulacije kod određivanja ekstremnih naprezanja nosećih konstrukcija, XIII Međunarodni skup Transport u industriji, Beograd, 1994. godine, Zbornik radova, strane 233-238

5. P. Malešev: Die Aehnlichkeitslehre in der Konstruktion, časopis "Hebezeuge und Foerdermittel", Berlin, Nr. 3, 1998. godina, strane 72-73

6. J.Vladić, P.Malešev, N.Babin: Experimental analysis of bicable ropeway dynamic behaviour, Mežnarodnaja naučno-tehničeskaja konferencija "Razvitie stroitelnih mašin...", Moskva, 1996. godine, Zbornik radova, strane 300-303

7. P. Malešev, J.Vladić: Examination of hydraulic excavator dynamic loads, Časopis Agricultural engineering, Novi Sad, vol. V, broj 1-4, 1999. godine, strane 21-29

8. P.Malešev, M.Plavšić: Kriterijum nepromenljivosti odnosa ugaonih brzina pri izboru hidrocilindara bagerskog uređaja, Časopis Tehnika, Beograd, broj 3-4, 1997. godine, strane 1-4

9. P. Malešev: O mogućnosti primene raspodela potrebnih sila u hidrocilindrima bagerskog uređaja pri njihovom dimenzionisanju, Časopis Tehnika, Beograd, broj 5-6, 1996. godine, strane 13-16

Representative refferences (minimum 5, not more than 10)				
10.	P.Malešev, M.Plavšić, Z.Ristić: Ocena efikasnosti standardima definisanih pokazatelja u vezi mogućnosti razvijanja sila rezanja kod hidrauličnih bagera, Časopis Tehnika, Beograd, broj 11-12, 1991. godine, strane 755-758			
Summary data for teacher's scientific or art and professional activity:				
Quotation total :	0			
Total of SCI(SSCI) list papers :	1			
Current projects :	Domestic :	0	International :	0

Science, arts and professional qualifications

Name and last name:	Maretić B. Ratko
Academic title:	Full Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	18.05.1993
Scientific or art field:	Deformable Body Mechanics

Academic carieer	Year	Institution	Field
Academic title election:	2009	Faculty of Technical Sciences - Novi Sad	Deformable Body Mechanics
PhD thesis	1997	Faculty of Technical Sciences - Novi Sad	Deformable Body Mechanics
Magister thesis	1993	Faculty of Technical Sciences - Novi Sad	Deformable Body Mechanics
Bachelor's thesis	1987	Faculty of Technical Sciences - Novi Sad	Deformable Body Mechanics

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	A237	Material Resistance	(A00) Architecture, Undergraduate Academic Studies
2.	M204	Strength of Materials	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
			(M30) Energy and Process Engineering, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
			(P00) Production Engineering, Undergraduate Academic Studies
3.	M4305	Thermomechanics	(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
4.	URZP14	Fundamentals of Mechanical Engineering	(ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies
5.	Z108	Fundamentals of Mechanics	(Z01) Safety at Work, Undergraduate Academic Studies
			(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
			(Z20) Environmental Engineering, Undergraduate Academic Studies
6.	BMI127	Biomechanics	(BM0) Biomedical Engineering, Undergraduate Academic Studies
			(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
7.	II1004	Mechanics and Industrial Engineering	(I10) Industrial Engineering, Undergraduate Academic Studies
8.	M44051	Theory of Plates and Shells	(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
9.	M4501	Industrial Design	(M40) Technical Mechanics and Technical Design, Master Academic Studies
10.	M4505	Modelling of non-linear systems	(M40) Technical Mechanics and Technical Design, Master Academic Studies
11.	DM403	Mathematical Rod Theory	(M00) Mechanical Engineering, Doctoral Academic Studies
			(M40) Technical Mechanics, Doctoral Academic Studies
			(OM1) Mathematics in Engineering, Doctoral Academic Studies
12.	ZRD16A	Selected chapters in mechanics and elasticity theory	(Z01) Safety at Work, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1. R. Maretic, V. Glavardanov and V. Milosevic-Mitic: Transverse vibrations and stability of a heavy and heated vertical circular plate. International Journal of Structural Stability and Dynamics, 2010, 10(5), 1111-1121.

2. V. Glavardanov, R. Maretic and N. Grahovac: Buckling of a twisted and compressed rod supported by Cardan joints. European Journal of Mechanics A/Solids, 2009, 28, 131- 140.

3. V. Glavardanov and R. Maretic: Stability of a twisted and compressed clamped rod. Acta Mechanica, 2009, 202, 17-33.

4. R. Maretic and V. Glavardanov: Impact of mounting with an overlap on vibration and stability of a rotating annular plate. Journal of Sound and Vibration, 2008, 313, 308- 324.

	Representative refferences (minimum 5, not more than 10)
5.	R. Maretic, V. Glavardanov and D. Radomirovic: Asymmetric vibrations and stability of a rotating annular plate loaded by a torque. Meccanica, 2007, 42, 537- 546.
6.	R. Maretic, 2005, "Transverse vibration and stability of an eccentric rotating circular plate", Journal of Sound and Vibration 280, 467-478.
7.	R. B. Maretic, V. B. Glavardanov, 2004, "Stability of a Rotating Heated Circular Plate with Elastic Support", Journal of Applied Mechanics, Transactions of the ASME, 71, 897-899.
8.	R. B. Maretic and T. M. Atanackovic, 2001, Journal of Engineering Mechanics Vol 127, 242-247, Buckling of Column with Base Attached to Elastic Half-Space.
9.	L. Cveticanin, R. Maretic, 2000., Mechanism and Machine Theory 35, 1391-1411. Dynamic analysis of a cutting mechanism.
10.	T.M. Atanackovic, R.B. Maretic, J.M. Milidragovic, 1999, Archive of Applied Mechanics 69, 94-104, On the stability of an elastic column positioned on an elastic half space.

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	25			
Total of SCI(SSCI) list papers :	14			
Current projects :	Domestic :	1	International :	0

Science, arts and professional qualifications

Name and last name:	Martinov L. Milan
Academic title:	Full Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	10.12.1978
Scientific or art field:	Biosystems Engineering

Academic carieer	Year	Institution	Field
Academic title election:	1999	Faculty of Technical Sciences - Novi Sad	Biosystems Engineering
Bachelor's thesis	2000	Faculty of Mechanical Engineering - Novi Sad	Mechanical Engineering
PhD thesis	1988	Faculty of Technical Sciences - Novi Sad	Biosystems Engineering
Magister thesis	1981	Faculty of Agriculture - Zagreb	Biosystems Engineering

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	M2407	Biosystem Machines 2	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
2.	M304	Biosystem Machines 1	(H00) Mechatronics, Undergraduate Academic Studies
			(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
3.	URZP54	Devices in the Process Industry	(ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies
4.	Z475A	Environmental engineering in biosystems	(Z20) Environmental Engineering, Undergraduate Academic Studies
5.	Z476	Energy and renewable energy sources in rural areas	(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
			(Z20) Environmental Engineering, Undergraduate Academic Studies
6.	ZRI421	Occupational Safety in Agriculture and Forestry	(Z01) Safety at Work, Undergraduate Academic Studies
7.	Z475	Inženjerstvo zaštite životne sredine u biosistema(uneti naziv na engleskom)	(Z20) Environmental Engineering, Undergraduate Academic Studies
8.	Z476	Energija i obnovljivi izvori energije u ruralnim oblastima(uneti naziv na engleskom)	(Z20) Environmental Engineering, Undergraduate Academic Studies
9.	H2405	IT in Biosystems	(H00) Mechatronics, Master Academic Studies
			(M22) Mechanization and Construction Engineering, Master Academic Studies
10.	M2651	Tractors	(M22) Mechanization and Construction Engineering, Master Academic Studies
11.	M2652	Agricultural machinery for renewable energy sources	(M22) Mechanization and Construction Engineering, Master Academic Studies
12.	Z477	Sustainable Agriculture Engineering	(Z20) Environmental Engineering, Master Academic Studies
13.	Z478A	Information technology support sustainable biosystems	(Z20) Environmental Engineering, Master Academic Studies
14.	Z477	Inženjerstvo održive poljoprivrede(uneti naziv na engleskom)	(Z20) Environmental Engineering, Master Academic Studies
15.	Z478	Informaciono-tehnološka podrška održivom razvoju biosistema(uneti naziv na engleskom)	(Z20) Environmental Engineering, Master Academic Studies
16.	H797	Mechatronics in mechanization - advanced topics	(H00) Mechatronics, Master Academic Studies
17.	SZSP14	Contemporary approach to the biosystems engineering	(Z00) Environmental Engineering, Specialised Academic Studies
18.	SZSP16	Engineering of renewable enery sources in agriculture	(Z00) Environmental Engineering, Specialised Academic Studies
19.	SZSP18	Contemporary scientific approaches in life cycle assessment of products (LCA)	(Z00) Environmental Engineering, Specialised Academic Studies
20.	ZCM12	Logistic of energy biomass	(ZC0) Clean Energy Technologies, Master Academic Studies
21.	ZR406A	System Regulations and EU Practice in Occupational Health and Safety	(Z01) Safety at Work, Master Academic Studies
22.	DM207	Standardization in biosystems engineering related to the safety	(Z01) Safety at Work, Doctoral Academic Studies

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
23.	DOM24	Procedure and Machines for Sustainable Agriculture	(M00) Mechanical Engineering, Doctoral Academic Studies
24.	HDOK11	Advanced Application of ICT in Agriculture	(H00) Mechatronics, Doctoral Academic Studies
25.	HDOL11	Advanced application of ICT in agriculture	(H00) Mechatronics, Doctoral Academic Studies
26.	ZSP14	Contemporary Approaches to Sustainable Engineering Biosystems	(Z00) Environmental Engineering, Doctoral Academic Studies
27.	ZSP16	Engineering of Renewable Energy in Agriculture	(OM1) Mathematics in Engineering, Doctoral Academic Studies (Z00) Environmental Engineering, Doctoral Academic Studies
28.	ZRD235	Systemic regulation in the field of occupational safety and health	(Z01) Safety at Work, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1. Bojić S., Golub M., Müller J., Obradović R., Martinov M.: Convective drying of naked seeded oil pumpkin seeds (Cucurbita pepo L.) in a medium scale batch dryer with different modes of air circulation., Zeitschrift für Arznei- und Gewürzpflanzen, 2012, Vol. 17, No 3, pp. 108-115, ISSN 1431-9292

2. Đatkov Đ., Effenberger M., Lehner A., Martinov M., Tešić M., Gronauer A.: New method for assessing the performance of agricultural biogas plants, Renewable energy, 2012, Vol. 40, No 1, pp. 104-112

3. Gavrić M., Martinov M., Bojić S., Đatkov Đ., Pavlović M.: Short- and long-term dynamic accuracies determination of satellite-based positioning devices using a specially designed testing facility, Computer and Electronics in Agriculture, Elsevier, Amsterdam, the Netherlands, 2011, Vol. 76, No 2, pp. 297-305

4. Scarlat N., Martinov M., Dallemand J.: Assessment of the availability of agricultural crop residues in the European Union: Potential and limitations for bioenergy use, Waste Management, 2010, Vol. 30, No 10, pp. 1889-1897, ISSN 0956-053X

5. Kratzeisen M., Starcevic N., Martinov M., Maurer C., Mueller J.: Applicability of biogas digestate as solid fuel, Fuel, 2010, Vol. 89, No 9, pp. 2544-2548

6. Martinov M, Mujic I, Müller J. 2007. Impact of drying air temperature on course of drying and quality of Hypericum perforatum L. Zeitschrift für Arznei- und Gewürzpflanzen, 12(3): 124-128.

7. Martinov M., Veselinov B., Bojić S., Đatkov Đ.: Investigation of maize cobs crushing – preparation for use as a fuel, Thermal Science - International Scientific Journal, 2011, Vol. 15, No 1, pp. 235-243, ISSN 0354-9836, UDK: 621

8. Jokić, S., Mujić, I., Martinov, M., Velić, D., Bilić, M. and J. Lukinac. 2009. Influence of drying procedure on colour and rehydration characteristic of wild asparagus Czech Journal of Food Sciences 27(3): 171-177.

9. Oztekin, S, Martinov, M. 2007. Medicinal and Aromatic Crops, Harvesting, Drying and Processing, Haworth Food and Agricultural Products Press, New York.

10. Martinov, M., Tesic, M. and M. Ilic. 2006. Latest developments on RES policy, implementation and planning in Serbia. Workshop: „Data Gathering on Renewable Energies for New Member States and Candidate Countries" organized by European Commission, Joint Research Center, Cavtat-Dubrovnik, 15-16 November 2006, Book of procc. 279-287.

Summary data for teacher's scientific or art and professional activity:

Quotation total :	20			
Total of SCI(SSCI) list papers :	10			
Current projects :	Domestic :	4	International :	1

Science, arts and professional qualifications

Name and last name:	Mihailović P. Biljana
Academic title:	Assistant Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	15.03.1999
Scientific or art field:	Mathematics

Academic carieer	Year	Institution	Field
Academic title election:	2010	Faculty of Technical Sciences - Novi Sad	Mathematics
PhD thesis	2009	Faculty of Sciences - Novi Sad	Mathematical Sciences
Magister thesis	2003	Faculty of Sciences - Novi Sad	Mathematical Sciences
Bachelor's thesis	1998	Faculty of Sciences - Novi Sad	Mathematical Sciences

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	E135	Probability, Statistics and Stochastic Processes	(MR0) Measurement and Control Engineering, Undergraduate Academic Studies
			(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
2.	E212	Mathematical Analysis 1	(E20) Computing and Control Engineering, Undergraduate Academic Studies
			(SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies
			(SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies
3.	E213	Discrete Mathematics and Linear Algebra	(E20) Computing and Control Engineering, Undergraduate Academic Studies
			(MR0) Measurement and Control Engineering, Undergraduate Academic Studies
			(SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies
			(SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies
4.	E224A	Probability and Stochastic Processes	(E20) Computing and Control Engineering, Undergraduate Academic Studies
			(ES0) Power Software Engineering, Undergraduate Academic Studies
			(SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies
			(SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies
5.	EOS07	Mathematics 2	(E01) Power Engineering - Renewble Sources of Electrical Energy, Undergraduate Professional Studies
6.	M102	Mathematics 1	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
			(M30) Energy and Process Engineering, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
			(P00) Production Engineering, Undergraduate Academic Studies
7.	E102	Mathematical Analysis 1	(ES0) Power Software Engineering, Undergraduate Academic Studies
			(MR0) Measurement and Control Engineering, Undergraduate Academic Studies
8.	BMI91	Mathematics 1	(BM0) Biomedical Engineering, Undergraduate Academic Studies
9.	BMI92	Mathematics 2	(BM0) Biomedical Engineering, Undergraduate Academic Studies
10.	E102A	Mathematical Analysis 1	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies

	List of courses being held by the teacher in the accredited study programmes		
	ID	Course name	Study programme name, study type
11.	IM1423	Financial Mathematics	(I20) Engineering Management, Undergraduate Academic Studies
12.	DZ01MS	Selected Chapters in Mathematics	(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies (I12) Industrial Engineering, Specialised Academic Studies (I22) Engineering Management, Specialised Academic Studies (Z00) Environmental Engineering, Specialised Academic Studies
13.	I004/S	Statistical Quantitative Methods	(I20) Engineering Management, Specialised Professional Studies (IB0) Engineering Management - MBA, Specialised Professional Studies
14.	OIR009	Primenjena aktuarska matematika	(I20) Engineering Management, Specialised Professional Studies
15.	ZR503	Statistical Advanced Models	(Z01) Safety at Work, Master Academic Studies
16.	D0M07	Mathematical Foundations of Fuzzy Systems	(OM1) Mathematics in Engineering, Doctoral Academic Studies
17.	D0M21	Fuzzy Systems and Their Applications	(OM1) Mathematics in Engineering, Doctoral Academic Studies
18.	D0M49	Aggregation Functions	(OM1) Mathematics in Engineering, Doctoral Academic Studies
19.	D0M50	Fuzzy Measures and Integrals	(OM1) Mathematics in Engineering, Doctoral Academic Studies
20.	D0M51	Large Deviations Principles	(OM1) Mathematics in Engineering, Doctoral Academic Studies
21.	DZ01M	Selected Chapters in Mathematics	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies (E20) Computing and Control Engineering, Doctoral Academic Studies (F00) Graphic Engineering and Design, Doctoral Academic Studies (F20) Engineering Animation, Doctoral Academic Studies (G00) Civil Engineering, Doctoral Academic Studies (GI0) Geodesy and Geomatics, Doctoral Academic Studies (H00) Mechatronics, Doctoral Academic Studies (I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies (M00) Mechanical Engineering, Doctoral Academic Studies (M40) Technical Mechanics, Doctoral Academic Studies (OM1) Mathematics in Engineering, Doctoral Academic Studies (S00) Traffic Engineering, Doctoral Academic Studies (Z00) Environmental Engineering, Doctoral Academic Studies (Z01) Safety at Work, Doctoral Academic Studies

	Representative refferences (minimum 5, not more than 10)		
1.	E. Pap, B. Mihailović: A representatation of a comonotone-v-additive and monotone functional by two Sugeno integrals, Fuzzy Sets and Systems 155, (2005) 77-88		
2.	B. Mihailović, E. Pap: Sugeno integral based on absolutely monotone real set functions, Fuzzy Sets and Systems, Vol 161, Issue 22, (2010) 2857-2869		
3.	B. Mihailović, E. Pap: Asymmetric integral as a limit of generated Choquet integrals based on absolutely monotone real set functions, Fuzzy Sets and Systems 181, (2011) 39-49.		
4.	B. Mihailović, E. Pap: Asymmetric general Choquet integrals, Acta Polytechnica Hungarica, Volume 6, Issue Number 1, (2009) 161-173.		
5.	Kalina M., Manzi M., Mihailović B.: Choquet integrals and T-supermodularity, E. Pap (Ed.): Intelligent Systems: Models and Applications, TIEI 3, DOI: 10.1007/978-3-642-33959-2 4 c Springer-Verlag Berlin Heidelberg , (2013) 61-75.		

	Representative refferences (minimum 5, not more than 10)			
6.	B. Mihailović, Lj. Nedović, T. Grbić : The induced Sugeno integral-based operator w.r.t bi-fuzzy measures, Journal of Electrical Engineering, Vol.54, No. 12/s, (2003) 76-79.			
7.	B. Mihailović, E. Pap: Non-monotonic set functions and general fuzzy integrals, Proceedings of SISY 2008, Subotica, (2008) 371-374.			
8.	B. Mihailović: On the class of symmetric S-separable aggregation functions Proceedings of AGOP 2007, Ghent, Belgium, (2007) 187-191.			
9.	B. Mihailović, E. Pap: Decomposable signed fuzzy measures, Proceedings of EUSFLAT 2007, Ostrava, Czech Republic, (2007) 265-269.			
10.	B. Mihailović, M. Manzi: On the asymmetric Shilket-like integral, Proceedings of AGOP2011, Benevento, Italy, (2011) 73-77.			

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	10			
Total of SCI(SSCI) list papers :	4			
Current projects :	Domestic :	2	International :	0

Science, arts and professional qualifications

Name and last name:	Milošević P. Mijodrag
Academic title:	Assistant Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	01.03.1998
Scientific or art field:	Tecnological Process Design and Optimization and Technical Preparation

Academic carieer	Year	Institution	Field
Academic title election:	2012	Faculty of Technical Sciences - Novi Sad	Tecnological Process Design and Optimization and Technical Preparation for Manufacturing
PhD thesis	2012	Faculty of Technical Sciences - Novi Sad	Technological Processes, Techno-Economic Optimization and Virtual Design
Magister thesis	2005	Faculty of Technical Sciences - Novi Sad	Technological Processes, Techno-Economic Optimization and Virtual Design
Bachelor's thesis	1997	Faculty of Technical Sciences - Novi Sad	Metrology, Quality, Fixtures and Ecological-Engineering Aspects

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	P1403	Integrated CAPP Systems and Technological Database	(P00) Production Engineering, Undergraduate Academic Studies
2.	P1503	Technological Logistics and Entrepreneurship	(P00) Production Engineering, Undergraduate Academic Studies
3.	P308	Process Planning	(P00) Production Engineering, Undergraduate Academic Studies
4.	P4408	Entrepreneurship in Small and Medium Enterprises	(P00) Production Engineering, Undergraduate Academic Studies
5.	P320	Technological Preparation of Production in Precision Engineering	(P00) Production Engineering, Undergraduate Academic Studies
6.	GM502	Management in Construction	(G00) Civil Engineering, Master Academic Studies
7.	P1506	Internet Technologies in Production Engineering	(PM0) Production Engineering, Master Academic Studies
8.	P315	Intelligent Process Planning	(PM0) Production Engineering, Master Academic Studies
9.	PLIS1	Logistics and Simulation in Technologies of Plastics Processing	(PM0) Production Engineering, Master Academic Studies
10.	SM1	Methods and Software Tools for Collaborative Design	(PM0) Production Engineering, Master Academic Studies
11.	DP001	Design and Research Methods in Production Engineering	(M00) Mechanical Engineering, Doctoral Academic Studies
12.	DP017	Selected Chapters in e-Manufacturing	(M00) Mechanical Engineering, Doctoral Academic Studies
13.	DP018	Modern Approach in Development Technological Preparation of Production	(M00) Mechanical Engineering, Doctoral Academic Studies
14.	DP022	Collaborative Engineering	(M00) Mechanical Engineering, Doctoral Academic Studies
15.	ZRD232	Logistics in the Security Services and Health at Work	(Z01) Safety at Work, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)	
1.	Antić, A.,NovákMarcinčin J.,Kovačević, D., Milošević, M., Ungureanu, N.: Depending Tool Vibrations of Tool Wear and Chip Forming Mechanism, New Ways In Manufacturing Technologies 2012, Prešov, Slovakia, 21th 23th June 2012.
2.	Todić, V., Zeljković, M., Tepić, J., Milošević, M., Lukić, D.: Techno-Economic Method for Evaluation and Selection of Flexible Manufacturing Systems, Metalurgija, ISSN 0543-5846, Vol. 51, No. 3, pp.349-353, 2012.
3.	Todić, V., Tepić, J., Kostelac, M., Lukić, D., Milošević, M.: Design and Economic Justification of Group Blanks Application, Metalurgija, ISSN 0543-5846, Vol. 51, No. 2, pp. 269-272, 2012.
4.	Todić, V., Tepić, J., Milošević, M., Lukić, D., Hadžistević M.: Design of Casting Blanks in CAPP System for Parts of Piston-Cylinder Assembly of Internal compustion Engines, Metalurgija, ISSN 0543-5846, Vol. 51, No. 1, pp. 75-78, 2012.
5.	Milošević, M., Todić, V., Lukić, D.: Internet-Based Collaborative System For Process Planning, Journal of Production Engineering, ISSN 1821-4932, Vol.15, No.1, pp.45-48, Faculty of Technical Science, Department of Production Engineering, Novi Sad, 2012.
6.	Tepić, J., Todić, V., Lukić, D., Milošević, M., Borojević, S.: Development of the Computer-Aided Process Planning (CAPP) System for Polymer Injection Mold Manufacturing, Metalurgija, ISSN 0543-5846, Vol.50, No.4, pp. 273-277, 2011.
7.	Milošević, M., Todić, V., Lukić, D.: Web-Based Collaborative Environment for Process Planning, 34th International Conference on Production Engineering, Proceedings, pp.109-112, ISBN 978-86-6055-019-6, Faculty of Mechanical Engineering, Niš, September 2011.
8.	Todić, V., Penezić, N., Lukić, D., Milošević, M.: Tehnološka logistika i preduzetništvo, FTN Izdavaštvo, ISBN 978-86-7892-368-5, Fakultet tehničkih nauka, Novi Sad, 2011.

Representative refferences (minimum 5, not more than 10)	
9.	Milošević, M., Todić, V., Lukić, D.: Model Development of Collaborative System for Process Planning, Proceedings of The International Scientific Conference "Flexible Technologies" - MMA, ISBN 978-86-7892-223-7, pp. 170 - 173, Faculty of Technical Science, Department for Production Engineering, Novi Sad, October 2009.
10.	Todić, V., Lukić, D., Stević, M., Milošević, M.: Integrated CAPP System for Plastic Injection Mold Manufacturing, Materiale Plastice, ISSN 0025-5289, Vol. 45, No. 4, pp. 381-389, 2008.

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	8			
Total of SCI(SSCI) list papers :	5			
Current projects :	Domestic :	0	International :	2

Science, arts and professional qualifications

Name and last name:	Navalušić V. Slobodan
Academic title:	Full Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	01.12.1975
Scientific or art field:	Machine Elements,Construction Principles, Machine and Mechanizm

Academic carieer	Year	Institution	Field
Academic title election:	2006	Faculty of Technical Sciences - Novi Sad	Machine Elements,Construction Principles, Machine and Mechanizm Theory, Power and Motion Transfer and Eng.Communication
PhD thesis	1996	Faculty of Technical Sciences - Novi Sad	Machine Elements,Construction Principles, Machine and Mechanizm Theory, Power and Motion Transfer and Eng.Communication
Magister thesis	1986	Faculty of Technical Sciences - Novi Sad	Machine Elements,Construction Principles, Machine and Mechanizm Theory, Power and Motion Transfer and Eng.Communication
Bachelor's thesis	1975	Faculty of Technical Sciences - Novi Sad	Thermal Energetics and Thermotechnics

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	A555	Perspective	(GI0) Geodesy and Geomatics, Undergraduate Academic Studies
2.	EOS03	Fundamentals in Mechanical Engineering(Machine elements and Materials)	(E01) Power Engineering - Renewble Sources of Electrical Energy, Undergraduate Professional Studies
3.	F202	Fundamentals in Mechanical Engineering	(F00) Graphic Engineering and Design, Undergraduate Academic Studies
4.	GG03	Descriptive Geometry	(G00) Civil Engineering, Undergraduate Academic Studies
5.	GI104	Descriptive Geometry in Geomatics	(GI0) Geodesy and Geomatics, Undergraduate Academic Studies
6.	M108	Engineering Graphic Communications	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
			(M30) Energy and Process Engineering, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
			(P00) Production Engineering, Undergraduate Academic Studies
7.	M2610	Graphic Communications and CAD	(H00) Mechatronics, Undergraduate Academic Studies
8.	S012	Descriptive Geometry and Engineering Drawing	(S00) Traffic and Transport Engineering, Undergraduate Academic Studies
			(S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies
9.	IA013	Interactive Engineering Graphics	(F10) Engineering Animation, Undergraduate Academic Studies
10.	ASO5	Descriptive Geometry with Perspective 1	(AS0) Scenic Architecture, Technique and Design, Undergraduate Academic Studies
11.	ASO9	Descriptive Geometry with Perspective 2	(AS0) Scenic Architecture, Technique and Design, Undergraduate Academic Studies
12.	ZC007	Engineering Graphic Communications	(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
13.	M2511	Methodology of Design	(M22) Mechanization and Construction Engineering, Master Academic Studies
14.	M2655	Maintenance of Agricultural Machinery	(M22) Mechanization and Construction Engineering, Master Academic Studies
15.	AD0013	Theory of curves and surfaces	(AD0) Digital Techniques, Design and Production in Architecture and Urban Planning, Master Academic Studies
16.	DM213	Contemporary Methods of Designing and Machine Constructing	(M00) Mechanical Engineering, Doctoral Academic Studies
17.	DM409	Selected Chapter in Power and Motion Transmission	(M00) Mechanical Engineering, Doctoral Academic Studies
18.	AID04	Haptic devices usage in the virtual environment	(F20) Engineering Animation, Doctoral Academic Studies

	Representative refferences (minimum 5, not more than 10)
1.	Milojević, Z., Navalušić, S., Zeljković, M.: " NC VERIFICATION AS A COMPONENT OF VIRTUAL MANUFACTURING", Academic Journal of Manufacturing Engineering, Vol. 5, No 2-2007., Editura Politehnica, žtimisoara, Romania, pp: 48-54, 2007. ISSN: 1583-7904
2.	Milojević, Z., Navalušić, S., Zeljković, M.: " DEVELOPMENT OF THE MODULE FOR REAL'TIME VERIFICATION OF NC MACHINING PROGRAM", Journal Manufacturing Engineering Manufacturing Accuracy Increasing problems, Wroclaw, 2007
3.	Milojević, Z., Navalušić, S., Zeljković, M.: " AN EXACT APPROACH TO 3-AXIS MILLING NC SIMULATION AND VERIFICATION", Journal Manufacturing Engineering Vol.3, No.5, Kosicah, 2006., pp. 14-17
4.	Milojević, Z., Navalušić, S., Zeljković, M:" DEVELOPMENT OF THE MODULE FOR VERIFICATION OF NC MACHINING PROGRAM ", Journal of Machine Engineering, Vol.5 No. 1-2, Intelligent Machines and factories, Wroclaw, 2005. god., pp. 177-185
5.	Zeljković, M., Zeljković, Ž., Navalušić, S., Milojević, Z.:" SOFTWARE SOLUTION DEVELOPMENT FOR THE GRINDING WHEEL PROFILING CYCLE ON THE CNC GRINDING MACHINE", Journal of Machine Engineering, Vol.4 No. 1-2, Machine tools and factories of the knowledge, Wroclaw, 2004. god., pp. 254-262
6.	Desnica E., Letić D., Gligorić R., Navalušić S.: Implementation of information technologies in higher technical education, Metalurgia international, 2012, Vol. 17, No 3, pp. 76-82, ISSN 1582-2214
7.	Milojević Z., Navalušić S., Milankov M., Obradović R., Harhaji V., Desnica E.: System for femoral tunnel position determination based on the X - ray , HealthMED, 2011, Vol. 5, No 4, pp. 894-900, ISSN 1840-2991
8.	Desnica E., Letić D., Navalušić S.: Concept of distance learning model in graphic communication teaching at university level education, Technics Technologies Education Management, 2010, Vol. 5, No 2, pp. 378-388, ISSN 1840-1503
9.	Milojević Z., Navalušić S., Milankov M., Obradović R., Desnica E., Harhaji V.: Methodology for 3D femur approximate model generation, HealthMED, 2011, Vol. 5, No 5, pp. 1211-1217, ISSN 1840-2991
10.	Navalušić, S., R. Gatalo, M. Zeljković: Automated Gearbox Design Based on Principles of Expert System Building, JSPE Publication Series No.1, Advancement of Intelligent Production, edited by Eiji Usui, Elsevier Science B. V., Amsterdam - Lausanne - New York - Oxford - Shannon - Tokyo, 1994, pp. 45-50

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	0			
Total of SCI(SSCI) list papers :	4			
Current projects :	Domestic :	0	International :	0

Science, arts and professional qualifications

Name and last name:	Novaković N. Branislava
Academic title:	Associate Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	05.12.1997
Scientific or art field:	Deformable Body Mechanics

Academic carieer	Year	Institution	Field
Academic title election:	2011		Deformable Body Mechanics
PhD thesis	2006	Faculty of Technical Sciences - Novi Sad	Deformable Body Mechanics
Magister thesis	2001	Faculty of Technical Sciences - Novi Sad	Deformable Body Mechanics
Bachelor's thesis	1987	Faculty of Technical Sciences - Novi Sad	Theory of Construction

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	GG15	Strength of Materials	(G00) Civil Engineering, Undergraduate Academic Studies
2.	GG410	Selected Chapters in the Theory of Elasticity	(G00) Civil Engineering, Undergraduate Academic Studies
3.	H202	Strength of materials	(H00) Mechatronics, Undergraduate Academic Studies
4.	M2412	Theory of Elasticity	(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
			(P00) Production Engineering, Undergraduate Academic Studies
5.	M4402	Dynamics and Stability of Constructions	(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
6.	BMI96	Mechanics	(BM0) Biomedical Engineering, Undergraduate Academic Studies
7.	II1004	Mechanics and Industrial Engineering	(I10) Industrial Engineering, Undergraduate Academic Studies
8.	M2546	Selected Chapters in the Theory of Elasticity	(M22) Mechanization and Construction Engineering, Master Academic Studies
9.	M4503	Higher Course in Elasticity	(M40) Technical Mechanics and Technical Design, Master Academic Studies
10.	DAU003	Selected Chapters in Mechanics	(E20) Computing and Control Engineering, Doctoral Academic Studies
			(H00) Mechatronics, Doctoral Academic Studies
			(OM1) Mathematics in Engineering, Doctoral Academic Studies
11.	DM403	Mathematical Rod Theory	(M00) Mechanical Engineering, Doctoral Academic Studies
			(M40) Technical Mechanics, Doctoral Academic Studies
			(OM1) Mathematics in Engineering, Doctoral Academic Studies
12.	DZ003	Selected Chapters in Mechanics	(M00) Mechanical Engineering, Doctoral Academic Studies
13.	ZRD16A	Selected chapters in mechanics and elasticity theory	(Z01) Safety at Work, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1.	Atanackovic, T. M., Novakovic, B. N.: ON A FRACTIONAL DERIVATIVE TYPE OF A VISCOELASTIC BODY. Theoretical and Applied Mechanics. Vol. 28-29, pp 27-37, Belgrade 2002
2.	B. N. Novakovic, T. M. Atanackovic.: ON STABILITY OF THE COLUMN WITH A STEP CHANGE IN A CROSS SECTION. Iranian Journal of Science and Technology. Vol 28, No B4, 2004
3.	T. M. Atanackovic, B. N. Novakovic, : OPTIMAL SHAPE OF AN ELASTIC COLUMN ON ELASTIC FOUNDATION. European Journal of Mechanics A/Solids. Vol.25, No 1, pp 154-165, 2006
4.	Branislava N. Novaković: O STABILNOSTI ŠTAPA NA ELASTIČNOJ PODLOZI, Međunarodna konferencija 2006 SAVREMENI PROBLEMI U GRAĐEVINARSTVU, Subotica, 2-3 Jun 2006
5.	Novakovic B., Atanackovic T.: ON THE OPTIMAL SHAPE OF AN ELASTIC ROD ON ELASTIC FUONDATION, The First International Conference on Computational Mechanics, Belgrade, November 15-17, 2004
6.	B. N. Novakovic, STABILITY OF THE COLUMN WITH A STEP CHANGE, 23th Congress of Theoretical and Applied Mechanics, Belgrade, October 12-13, 2001
7.	B. N. Novakovic, ON STABILITY OF THE COLUMN WITH A STEP CHANGE, ISIRR 2002, Novi Sad, October 2002

Representative refferences (minimum 5, not more than 10)	
8.	Atanackovic T., Novakovic B. : STABILITY OF AN ELASTIC ROD ON ELASTIC FOUNDATION,24th Congress of Theoretical and Applied Mechanics, Belgrade, October 9-10, 2003.
9.	B. N. Novaković, T. M. Atanacković: STABILNOST ELASTIČNOG ŠTAPA NA ELASTIČNOJ PODLOZI, INDIS 2003, 9th National and 3rd International scientific meeting, Novi Sad,
10.	Atanackovic T.M., Novakovic B.N.: OPTIMAL SHAPE OF AN ELASTIC, 25th Congress of Theoretical and Applied Mechanics, Novi Sad, June1-3, 2005.

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	2			
Total of SCI(SSCI) list papers :	5			
Current projects :	Domestic :	1	International :	0

Science, arts and professional qualifications

Name and last name:	Pantović B. Jovanka
Academic title:	Full Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	13.06.1993
Scientific or art field:	Mathematics

Academic carieer	Year	Institution	Field
Academic title election:	2010		Mathematics
PhD thesis	2000	Faculty of Sciences - Novi Sad	Mathematical Sciences
Magister thesis	1996	Faculty of Sciences - Novi Sad	Mathematical Sciences
Bachelor's thesis	1991	Faculty of Sciences - Novi Sad	Mathematical Sciences

	List of courses being held by the teacher in the accredited study programmes		

	ID	Course name	Study programme name, study type
1.	E145	Operations Research	(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
			(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
2.	E213	Discrete Mathematics and Linear Algebra	(E20) Computing and Control Engineering, Undergraduate Academic Studies
			(MR0) Measurement and Control Engineering, Undergraduate Academic Studies
			(SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies
			(SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies
3.	E221A	Mathematical Analysis 2	(E20) Computing and Control Engineering, Undergraduate Academic Studies
			(MR0) Measurement and Control Engineering, Undergraduate Academic Studies
4.	GI101	Algebra	(GI0) Geodesy and Geomatics, Undergraduate Academic Studies
5.	H203	Mathematics 3	(H00) Mechatronics, Undergraduate Academic Studies
6.	IAM002	Discrete and Combinatorial Methods for Computer Graphics	(F10) Engineering Animation, Undergraduate Academic Studies
7.	S053N	Operations research	(S00) Traffic and Transport Engineering, Undergraduate Academic Studies
			(S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies
8.	0M512	Models of Computation	(OM1) Mathematics in Engineering, Master Academic Studies
9.	0ML512	Models of Computation	(OM1) Mathematics in Engineering, Master Academic Studies
10.	DZ01MS	Selected Chapters in Mathematics	(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
			(I12) Industrial Engineering, Specialised Academic Studies
			(I22) Engineering Management, Specialised Academic Studies
			(Z00) Environmental Engineering, Specialised Academic Studies
11.	D0M08	Applied Abstract Algebra	(OM1) Mathematics in Engineering, Doctoral Academic Studies
12.	D0M13	Theory of Mobile Processes	(OM1) Mathematics in Engineering, Doctoral Academic Studies
13.	D0M14	Process Algebra	(OM1) Mathematics in Engineering, Doctoral Academic Studies
14.	D0M22	Multiple-Valued Logic	(OM1) Mathematics in Engineering, Doctoral Academic Studies

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
15.	D0M23	Clone Theory	(OM1) Mathematics in Engineering, Doctoral Academic Studies
16.	DZ01M	Selected Chapters in Mathematics	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies (E20) Computing and Control Engineering, Doctoral Academic Studies (F00) Graphic Engineering and Design, Doctoral Academic Studies (F20) Engineering Animation, Doctoral Academic Studies (G00) Civil Engineering, Doctoral Academic Studies (GI0) Geodesy and Geomatics, Doctoral Academic Studies (H00) Mechatronics, Doctoral Academic Studies (I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies (M00) Mechanical Engineering, Doctoral Academic Studies (M40) Technical Mechanics, Doctoral Academic Studies (OM1) Mathematics in Engineering, Doctoral Academic Studies (S00) Traffic Engineering, Doctoral Academic Studies (Z00) Environmental Engineering, Doctoral Academic Studies (Z01) Safety at Work, Doctoral Academic Studies
17.	AID05	Theory of Mobile Processes	(F20) Engineering Animation, Doctoral Academic Studies
18.	AID06	Graph theory	(F20) Engineering Animation, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1. Gilezan S., Pantović J., Žunić J.: Partitioning Finite d-Dimensional Integer Grids with Applications, chapter in: Approximation Algorithms and Metaheuristics (editor: T. F. Gonzalez)., Chapman

2. Ghilezan S., Pantović J., Žunić J.,Separating points by parallel hyperplanes - characteization problem, IEEE Transactions on Neural Networks, 2007, Vol. 18, No. 5, 1356-1363.

3. Mariangiola Dezani-Ciancaglini, Silvia Ghilezan, Jovanka Pantovic, Daniele Varacca: Security types for dynamic web data. Theor. Comput. Sci, 2008, 402(2-3): 156-171

4. Pantović J., Vojvodić D., On the cardinality of nonfinitely based functionally complete algebras, Algebra Universalis, Vol. 43, No. 4, 2000, 369-374.

5. Pantović J., Tošić R., Vojvodić G., The cardinality of functionally complete algebras on a three element set, Algebra Universalis, Vol. 38, No.2, 1997, 136-140.

6. Pantović J., Machida H., Rosenberg I.: Regular sets of operations, Journal of Multiple Valued Logic and Soft Computing, 2012, Vol. 19, No 1-3, pp. 149-162, ISSN 1542-3980

7. Machida H., Pantović J.: Three classes of maximal hyperclones, Journal of Multiple Valued Logic and Soft Computing, 2012, Vol. 18, No 2, pp. 201-210, ISSN 1542-3980

8. Pantović J., Machida H.: Maximal hyperclones on E2 as hypercores   , Journal of Multiple Valued Logic and Soft Computing, 2009, pp. 1-13, ISSN 1542-3980

9. Pantović J., Tošić R., Vojvodić G., Relative completeness with respect to two unary functions, Discrete Applied Mathematics, Vol.113 (2-3), 2001, 337-342.

10. Marinagiola Dezani-Ciancaglini, Silvia Ghilezan, Jovanka Pantović, Security types for dynamic web data, Proceedings of Trustworthy Global Computing, Lecture Notes in Computer Science, 2007, Vol. 4661, str. 263-280.

Summary data for teacher's scientific or art and professional activity:

Quotation total :	30			
Total of SCI(SSCI) list papers :	13			
Current projects :	Domestic :	2	International :	3

Science, arts and professional qualifications

Name and last name:	Petrovački P. Dušan
Academic title:	Emeritus Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	01.01.1971
Scientific or art field:	Automatic Control and System Engineering

Academic carieer	Year	Institution	Field
Academic title election:	2011		Automatic Control and System Engineering
PhD thesis	1979	Faculty of Technical Sciences - Novi Sad	Automatic Control and System Engineering
Magister thesis	1973	Faculty of Technical Sciences - Novi Sad	Automatic Control and System Engineering
Bachelor's thesis	1968	Faculty of Technical Sciences - Novi Sad	Automatic Control and System Engineering

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	AU509	Nonlinear Control Systems	(E20) Computing and Control Engineering, Master Academic Studies
			(MR0) Measurement and Control Engineering, Master Academic Studies
2.	E2515	Intelligent Control Systems	(E20) Computing and Control Engineering, Master Academic Studies
			(MR0) Measurement and Control Engineering, Master Academic Studies
			(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies
3.	GIAU01	Geosensor networks	(E20) Computing and Control Engineering, Master Academic Studies
			(MR0) Measurement and Control Engineering, Master Academic Studies
			(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies
4.	GIAU04	Geospatial data visualization	(E20) Computing and Control Engineering, Master Academic Studies
5.	M3417	Applied industrial automatization	(M30) Energy and Process Engineering, Master Academic Studies
6.	SDGI04	Selected Chapters in Underground Infrastructure Detection	(GI0) Geodesy and Geomatics, Specialised Academic Studies
7.	SDGI08	Selected topics in laser scanning	(GI0) Geodesy and Geomatics, Specialised Academic Studies
8.	SDGI13	Selected topics in spatial data infrastructure	(GI0) Geodesy and Geomatics, Specialised Academic Studies
9.	SDGI3C	Selected topics in Geoportals	(GI0) Geodesy and Geomatics, Specialised Academic Studies
10.	SDGI5F	Basic topics in remote sensing and image processing	(GI0) Geodesy and Geomatics, Specialised Academic Studies
11.	DAU005	Selected Chapters in Optimization Methods	(M00) Mechanical Engineering, Doctoral Academic Studies
12.	DAU011	Selected Chapters in Geographic Information Systems and Technologies	(E20) Computing and Control Engineering, Doctoral Academic Studies
13.	DGI004	Selected Chapters in Underground Infrastructure Utility Detection	(GI0) Geodesy and Geomatics, Doctoral Academic Studies
14.	DGI010	Selected Chapters in Landscape Arrangement	(GI0) Geodesy and Geomatics, Doctoral Academic Studies
15.	DGI016	Selected Chapters in Systems and Signals	(GI0) Geodesy and Geomatics, Doctoral Academic Studies
16.	DGI018	Selected Chapters of Automatic Control Systems	(GI0) Geodesy and Geomatics, Doctoral Academic Studies
17.	DAU005	Selected Chapters in Optimization Methods	(E20) Computing and Control Engineering, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1.	D. Petrovački: "Optimal Control of a Heat Conduction Problem" Journal of Applied Mathematics and Physics, Vol. 26; 463-480, Basel, Switzerland, 1975.
2.	D. Petrovački: "The Minimum Time Problem for a Class of Nonlinear Distributed Parameter Systems", International Journal of Control, Vol. 32, No. 1, 51-62, London, United Kingdom., 1980

Representative refferences (minimum 5, not more than 10)

3.	S. Odri, D. Petrovački, G. Krstonošić: "Evolutional Development of a Multi Level Neural Networks", INNS Neural Networks, Pergamon Press, Volume 6, Number 4, 1993.
4.	V.Pavlica, D.Petrovački: "About simple fuzzy control and fuzzy control based on fuzzy relational equations", International Journal FUZZY SETS AND SYSTEMS, Elsevier-Science, Amsterdam
5.	Ristić A., Petrovački D., Govedarica M.: A New Method to Simultaneously Estimate the Radius of a Cylindrical Object and the Wave Propagation Velocity from GPR Data (SCI 2010 IF=1.416), Computers & Geosciences, 2009. Vol.35, No 8, p 1620-1630, ISSN 0098-3004
6.	Govedarica M., Petrovački D., Sladić D., Ristić A., Jovanović D., Pajić V., Vrtunski M., Ristić A.: ENVIRONMENTAL DATA IN SERBIAN SPATIAL DATA INFRASTRUCTURE - GEOPORTAL OF ECOLOGY (IF 2010 0.178) positively evaluated and accepted for publication in JEPE 2011, Journal of Environmental Protection and Ecology, 2012, ISSN 1311-5065
7.	Ristić A., Abolmasov B., Govedarica M., Petrovački D., Ristić A.: Shallow-landslide spatial structure interpretation using a multi-geophysical approach (IF2011 0.100), Acta Geotechnica Slovenica, 2012, Vol. 9, No 1/2012, pp. 47-59, ISSN 1854-0171
8.	Govedarica M., Sladić D., Petrovački D., Ninkov T., Ristić A.: Metadata Catalogues in Spatial Information Systems (2009 IF = 0.167), Geodetski list, 2010, Vol. 64, No 4, pp. 313-334, ISSN 0016-710X, UDK: 528
9.	Ristić A., Govedarica M., Petrovački D.: GNSS-Status and Perspective, Časopis za procesnu tehniku i energetiku u poljoprivredi (PTEP), 2010, Vol. 14, No 1, pp. 6-10, ISSN 1821-4487, UDK: 63:004(497.11)
10.	Ristić A., Petrovački D., Govedarica M.: Radar Remote Sensing Technologies - the Usage in Agriculture, Časopis za procesnu tehniku i energetiku u poljoprivredi (PTEP), 2010, Vol. 14, No 2, pp. 76-80, ISSN 1821-4487, UDK: 621.396.96(075.8)

Summary data for teacher's scientific or art and professional activity:

Quotation total :	45			
Total of SCI(SSCI) list papers :	5			
Current projects :	Domestic :	9	International :	1

Science, arts and professional qualifications

Name and last name:	Petrović R. Jovan
Academic title:	Associate Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	01.01.1982
Scientific or art field:	Thermal Energetics

Academic carieer	Year	Institution	Field
Academic title election:	2012	Faculty of Technical Sciences - Novi Sad	Thermal Energetics
PhD thesis	2007	Faculty of Technical Sciences - Novi Sad	Thermal Energetics and Thermotechnics
Magister thesis	2002	Faculty of Agriculture - Novi Sad	Process Technics
Bachelor's thesis	1978	Faculty of Technical Sciences - Novi Sad	Thermal Energetics and Thermotechnics

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	I079	Modern Energy Technologies	(M50) Energy Management, Master Academic Studies
			(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
2.	M3304	Boiler Plants	(M30) Energy and Process Engineering, Undergraduate Academic Studies
3.	M3406	Heat Apparatus	(M30) Energy and Process Engineering, Undergraduate Academic Studies
4.	M3409A	Modern Energy Technologies	(M30) Energy and Process Engineering, Undergraduate Academic Studies
5.	Z306	Process Engineering	(Z20) Environmental Engineering, Undergraduate Academic Studies
6.	Z306A	Process Engineering	(Z01) Safety at Work, Undergraduate Academic Studies
			(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
7.	Z412A	Process apparatus for protecting the environment	(Z20) Environmental Engineering, Undergraduate Academic Studies
8.	Z412	Procesni aparati za zaštitu okoline(uneti naziv na engleskom)	(Z20) Environmental Engineering, Undergraduate Academic Studies
9.	M211	Measurement and Regulation	(M30) Energy and Process Engineering, Undergraduate Academic Studies
			(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
10.	M3041	Cogeneration facilities	(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
11.	M3494	Energy efficiency	(M30) Energy and Process Engineering, Undergraduate Academic Studies
			(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
12.	M3497	Energy audits	(M30) Energy and Process Engineering, Undergraduate Academic Studies
			(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
13.	M3518	Energy Management	(M30) Energy and Process Engineering, Master Academic Studies
			(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
14.	I079	Modern Energy Technologies	(M50) Energy Management, Master Academic Studies
			(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
15.	I916	Energy Management in Industry	(M50) Energy Management, Master Academic Studies
16.	I917	Energy Management in Buildings	(M50) Energy Management, Master Academic Studies
17.	I078	Energetska politika	(M50) Energy Management, Master Academic Studies

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
18.	M3515	Energy Systems	(M30) Energy and Process Engineering, Master Academic Studies
			(M50) Energy Management, Master Academic Studies
19.	M3518	Energy Management	(M30) Energy and Process Engineering, Master Academic Studies
			(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
20.	M3M01	Implementation of Energy Management in Industry and Buildings	(ZC0) Clean Energy Technologies, Master Academic Studies
21.	M5025	Energy audits	(M50) Energy Management, Master Academic Studies
22.	DM216	Energy Systems	(M00) Mechanical Engineering, Doctoral Academic Studies
23.	DM217	Energy Management in Idustry	(M00) Mechanical Engineering, Doctoral Academic Studies
24.	DM218	Contemporary Energy Technologies	(M00) Mechanical Engineering, Doctoral Academic Studies
25.	DM219	Energy Politics	(M00) Mechanical Engineering, Doctoral Academic Studies
26.	DM332	Energy Management in Buildings	(M00) Mechanical Engineering, Doctoral Academic Studies
27.	DM333	Renewable Energy Resoruces	(M00) Mechanical Engineering, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1. Bojić M. at al: 24th International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems - ECOSS 2011, Novi Sad, 2011, pages 3958, ISBN 978-86-6055-016-5 (member of editorial team)

2. Ćosić I. at al: 4th Internationa Conference on Engineering Technologies ICET 2009, Novi Sad, 2009, pages 523, ISBN 978-86-7892-227-5 (member of editorial team)

3. Gvozdenac, D., Menke, C., Vallikul, P., Petrović, J., Gvozdenac, B.: Assessment of potential for natural gas/based cogeneration in Thailand, Energy, Vol. 34, No.4, pp. 465–475.

4. JOVAN R. PETROVIĆ, BRANKA GVOZDENAC – UROŠEVIĆ, JOSIP J. POLC: Reasons for heat demand changes and effects on planning and development of heating systems, Thermal Sciences, Year 2112, Vol. 16, Suppl. 1, pp S63-S77, ISSN 0354-9836, UDC 621

5. MIROSLAV V. KLJAJIĆ, JOVAN R. PETROVIĆ: Applicability assessment of central and solar hot water system integration in Serbia, Thermal Sciences, Year 2012, Vol. 16, Suppl. 1, pp S63-S77, ISSN 0354-9836, UDC 621

6. GVOZDENAC D, PETROVIC J, GVOZDENAC B.: Industrial Gas Turbine Operation Procedure Improvement, Thermal Science, Vol. 15 (2011), pages 17-28, UDC: 662.76.035/.036, DOI: 10.2298/TSCI100516012G

7. GVOZDENAC D., PETROVIC J.: Survey of Activities in the Subnetwork in Food Processing Industry; ENCONET NEWSLETTER, Prague, Czechoslovakia, 1989, No 2, pp. 32-35.

8. PETROVIĆ Lj., MANOJLOVIĆ D., PETROVIĆ M., GVOZDENAC D., PETROVIĆ J.: Uticaj brzine hlađenja na kvalitet svinjskog mesa; "Tehnologija mesa", Beorad, 1990., br. 4, str. 128-135

9. GRKOVIĆ V., PETROVIĆ J.: Pokazatelji energetske efikasnosti kod postrojenja za spregnutu proizvodnju električne i toplotne energije (SPETE), "Termotehnika", Beograd, 1991., br. 1-2, str. 27-39

10. PETROVIC J., GVOZDENAC D., PERUNOVIC P.: Monitoring of the Operating Thermal Performances in a Water Heating Boiler - Case Study; ENCONET NEWSLETTER, Prague, Czechoslovakia, No. 4, 1991

Summary data for teacher's scientific or art and professional activity:

Quotation total :	7			
Total of SCI(SSCI) list papers :	4			
Current projects :	Domestic :	3	International :	0

Science, arts and professional qualifications

Name and last name:	Pilić M. Branka
Academic title:	Associate Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technology - Novi Sad
	01.10.2000
Scientific or art field:	Technological Engineering

Academic carieer	Year	Institution	Field
Academic title election:	2011	Faculty of Technology - Novi Sad	Technological Engineering
PhD thesis	2006	Faculty of Technology - Novi Sad	Technological Engineering
Magister thesis	2001	Faculty of Technology - Novi Sad	Technological Engineering
Bachelor's thesis	1991	Faculty of Technology - Novi Sad	Technological Engineering

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	P3402	Physical and Phase States of Polymers	(P00) Production Engineering, Undergraduate Academic Studies
2.	DP026	Modern methods for polymers investigation	(M00) Mechanical Engineering, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1.	Bera, O., Pavličević, B., Jovičić, M., Stoiljković, D., Pilić, B., Radičević, R.,The influence of nanosilica on styrene free radical polymerization kinetics, Polymer Composites, Vol 33 (2012), pp 262-266.
2.	Bera, O., Pilić, B., Pavličević, J., Jovičić, M., Holo, B., Mészáros Szécsényi, K., Špirkova, M.: Preparation and thermal properties of polystyrene/silica nanocomposites, Thermochimica Acta, 2011, Vol. 515, pp. 1-5, ISSN 0040-6031.
3.	Bjelović Z., Ristić I.S., Budimski-Simendić J., Jovičić M., Pavličević J., Pilić B., Cakić S., Ispitivanje kinetike reakcije dobijanja poliuretana na osnovu različitih tipova diizocijanata i ricinusovog ulja, Hemijska industrija 2012 doi 10.2298/HEMIND 111216014B, 123/135.
4.	Balos, S., Balos, T., Sidjanin, L., Markovic, D., Pilic, B., Pavlicevic, J., Study of PMMA biopolymer properties treated by microwave energy, Materiale Plastice, 2011, Vol 48, No 2, pp 127-131.
5.	Baloš, S., Baloš, T., Šiđanin, L., Marković, D., Pilić, B., Pavličević, J.: Flexural and Impact Strength of Microwave Treated Autopolymerized Poly (Methyl - Methacrylate), Materiale Plastice, 2009, Vol. 46, pp. 261-265, ISSN 0025-5289.
6.	Stoiljković D., Pilić B., Bulajić M., Đurasović N., Ostrovskii N.,The charge percolation mechanism and simulation of Ziegler-Natta polymerizations, Part VII, Effects of chromium active centers distribution on silica on the polymerization of ethylene, Journal of the Serbian Chemical Society, 73 (1), 2008, pp 97-111
7.	Stoiljković D., Pilić B., Bulajić M., Đurasović N., Ostrovskii N. Naziv, The charge percolation mechanism and simulation of Ziegler-Natta polymerizations, Part VI. Mechanism of ethylene polymerization by supported chromium oxide, Journal of the Serbian Chemical Society 72 (11), 2007, pp 1155-1169
8.	Pilic B., Stoiljkovic D., Bakocevic I., Jovanovic S., Panic D., Korugic-Karasz Lj., The charge percolation mechanism and simulation of Ziegler-Natta polymerization, Part III, Oxidation states of transition metals, Journal of the Serbian Chemical Society 71 (4), 2006, pp 357-372
9.	Pilic B., Stoiljovic D., Bakocevic I., Jovanovic S., Panic D., Korugic-Karasz Lj., Polymer Structure Prediction by Computer Simulation of Ziegler-Natta Polymerization based on Charge Percolation Mechanism, Material Science Forum Vol 518,2006, pp 381-386
10.	Pilic B., Stoiljkovic D., Bakocevic I., Jovanovic S., Panić D., Korugic-Karasz Lj., New percolation theory and simulation of Ziegler-Natta polymerization, Part II, Importance of support nano-particles, in Korugic-Karasz Lj., MacKnight W. and Martuscelli E., Editors "New Polymeric Materials", ACS Symposium Series 916, Ch. 16, 2005, pp 215-228,

Summary data for teacher's scientific or art and professional activity:

Quotation total :	3		
Total of SCI(SSCI) list papers :	11		
Current projects :	Domestic :	2	International :	1

Science, arts and professional qualifications

Name and last name:	Pilipović R. Stevan
Academic title:	Full Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Sciences - Novi Sad
	01.01.1973
Scientific or art field:	Mathematics

Academic carieer	Year	Institution	Field
Academic title election:	1987	Faculty of Sciences - Novi Sad	Mathematics
PhD thesis	1979	Faculty of Sciences - Novi Sad	Mathematics
Magister thesis	1977	Faculty of Mathematics - Beograd	Mathematics
Bachelor's thesis	1973	Faculty of Sciences - Novi Sad	Mathematics

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	DAU004	Selected Chapters in Mathematics 2	(E20) Computing and Control Engineering, Doctoral Academic Studies
			(H00) Mechatronics, Doctoral Academic Studies
2.	DZ01M	Selected Chapters in Mathematics	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies
			(E20) Computing and Control Engineering, Doctoral Academic Studies
			(F00) Graphic Engineering and Design, Doctoral Academic Studies
			(F20) Engineering Animation, Doctoral Academic Studies
			(G00) Civil Engineering, Doctoral Academic Studies
			(GI0) Geodesy and Geomatics, Doctoral Academic Studies
			(H00) Mechatronics, Doctoral Academic Studies
			(I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
			(M00) Mechanical Engineering, Doctoral Academic Studies
			(M40) Technical Mechanics, Doctoral Academic Studies
			(OM1) Mathematics in Engineering, Doctoral Academic Studies
			(S00) Traffic Engineering, Doctoral Academic Studies
			(Z00) Environmental Engineering, Doctoral Academic Studies
			(Z01) Safety at Work, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1. Atanacković TM, Oparnica L, Pilipović S: On a model of viscoelastic rod in unilateral contact with a rigid wall, IMA JOURNAL OF APPLIED MATHEMATICS, (2006) vol.71 br.1 str. 1-13.

2. Atanackovic, TM Pilipovic, S Zorica, D: A diffusion wave equation with two fractional derivatives of different order, JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, (2007) vol.40 br.20 str. 5319-5333

3. Pilipovic, S. Teofanov, N. : Multiresolution expansion, approximation order and quasiasymptotic behavior of tempered distributions, JOURNAL OF MATHEMATICAL ANALYSIS AND APPLICATIONS, (2007) vol.331 br.1 str. 455-471

4. Oberguggenberger, M. Pilipovic, S. Scarpalezos, D. : Positivity and positive definiteness in generalized function algebras, JOURNAL OF MATHEMATICAL ANALYSIS AND APPLICATIONS, (2007) vol.328 br.2 str. 1321-1335

5. Oberguggenberger, M. Pilipovic, S. Valmorin, V. : Global representatives of Colombeau holomorphic generalized functions, MONATSHEFTE FUR MATHEMATIK, (2007) vol.151 br.1 str. 67-74

6. Pilipovic, S Scarpalezos, D : Divergent type quasilinear Dirichlet problem with singularities, ACTA APPLICANDAE MATHEMATICAE, (2006) vol.94 br.1 str. 67-82

7. Pilipovic, Stevan Vuletic, Mirjana : Characterization of wave front sets by wavelet transforms, TOHOKU MATHEMATICAL JOURNAL, (2006) vol.58 br.3 str. 369-391

8. Hormann, G Oberguggenberger, M Pilipovic, S : Microlocal hypoellipticity of linear partial differential operators with generalized functions as coefficients, TRANSACTIONS OF THE AMERICAN MATHEMATICAL SOCIETY, (2006) vol.358 br.8 str. 3363-3383

9. Mitrovic, D Pilipovic, S : Approximations of linear Dirichlet problems with singularities, JOURNAL OF MATHEMATICAL ANALYSIS AND APPLICATIONS, (2006) vol.313 br.1 str. 98-119

10. Pilipovic, Stevan Scarpalezos, Dimitris Valmorin, Vincent : Equalities in algebras of generalized functions, FORUM MATHEMATICUM, (2006) vol.18 br.5 str. 789-801

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	250			
Total of SCI(SSCI) list papers :	258			
Current projects :		Domestic :	0	International :	0

Science, arts and professional qualifications

Name and last name:	Plančak E. Miroslav
Academic title:	Full Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	01.01.1975
Scientific or art field:	Plastic Deformation Technology, Rapid Prototyping, Virtual

Academic carieer	Year	Institution	Field
Academic title election:	1995	Faculty of Technical Sciences - Novi Sad	Plastic Deformation Technology, Rapid Prototyping, Virtual
PhD thesis	1985	Faculty of Technical Sciences - Novi Sad	Plastic Deformation Technology, Rapid Prototyping, Virtual
Magister thesis	1979	Faculty of Technical Sciences - Novi Sad	Plastic Deformation Technology
Bachelor's thesis	1969	Faculty of Technical Sciences - Novi Sad	Plastic Deformation Technology, Rapid Prototyping, Virtual

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	IA016	Introduction to Virtual Reality Technology	(F10) Engineering Animation, Undergraduate Academic Studies
2.	P207	Metal forming	(P00) Production Engineering, Undergraduate Academic Studies
3.	P2401	Advanced Methods in Metal Forming	(P00) Production Engineering, Undergraduate Academic Studies
4.	P2413	Computer Aided Design of Tools and Dies for Metal Forming	(P00) Production Engineering, Undergraduate Academic Studies
5.	P303	Machines for Processing by Deforming	(P00) Production Engineering, Undergraduate Academic Studies
6.	P3403	Technology of Plastic Forming - Shaping of plastic material	(P00) Production Engineering, Undergraduate Academic Studies
7.	P3503	Machines and Devices for Plastic Processing	(P00) Production Engineering, Undergraduate Academic Studies
8.	BM119D	Reverse engineering and rapid prototyping in biomedical engineering	(BM0) Biomedical Engineering, Undergraduate Academic Studies
9.	M2062	Mechanical engineering technologies 2	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
10.	P2407	Rapid Prototyping and Rapid Tooling	(PM0) Production Engineering, Master Academic Studies
11.	P3501	Tool Designing for Plastic	(PM0) Production Engineering, Master Academic Studies
12.	P3503A	Contemporary Process Systems for Plastic Treatment	(PM0) Production Engineering, Master Academic Studies
13.	NIT01	Innovative Product Development	(NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies
14.	BMIM4B	Technologies of shaping biomedical materials	(BM0) Biomedical Engineering, Master Academic Studies
			(PM0) Production Engineering, Master Academic Studies
15.	MIA11	Machines and dies for powder forming	(PM0) Production Engineering, Master Academic Studies
16.	P321	Reverse Engineering and Rapid Prototyping	(I10) Industrial Engineering, Master Academic Studies
17.	PMISP1	Modelling and Simulation of Metal Forming Processes	(PM0) Production Engineering, Master Academic Studies
18.	DM411	Contemporary Approach to Integration of Reverse Engineering of Rapid Prototyping, Tools, Products and Virtual Manufacturing	(M00) Mechanical Engineering, Doctoral Academic Studies
19.	DP001	Design and Research Methods in Production Engineering	(M00) Mechanical Engineering, Doctoral Academic Studies
20.	DP005	State and Tendencies in Development of Metrology, Quality and Equipment	(M00) Mechanical Engineering, Doctoral Academic Studies
21.	DP008	Contemporary Methods and TPD Systems	(M00) Mechanical Engineering, Doctoral Academic Studies
22.	DP012	Physical Modelling and TPD Simulation by Computers	(M00) Mechanical Engineering, Doctoral Academic Studies
23.	DP015	Nonconventional Procedures of Forming in TPD	(M00) Mechanical Engineering, Doctoral Academic Studies
24.	DP027	Advanced technologies of plastics packiging manufacturing	(M00) Mechanical Engineering, Doctoral Academic Studies
25.	DP029	Advanced Development of Polymeric Products	(M00) Mechanical Engineering, Doctoral Academic Studies

	Representative refferences (minimum 5, not more than 10)
1.	Essa K., Kacmarcik I., Hartley P., Plancak M., Vilotic D.: Upsetting of bi-metallic ring billets, Journal of Materials Processing Technology, 2012, Vol 212, Nr 4, pp. 817-824, ISSN/ISBN: 0924-0136
2.	Vilotić D., Plančak M., Čupković Đ., Aleksandrov S., Aleksandrov N.: Free Surface Fracture in Three Upsetting Tests, Experimental Mechanics, 2006, Vol 46, pp. 115-120, ISSN: 0014-4851
3.	Plančak M., Bramley A. N., Osman F. H.: Some observation on contact stress measurement by pin load cell in bulk metal forming, Journal of Material and Processing Technology 60, 1996, pp. 339-342, ISSN/ISBN: 0924-0136
4.	Plančak M., Bramley A. N.. Osman F. H.: Non conventional cold extrusion, Journal of Material and Processing Technology 34, 1992, pp. 465-472, ISSN/ISBN: 0924-0136
5.	Hiroši I., Plančak M.: Coining process as a means of controlling surface microgeometry, Journal of Material Processing Technology, Vol 80-81, 1998, pp. 101-107, ISSN/ISBN: 0924-0136
6.	Plančak M., Vollertsen F., Woitschig J.: Analysis, finite element simulation and experimental investigation of friction in tube hydroforming, Journal of Material Processing Technology, Vol. 170, Issue I-2, 2005, pp.220-228, ISSN/ISBN: 0924-0136
7.	Vollertsen F., Plančak M.: On possibilities for the determination of the coefficient of friction in hydroforming of tubes, Journal of Material processing Technology, Vol 125-126, 2002, pp. 412-420, ISSN/ISBN: 0924-0136
8.	Plančak M.: Stress distribution within specimen in cold forward extrusion of steel, Journal of Materials Processing Technology, Vol 24, 1990, pp. 387-394, ISSN/ISBN: 0924-0136
9.	Vilotic D., Alexandrov S., Plancak M., Vilotic M., Ivanisevic I., Kacmarcik I.: Material Formability at Upsetting by Cylindrical and Flat Dies, Steel Research International Special Issue, 2012, pp. 1175-1178, ISSN: 1611-3683
10.	Plancak M., Hartley P., Essa K., Vilotic D., Movrin D, Luzanin O.: Deformation analysis during bi-metallic coining operations, Steel Research International Special Issue, 2012, pp. 1247-1250, ISSN/ISBN: 1611-3683

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	92			
Total of SCI(SSCI) list papers :	23			
Current projects :	Domestic :	1	International :	2

Science, arts and professional qualifications

Name and last name:	Rajković R. Milan
Academic title:	Senior Science Associate
Name of the institution where the teacher works full time and starting date:	Vinča Institute of Nuclear Sciences - Vinča
	01.01.2000
Scientific or art field:	Physical Science

Academic carieer	Year	Institution	Field
Academic title election:	2005	Vinča Institute of Nuclear Sciences - Vinča	Physical Science
PhD thesis	1997	University of Belgrade - Beograd	Physics
Magister thesis	1983	University of Pennsylvania - Tennessee	Physics
Bachelor's thesis	1982	University of Pennsylvania - Tennessee	Physics

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	DZ01M	Selected Chapters in Mathematics	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies (E20) Computing and Control Engineering, Doctoral Academic Studies (F00) Graphic Engineering and Design, Doctoral Academic Studies (F20) Engineering Animation, Doctoral Academic Studies (G00) Civil Engineering, Doctoral Academic Studies (GI0) Geodesy and Geomatics, Doctoral Academic Studies (H00) Mechatronics, Doctoral Academic Studies (I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies (M00) Mechanical Engineering, Doctoral Academic Studies (M40) Technical Mechanics, Doctoral Academic Studies (OM1) Mathematics in Engineering, Doctoral Academic Studies (S00) Traffic Engineering, Doctoral Academic Studies (Z00) Environmental Engineering, Doctoral Academic Studies (Z01) Safety at Work, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1.	D. Horak, S. Maletić, M. Rajković, Persistent Homology of Complex Networks, Journal of Statistical Mechanics and Applications (2009) P03034.
2.	Milan Rajković, M.M. Škorić, K. Sølna and G. Antar, Characetrization of Local Turbulence in Magnetic Confinement Devices, Nuclear Fusion 48 (2008) 1-13.
3.	Mladen Nikolić and Milan Rajković, A group theoretic approach to a class of third-order differential equations with two parameter symmetry group solvable by quadratures, Nonlinear Dynamics 48 (2007) 17-27.
4.	Mladen Nikolić and Milan Rajković, Bifurcations in Nonlinear Models of Fluid Conveying Pipes, Journal of Fluids and Structures, 22 (2006),
5.	Z. Mihailović and M. Rajković, Cooperative Parrondo's games on a two-dimensional lattice, Physica A 365 (2006) 244-251
6.	Milan Rajković, Tomo-hiko Watanabe and M.M. Škorić, Level crossing function in the Analysis of Confined Plasma Turbulence, Nuclear Fusion 49 (2009) 095016i
7.	Milan Rajković and M.M. Škorić, Characterization of Intermittency in Plasma Edge Turbulence; Contributions to Plasma Physics 48 (2008) L31-L35.
8.	M. Rajković, Nonextensive entropy as a measure of time series complexity, Physica A 340 (2004) 327-333
9.	M. Rajković and Z. Mihailović, Quantifying Complexity in the Minority Game, Physica A 325 (2003) 40 - 47
10.	Z. Mihailović and M. Rajković, One-dimensional Asynchronous Cooperative Parrondo's Games, Fluctuation and Noise Letters 3 (2003) L389 - 398

Summary data for teacher's scientific or art and professional activity:

Quotation total :	100				
Total of SCI(SSCI) list papers :	22				
Current projects :		Domestic :	1	International :	1

Science, arts and professional qualifications

Name and last name:		Ralević M. Nebojša	
Academic title:		Full Professor	
Name of the institution where the teacher works full time and starting date:		Faculty of Technical Sciences - Novi Sad	
		01.10.1990	
Scientific or art field:		Mathematics	
Academic carieer	Year	Institution	Field
Academic title election:	2010	Faculty of Technical Sciences - Novi Sad	Mathematics
PhD thesis	1997	Faculty of Sciences - Novi Sad	Mathematical Sciences
Magister thesis	1994	Faculty of Sciences - Novi Sad	Mathematical Sciences
Bachelor's thesis	1990	Faculty of Sciences - Novi Sad	Mathematical Sciences

	List of courses being held by the teacher in the accredited study programmes		

	ID	Course name	Study programme name, study type
1.	H103	Mathematics 1	(H00) Mechatronics, Undergraduate Academic Studies
2.	H107	Mathematics 2	(H00) Mechatronics, Undergraduate Academic Studies
3.	M4201	Mathematics 3	(M30) Energy and Process Engineering, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
4.	M4202	Applied Mathematical Analysis	(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
5.	P216	Numerical Analysis	(P00) Production Engineering, Undergraduate Academic Studies
6.	0M502	Partial Differential Equations	(OM1) Mathematics in Engineering, Master Academic Studies
7.	0M508	Mathematical Foundations of Fuzzy Systems	(OM1) Mathematics in Engineering, Master Academic Studies
8.	0M517	Numerical Analysis	(OM1) Mathematics in Engineering, Master Academic Studies
9.	0ML502	Partial Differential Equations	(OM1) Mathematics in Engineering, Master Academic Studies
10.	0ML508	Mathematical Foundations of Fuzzy Systems	(OM1) Mathematics in Engineering, Master Academic Studies
11.	0ML517	Numerical Analysis	(OM1) Mathematics in Engineering, Master Academic Studies
12.	DZ01MS	Selected Chapters in Mathematics	(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
			(I12) Industrial Engineering, Specialised Academic Studies
			(I22) Engineering Management, Specialised Academic Studies
			(Z00) Environmental Engineering, Specialised Academic Studies
13.	Z506	20BAdvanced Course in Mathematics 1	(ZP1) Disaster Risk Management and Fire Safety, Master Academic Studies
			(Z20) Environmental Engineering, Master Academic Studies
14.	Z506	Viši kurs matematike 1(uneti naziv na engleskom)	(Z20) Environmental Engineering, Master Academic Studies
15.	D0M02	Partial Differential Equations	(OM1) Mathematics in Engineering, Doctoral Academic Studies
16.	D0M07	Mathematical Foundations of Fuzzy Systems	(OM1) Mathematics in Engineering, Doctoral Academic Studies
17.	D0M21	Fuzzy Systems and Their Applications	(OM1) Mathematics in Engineering, Doctoral Academic Studies
18.	D0M38	Non-linear Equations and Their Applications	(OM1) Mathematics in Engineering, Doctoral Academic Studies
19.	D0M39	Optimization Methods and Mathematical Modelling	(OM1) Mathematics in Engineering, Doctoral Academic Studies

	ID	Course name	Study programme name, study type
20.	DOM54	Computational geometry	(F20) Engineering Animation, Doctoral Academic Studies (OM1) Mathematics in Engineering, Doctoral Academic Studies
21.	DOM55	Pattern Recognition	(F20) Engineering Animation, Doctoral Academic Studies (OM1) Mathematics in Engineering, Doctoral Academic Studies
22.	DZ01M	Selected Chapters in Mathematics	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies (E20) Computing and Control Engineering, Doctoral Academic Studies (F00) Graphic Engineering and Design, Doctoral Academic Studies (F20) Engineering Animation, Doctoral Academic Studies (G00) Civil Engineering, Doctoral Academic Studies (GI0) Geodesy and Geomatics, Doctoral Academic Studies (H00) Mechatronics, Doctoral Academic Studies (I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies (M00) Mechanical Engineering, Doctoral Academic Studies (M40) Technical Mechanics, Doctoral Academic Studies (OM1) Mathematics in Engineering, Doctoral Academic Studies (S00) Traffic Engineering, Doctoral Academic Studies (Z00) Environmental Engineering, Doctoral Academic Studies (Z01) Safety at Work, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1. E. Pap, N. Ralević, Pseudo-Laplace transform, Nonlinear Analysis: Theory Methods and Applications, 33 (1998), 533-550.

2. N. M. Ralević, Lj. M. Nedović, T. Grbić, The pseudo-linear superposition principle for nonlinear partial differential equations and representation of their solution by the pseudo-integral, Fuzzy Sets and Systems 155 (2005) 89-101.

3. Lj. M. Nedović, N. M. Ralević, T. Grbić,Large deviation principle with generated pseudo measures,Fuzzy Sets and Systems 155 (2005) 65-76.

4. T. Lukić, N. M. Ralević, Geometric Mean Newton"s Method for Simple and Multiple Roots, Applied Mathematics Letters (accepted).

5. N. M. Ralević,One characterization of Navier-Stokes equation, Acta Mechanica Slovaca, Košice, ročnik 8., č. 4/2004, str. 97-102.

6. N. Ralević, Some new properties of g-calculus, Univ. u Novom Sadu Zb. Rad. Prirod.-Mat. Fak. Ser. Mat. 24, 1 (1994), 139-157.

7. E. Pap, N. Ralević, Pseudo operations on finite intervals, Novi Sad J. Math. Vol. 29, No. 1, 1999, 1-6

8. N. M. Ralević, A generalization of the Pseudo-Laplace transform, Novi Sad J. Math. Vol. (accepted).

9. I. Kovačević, N. Ralević, Funkcionalna analiza, Edicija tehničke nauke, Novi Sad (2004), 203 str.

10. I. Kovačević, N. Ralević, Matematička analiza I (uvodni pojmovi i granični procesi), Novi Sad (2000), 155 str.

Summary data for teacher's scientific or art and professional activity:

Quotation total :	28			
Total of SCI(SSCI) list papers :	10			
Current projects :		Domestic :	2	International :	0

Science, arts and professional qualifications

Name and last name:		Satarić V. Miljko	
Academic title:		Full Professor	
Name of the institution where the teacher works full time and starting date:		Faculty of Technical Sciences - Novi Sad	
		03.01.1973	
Scientific or art field:		Physics	
Academic carieer	Year	Institution	Field
Academic title election:	1995	Faculty of Technical Sciences - Novi Sad	Physics
PhD thesis	1984	School of Electrical Engineering - Beograd	Physics
Magister thesis	1979	School of Electrical Engineering - Beograd	Physics
Bachelor's thesis	1972	Faculty of Sciences - Novi Sad	Physics

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	E103	Physics	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (MR0) Measurement and Control Engineering, Undergraduate Academic Studies
2.	E215	Physics	(E20) Computing and Control Engineering, Undergraduate Academic Studies
3.	Z103	Selected Chapters in Physics 1	(Z01) Safety at Work, Undergraduate Academic Studies (Z20) Environmental Engineering, Undergraduate Academic Studies
4.	Z110	Selected Chapters in Physics 2	(Z01) Safety at Work, Undergraduate Academic Studies (Z20) Environmental Engineering, Undergraduate Academic Studies
5.	EI410	Biophysics	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
6.	DE203S	Odabrana poglavlja iz kvantne elektronike	(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
7.	DE301S	Molekularna elektronika(uneti naziv na engleskom)	(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
8.	DZ01FS	Selected Chapters in Physics	(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies (I12) Industrial Engineering, Specialised Academic Studies (I22) Engineering Management, Specialised Academic Studies (Z00) Environmental Engineering, Specialised Academic Studies
9.	EM511	Quantum and Organic Electronics	(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies
10.	SI028	Biophysics	(E00) Power, Electronic and Telecommunication Engineering, Specialised Professional Studies
11.	DE203	Selected Chapters in Quantum Electronics	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies
12.	DE301	Molecular Electronics	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
13.	DZ01F	Selected Chapters in Physics	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies
			(E20) Computing and Control Engineering, Doctoral Academic Studies
			(F00) Graphic Engineering and Design, Doctoral Academic Studies
			(G00) Civil Engineering, Doctoral Academic Studies
			(GI0) Geodesy and Geomatics, Doctoral Academic Studies
			(H00) Mechatronics, Doctoral Academic Studies
			(I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
			(M00) Mechanical Engineering, Doctoral Academic Studies
			(M40) Technical Mechanics, Doctoral Academic Studies
			(OM1) Mathematics in Engineering, Doctoral Academic Studies
			(S00) Traffic Engineering, Doctoral Academic Studies
			(Z00) Environmental Engineering, Doctoral Academic Studies
			(Z01) Safety at Work, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)	
1.	S. Zdravković, M.V. Satarić, "Single-Molecule Unzipping Experiments on DNA Peyrard-Bishop-Dauxois Model",Phys.Rev.E73,021905-11,2006.
2.	J. A. Tuszynski, J. A. Brown, E. Crawford, E. J. Carpenter, M. L. A. Nip, J. M. Dixon, M. Satarić, "Molecular dynamics simulations of tubulin structure and calculations of electrostatic properties of microtubules", Mathematical and Computer Modelling, vol. 41, no.10, pp. 1055-1070, 2005.
3.	M. Satarić, B. Satarić, J. A. Tuszynski, "Nonlinear model of microtubule dynamics", Electromagnetic Biology and Medicine, vol.24, no. 3, pp. 255-264, 2005.
4.	S. Zdravković J. A. Tuszynski, M. Satarić "Peyrard-Bishop-Dauxois model of DNA dynamics and impact of viscosity", Journal of Computational and Theoretical Nanoscience, vol. 2, no. 2, pp. 263-271, 2005.
5.	S. Zdravković, M. Satarić, "Optical and Acoustical Frequencies in a Nonlinear Helicoidal Model of DNA Molecule", Chinese Physics Letters 22, pp. 850-853, 2005.
6.	S. Portet, J. A. Tuszynski, J. M. Dixon, M. Satarić, "Models of spatial and orientational self-organization of microtubules under the influence of gravitational fields", Physical Review E, vol. 68, no. 2, 2003.
7.	M. Satarić, J. A. Tuszynski, "Relationship between the nonlinear ferroelectric and liquid crystal models for microtubules", Physical Review E, vol. 67, no. 1, 2003.
8.	S. Zdravković, M. Satarić, "DNA dynamics and big viscosity", International Journal of Modern Physics B, vol.17, no. 31-32, pp. 5911-5923, 2003.
9.	M. Satarić, J. A. Tuszynski, "Impact of regulatory proteins on the nonlinear dynamics of DNA", Physical Review E, vol. 65, no. 5, 2002.
10.	G. Keković, D. Raković, M. Satarić, D. Koruga, "A kink-soliton model of charge transport through microtabular cytoskeleton", Current Research in Advanced Materials and Processes, vol. 494, pp. 507-512, 2005.

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	295			
Total of SCI(SSCI) list papers :	67			
Current projects :	Domestic :	1	International :	2

Science, arts and professional qualifications

Name and last name:	Sekulić Lj. Milenko
Academic title:	Associate Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	14.03.1994
Scientific or art field:	Processes for Material Removal Processing

Academic carieer	Year	Institution	Field
Academic title election:	2012	Faculty of Technical Sciences - Novi Sad	Processes for Material Removal Processing
PhD thesis	2007	Faculty of Technical Sciences - Novi Sad	Processes for Material Removal Processing
Magister thesis	1998	Faculty of Technical Sciences - Novi Sad	Processes for Material Removal Processing
Bachelor's thesis	1993	Faculty of Technical Sciences - Novi Sad	Processes for Material Removal Processing

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	P1406	Theory of Machining Processes	(P00) Production Engineering, Undergraduate Academic Studies
2.	P1507	Inovational Technologies	(P00) Production Engineering, Undergraduate Academic Studies
3.	P208	Technology for Cutting Processing	(P00) Production Engineering, Undergraduate Academic Studies
4.	P305	Nonconventional Procedures in Processing	(P00) Production Engineering, Undergraduate Academic Studies
5.	P4410	Design and Product Functionality	(P00) Production Engineering, Undergraduate Academic Studies
6.	P316A	Technology for Microcutting Processes	(P00) Production Engineering, Undergraduate Academic Studies
7.	P1501	Ecological Technologies and Systems	(M40) Technical Mechanics and Technical Design, Master Academic Studies
			(PM0) Production Engineering, Master Academic Studies
8.	P1505	Modelling and Simulation in Processing	(PM0) Production Engineering, Master Academic Studies
9.	P1509	Highly Productive Processing	(PM0) Production Engineering, Master Academic Studies
10.	P3502	Mold and die machining technology	(PM0) Production Engineering, Master Academic Studies
11.	P4410A	Production Design	(PM0) Production Engineering, Master Academic Studies
12.	PP101	Inteligent Forming Processes	(PM0) Production Engineering, Master Academic Studies
13.	ZRMI2A	Product safety and user/consumer protection	(Z01) Safety at Work, Master Academic Studies
14.	DP001	Design and Research Methods in Production Engineering	(M00) Mechanical Engineering, Doctoral Academic Studies
15.	DP002	State and Trend in Forming by Material Removal	(M00) Mechanical Engineering, Doctoral Academic Studies
16.	DP009	Artificial Intelligence Application in Forming by Material Removal	(M00) Mechanical Engineering, Doctoral Academic Studies
17.	DP020	State and Tendencies in Development of Unconventional Forming Processes	(M00) Mechanical Engineering, Doctoral Academic Studies
18.	DP021	Selected Chapters in Micro and Nano Forming by Material Removal	(M00) Mechanical Engineering, Doctoral Academic Studies
19.	ZRD211	Sustainable design and product safety	(Z01) Safety at Work, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1. Gostimirović M., Kovač P., Sekulić M., Škorić B.: Influence of discharge energy on machining characteristics in EDM, J MECH SCI TECHNOL, 2012, Vol. 26, No 1, pp. 173-179, ISSN 1738-494X
2. Cukor G., Jurković Z., Sekulić M.: Rotatable Central Composite Design of Experiments versus Taguchi Method in the Optimization of Turning, Metalurgija, 2011, Vol. 50, No 1, pp. 17-20, ISSN 0543-5846
3. Gostimirović M., Sekulić M., Kopač J., Kovač P.: Optimal Control of Workpiece Thermal State in Creep-Feed Grinding Using Inverse Heat Conduction Analysis, Strojniski vestnik = Journal of Mechanical Engineering, 2011, Vol. 57, No 10, pp. 730-738, ISSN 0039-2480
4. Gostimirović M., Kovač P., Sekulić M.: An inverse heat transfer problem for optimization of the thermal process in machining, Indian Academy of Sciences, Sadhana - Academy Proceedings in Engineering Science, 2011, Vol. 36, No 4, pp. 489-504, ISSN 0256-2499
5. Gostimirović M., Kovač P., Škorić B., Sekulić M.: Effect of Electrical Pulse Parameters on the Machining Performance of EDM, INDIAN J ENG MATER S, 2011, Vol. 18, No 6, pp. 411-415, ISSN 0971-4588

	Representative refferences (minimum 5, not more than 10)
6.	Sekulić M., Jurković Z., Hadžistević M., Gostimirović M.: The influence of mechanical properties of workpiece material on the main cutting force in face milling, Metalurgija, 2010, Vol. 49, No 4, pp. 339-342, ISSN 0543-5846
7.	Sekulić M., Kovač P., Gostimirović M.: Drilling cuting forces monitoring using virtual instrumentation, Central Europen Exchange Program for University Studies, Cracow University of Technology, Technical University of Košice, 2009, str. 31-36, ISBN 978-83-7242-509-6
8.	Kovač P., Gostimirović M., Sekulić M., Pižurica N.: The Internet/Intranet Application for Cutting Regime Setting, Journal of Machine Engineering, 2010, Vol. 10, No 2, pp. 18-24, ISSN 1895-7595
9.	Sekulić M., Kovač P.: Modelling of components of resultant force during face milling , Journal of Machine Engineering, 2008, Vol. 8, No 2, pp. 65-72, ISSN 1895-7595
10.	Milikić, D., Sekulić, M., Gostimirović, M., Uzelac, S. Naziv: Uticaj trenja i poprečnog sečiva burgije na položaj i veličinu sila rezanja Naziv časopisa: Časopis Jugoslovenskog društva za tribologiju TRIBOLOGIJA U INDUSTRIJI, 1999.

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	40			
Total of SCI(SSCI) list papers :	6			
Current projects :	Domestic :	1	International :	3

Science, arts and professional qualifications

Name and last name:	Simić S. Srboljub
Academic title:	Full Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	25.11.1993
Scientific or art field:	Mechanics

Academic carieer	Year	Institution	Field
Academic title election:	2010	Faculty of Technical Sciences - Novi Sad	Mechanics
PhD thesis	1999	Faculty of Technical Sciences - Novi Sad	Mechanics
Magister thesis	1997	Faculty of Mathematics - Beograd	Mechanics
Bachelor's thesis	1993	Faculty of Technical Sciences - Novi Sad	Mechanical Engineering

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	E104	Mechanics	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
			(MR0) Measurement and Control Engineering, Undergraduate Academic Studies
2.	GG07	Mechanics 1	(G00) Civil Engineering, Undergraduate Academic Studies
3.	M4305	Thermomechanics	(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
4.	Z108	Fundamentals of Mechanics	(Z01) Safety at Work, Undergraduate Academic Studies
			(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
			(Z20) Environmental Engineering, Undergraduate Academic Studies
5.	M44031	Analytical mechanics	(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
6.	M4505	Modelling of non-linear systems	(M40) Technical Mechanics and Technical Design, Master Academic Studies
7.	BMIM4A	Transport phenomena and Living systems	(BM0) Biomedical Engineering, Master Academic Studies
8.	DM407	Nonlinear Mechanics with Nonconservative Properties	(M00) Mechanical Engineering, Doctoral Academic Studies
			(M40) Technical Mechanics, Doctoral Academic Studies
			(OM1) Mathematics in Engineering, Doctoral Academic Studies
9.	DSIM8	Selected Chapters in Dynamics and Control	(M40) Technical Mechanics, Doctoral Academic Studies
10.	DZ003	Selected Chapters in Mechanics	(M00) Mechanical Engineering, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)
1. Srboljub S. Simić: Analitička mehanika: dinamika, stabilnost, bifurkacije, Fakultet tehničkih nauka, Novi Sad 2006., Edicija „Tehničke nauke - udžbenici", 415 str., ISBN 86-85211-83-2
2. Srboljub S. Simić, Ratko B. Maretić: Osnove mehanike, Fakultet tehničkih nauka, Novi Sad 2008., Edicija „Tehničke nauke - udžbenici", 273 str., ISBN 978-86-7892-147-6
3. B.D. Vujanovic, T. Kawaguchi, S.S. Simic (1997), A Class of Conservation Laws of Linear Time-Dependent Dynamical Systems, TENSOR (NS), 58 (3), pp. 243-252.
4. T.M. Atanackovic, S.S. Simic (1999), On the optimal shape of a Pflüger column, European Journal of Mechanics, A/Solids, 18 (5), pp. 903-913.<eng>
5. S.S. Simic (2002), On the symmetry approach to polynomial conservation laws of one-dimensional Lagrangian systems, International Jounal of Non-Linear Mechanics, 37, pp. 197-211.<eng>
6. T. Ruggeri, S. Simić (2004), Non Linear Wave Propagation in Binary Mixtures of Euler Fluids, Continuum Mechanics and Thermodynamics, 16, pp. 125-148.<eng>
7. T. Ruggeri, S. Simić (2007), On the Hyperbolic system of a mixture of Eulerian fluids: a comparison between single- and multi-temperature models, Mathematical Methods in the Applied Sciences, 30, pp. 827-849.<eng>
8. T. Ruggeri, S. Simić (2009) Average temperature and Maxwellian iteration in multitemperature mixtures of fluids, Physical Review E, vol. 80, 026317
9. T. Atanacković, S. Konjik, S. Pilipović, S. Simić (2009) Variational problems with fractional derivatives: Invariance conditions and Nöther's theorem, Nonlinear Analysis: Theory, Methods and Applications, vol. 71, pp. 1504-1517
10. S. Simić (2009) Shock structure in continuum models of gas dynamics, Nonlinearity, vol. 20, pp. 1337-1366

Summary data for teacher's scientific or art and professional activity:

Quotation total :	7			
Total of SCI(SSCI) list papers :	9			
Current projects :	Domestic :	1	International :	1

Science, arts and professional qualifications

Name and last name:		Sladoje Matić I. Nataša	
Academic title:		Associate Professor	
Name of the institution where the teacher works full time and starting date:		Faculty of Technical Sciences - Novi Sad	
		14.03.1994	
Scientific or art field:		Mathematics	

Academic carieer	Year	Institution	Field
Academic title election:	2011		Mathematics
PhD thesis	2005	University of Novi Sad - Novi Sad	Mathematical Sciences
Magister thesis	1998	Faculty of Sciences - Novi Sad	Mathematical Sciences
Bachelor's thesis	1992	Faculty of Sciences - Novi Sad	Mathematical Sciences

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	A101	Mathematics	(A00) Architecture, Undergraduate Academic Studies
2.	E135B	Mathematical Analysis 2	(GI0) Geodesy and Geomatics, Undergraduate Academic Studies
3.	GI107	Mathematical Analysis 1	(GI0) Geodesy and Geomatics, Undergraduate Academic Studies
4.	IAM001	Mathematical Shape Modeling for Computer Animation	(F10) Engineering Animation, Undergraduate Academic Studies
5.	IAM004	Geometry of Discrete Space	(F10) Engineering Animation, Undergraduate Academic Studies
6.	IGA008	Mathematics for Engineering Graphics	(F10) Engineering Animation, Undergraduate Academic Studies
7.	BMI91	Mathematics 1	(BM0) Biomedical Engineering, Undergraduate Academic Studies
8.	BMI92	Mathematics 2	(BM0) Biomedical Engineering, Undergraduate Academic Studies
9.	E101A	Discrete Mathematics	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
10.	DZ01MS	Selected Chapters in Mathematics	(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
			(I12) Industrial Engineering, Specialised Academic Studies
			(I22) Engineering Management, Specialised Academic Studies
			(Z00) Environmental Engineering, Specialised Academic Studies
11.	Z506	20BAdvanced Course in Mathematics 1	(ZP1) Disaster Risk Management and Fire Safety, Master Academic Studies
			(Z20) Environmental Engineering, Master Academic Studies
12.	IA018	Computer Geometry	(F20) Engineering Animation, Master Academic Studies
13.	D0M28	Digital Geometry	(OM1) Mathematics in Engineering, Doctoral Academic Studies
14.	D0M29	Image Processing 1	(OM1) Mathematics in Engineering, Doctoral Academic Studies
15.	D0M30	Image Processing 2	(OM1) Mathematics in Engineering, Doctoral Academic Studies
16.	D0M31	Applied Algorithms	(OM1) Mathematics in Engineering, Doctoral Academic Studies
17.	D0M32	Combinatorial and Geometric Algorithms	(OM1) Mathematics in Engineering, Doctoral Academic Studies
18.	D0M33	Positional Games	(OM1) Mathematics in Engineering, Doctoral Academic Studies

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
19.	DZ01M	Selected Chapters in Mathematics	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies
			(E20) Computing and Control Engineering, Doctoral Academic Studies
			(F00) Graphic Engineering and Design, Doctoral Academic Studies
			(F20) Engineering Animation, Doctoral Academic Studies
			(G00) Civil Engineering, Doctoral Academic Studies
			(GI0) Geodesy and Geomatics, Doctoral Academic Studies
			(H00) Mechatronics, Doctoral Academic Studies
			(I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
			(M00) Mechanical Engineering, Doctoral Academic Studies
			(M40) Technical Mechanics, Doctoral Academic Studies
			(OM1) Mathematics in Engineering, Doctoral Academic Studies
			(S00) Traffic Engineering, Doctoral Academic Studies
			(Z00) Environmental Engineering, Doctoral Academic Studies
			(Z01) Safety at Work, Doctoral Academic Studies
20.	AID07	Digital geometry	(F20) Engineering Animation, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)	
1.	Sladoje N., Lindblad J., Nystrom I.: Defuzzification of spatial fuzzy sets by feature distance minimization. , Image and Vision Computing, 2011, Vol. 29, No 2-3, pp. 127-141, ISSN 0262-8856
2.	Lukić T., Lindblad J., Sladoje N.: Regularized Image Denoising Based on Spectral Gradient Optimization, Inverse Problems, 2011, Vol. 27, No 8, pp. 8501-1, ISSN 0266-5611
3.	Sladoje N., Lindblad J.: High precision boundary length estimation by utilizing grey-level information , IEEE Transactions on Pattern Analysis and Machine Intelligence, 2009, Vol. 31, No 2, pp. 357-363, ISSN 0162-8828
4.	N. Sladoje and J. Lindblad, "Representation and Reconstruction of Fuzzy Disks by Moments", Fuzzy Sets and Systems, Vol. 158, No. 5, pp. 517-534, 2007.<\eng>
5.	N. Sladoje, I. Nyström, and P.K. Saha, "Measurements of digitized objects with fuzzy borders in 2D and 3D", Image and Vision Computing, vol. 23, pp 123-132, 2005.<\eng>
6.	J. Zunic and N. Sladoje, "Efficiency of Characterizing Ellipses and Ellipsoids by Discrete Moments", IEEE Trans. Pattern Analysis and Machine Intelligence, vol.22, No.4, pp 407-414, 2000.<\eng>
7.	J. Chanussot, I. Nyström and N. Sladoje, "Shape signatures of fuzzy star-shaped sets based on distance from the centroid", Pattern Recognition Letters, vol. 26(6), pp. 735-746, 2005.<\eng>
8.	Ćurić,V., Lindblad, J., Sladoje, N., Sarve, H., Borgefors, B. A new set distance and its application to shape registration. Accepted for Pattern Analysis and Applications, 2012.
9.	Lindblad L., Sladoje N. Coverage Segmentation based on Linear Unmixing and Minimization of Perimeter and Boundary Thickness. Pattern Recognition Letters, Vol. 33, No.6, pp. 728-738, 2012.
10.	Malmberg F., Lindblad J., Sladoje N., Nystrom I.: A graph-based framework for sub-pixel image segmentation, Theoretical Computer Science, 2011, Vol. 412, No 15, pp. 1338-1349

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	71			
Total of SCI(SSCI) list papers :	21			
Current projects :	Domestic :	2	International :	3

Science, arts and professional qualifications

Name and last name:	Sokolović S. Dunja
Academic title:	Assistant Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	01.11.2012
Scientific or art field:	Process Technics

Academic carieer	Year	Institution	Field
Academic title election:	2012	Faculty of Technical Sciences - Novi Sad	Process Technics
PhD thesis	2012	Faculty of Technology - Novi Sad	Technological Engineering
Bachelor's thesis	2007	Faculty of Technology - Novi Sad	Technological Engineering

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	M3301	Pumping and Compression Stations	(M30) Energy and Process Engineering, Undergraduate Academic Studies
			(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
2.	M3303	Fundamentals of Process Engineering	(M30) Energy and Process Engineering, Undergraduate Academic Studies
3.	M3315	Fundamentals in Ecological Oil Analysis and Gas Industry	(M30) Energy and Process Engineering, Undergraduate Academic Studies
4.	M3403	Fluid Machines	(M30) Energy and Process Engineering, Undergraduate Academic Studies
5.	M3498	Industrial Process Technology	(M30) Energy and Process Engineering, Undergraduate Academic Studies
6.	M3517	Construction in energy and process engineering	(M30) Energy and Process Engineering, Master Academic Studies
			(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
7.	M3517	Construction in energy and process engineering	(M30) Energy and Process Engineering, Master Academic Studies
			(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
8.	M3599	Energy efficient separation process	(M30) Energy and Process Engineering, Master Academic Studies
9.	DM313	Process Kinetics	(M00) Mechanical Engineering, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1.	Sokolović D., Höflinger W., Zavargo Z., Šećerov Sokolović R.: Uticaj ventilacije komore mašine alatke na osobine SHP aerosola, Hemijska industrija, 2012, Vol. 66, No. 1, pp. 67-77, ISSN 0367-598X
2.	Sokolović D., Šećerov Sokolović R., Sokolović S.: Proučavanje reoloških osobina nestabilnih emulzija mineralnog porekla , Hemijska industrija, 2012, DOI:10.2298/HEMIND120216070S, ISSN 0367-598X.
3.	Šećerov Sokolović R., Govedarica D., Sokolović D.: Separation of oil-in-water emulsion using two coalescers of different geometry, Journal of Hazardous Materials, 2010, Vol. 175, No. 1-3, pp. 1001-1006, ISSN: 0304-3894.
4.	Govedarica D., Šećerov Sokolović R., Sokolović D., Sokolović S.: Evaluation of the Separation of Liquid-Liquid Dispersions by Flow through Fiber Beds, Industrial & Engineering Chemistry Research, 2012, dx.doi.org/10.1021/ie3026967, ISSN: 0888-5885.
5.	Govedarica D., Šećerov Sokolović R., Sokolović D., Sokolović S.: A Novel Approach for the Estimation of the Efficiency of Steady-State Fiber Bed Coalescence, Separation and Purification Technology, 2012, ISSN 1383-5866, UDK: http://dx.doi.org/10.1016/j.seppur.2012.11.034
6.	Sokolović S., Zavargo Z., Sokolović D.: SUSTAINABLE DEVELOPMENT, CLEAN TECHNOLOGY AND KNOWLEDGE FROM INDUSTRY, Thermal Science, 2012, Vol. 16, Suppl. 1, pp. S131-S139, ISSN 0354-9836
7.	Sokolović D., Govedarica D.: Sustainable waste management and petroleum sludge, 1. ISWA Beacon Conference, Novi Sad: Internacional Solid Waste Association-ISWA, 10-11 Decembar, 2009, pp. 176-183
8.	Šećerov Sokolović R., Sokolović S., Sokolović D.: Waste polymer fibrous as filter media for oily water separation, 11. World Filtration Congress, Graz: 11th World Filtration Congress - Session PL03 - Solid-Liquid Separation III, 17-20 April, 2012
9.	Sokolović D., Šećerov Sokolović R., Govedarica D.: INFLUENCE OF INLET OIL CONCENTRATION ON OILY WATER SEPARATION BY STEADY-STATE BED COALESCERS TWO DIFFERENT GEOMETRY, 1. International Congress of Chemical Engineering of the ANQUE, Seville, 24-27 Jun, 2012, ISBN ISBN: 988-84-695-353, UDK: T132-T133
10.	Sokolović D., Šećerov Sokolović R.: NEW TECHNOLOGY FOR HIGH ORGANIC LOAD WASTEWATER TREATMENT, 1. International Congress of Chemical Engineering of the ANQUE, Seville, 24-27 Jun, 2012, ISBN ISBN: 978-84-695-353, UDK: str.T742-T743

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	4			
Total of SCI(SSCI) list papers :	5			
Current projects :		Domestic :	1	International :	1

Science, arts and professional qualifications

Name and last name:	Soković M. Mirko		
Academic title:	Guest Professor		
Name of the institution where the teacher works full time and starting date:	-		
Scientific or art field:	Metrology, Quality, Fixtures and Ecological-Engineering Aspects		

Academic carieer	Year	Institution	Field
Academic title election:	2010	Faculty of Technical Sciences - Novi Sad	Metrology, Quality, Fixtures and Ecological-Engineering Aspects
PhD thesis	1997	University of Ljubljana - Ljubljana	Mechanical Engineering
Magister thesis	1982	University of Ljubljana - Ljubljana	Mechanical Engineering
Bachelor's thesis	1973	University of Ljubljana - Ljubljana	Mechanical Engineering

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	DP006	State and development trends of metrology, quality and fixtures	(M00) Mechanical Engineering, Doctoral Academic Studies
2.	DP013	Ecological Engineering Aspects	(M00) Mechanical Engineering, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)
1. Budak, I., Vukelić, D., Bračun, D., Hodolič, J., Soković, M.: Pre-processing of point-data from contact and optical 3D digitization sensors, Sensors 12 (1) , pp. 1100-1126, 2012, ISSN 1424-8220.
2. Budak, I., Sokovic, M., Barisic, B.: Accuracy improvement of point data reduction with sampling-based methods by Fuzzy logic-based decision-making, Measurement, 44 (6) , pp. 1188-1200, 2011, ISSN 0263-2241.
3. Soković, M., Barišić, B., Sladić, S.: Model of quality management of hard coatings on ceramic cutting tools, Journal of Materials Processing Technology, 209 (8) , pp. 4207-4216, 2009, ISSN 0924-0136.
4. Sladić, S., Barišić, B., Soković, M.: Cost-effective power converter for thin film solar cell technology and improved power quality, Journal of Materials Processing Technology, 201 (1-3) , pp. 786-790, 2008, ISSN 0924-0136.
5. Sokovic, M., Kopac, J.: RE (reverse engineering) as necessary phase by rapid product development, Journal of Materials Processing Technology 175 (1-3) , pp. 398-403, 2006, ISSN 0924-0136.
6. Dobrzański, L.A., Pakuła, D., Křiž, A., Soković, M., Kopač, J.: Tribological properties of the PVD and CVD coatings deposited onto the nitride tool ceramics, Journal of Materials Processing Technology 175 (1-3) , pp. 179-185, 2006, ISSN 0924-0136.
7. Bobrek, M., Sokovic, M.: Integration concept and synergetic effect in modern management, Journal of Materials Processing Technology 175 (1-3) , pp. 33-39, 2006, ISSN 0924-0136.
8. Bobrek, M., Sokovic, M.: Implementation of APQP-concept in design of QMS, Journal of Materials Processing Technology 162-163 (SPEC. ISS.) , pp. 718-724, 2005, ISSN 0924-0136.
9. Budak, I., Hodolic, J., Sokovic, M.: Development of a programme system for data-point pre-processing in Reverse Engineering, Journal of Materials Processing Technology 162-163 (SPEC. ISS.) , pp. 730-735, 2005, ISSN 0924-0136.
10. Sokovic, M., Pavletic, D., Fakin, S.: Application of Six Sigma methodology for process design, Journal of Materials Processing Technology 162-163 (SPEC. ISS.) , pp. 777-783, 2005, ISSN 0924-0136.

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	396			
Total of SCI(SSCI) list papers :	52			
Current projects :	Domestic :	1	International :	2

Science, arts and professional qualifications

Name and last name:	Sovilj N. Bogdan
Academic title:	Full Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	05.01.1973
Scientific or art field:	Cutting Processing Tools and Tribology

Academic carieer	Year	Institution	Field
Academic title election:	1998	Faculty of Technical Sciences - Novi Sad	Cutting Processing Tools and Tribology
PhD thesis	1988	Faculty of Technical Sciences - Novi Sad	Cutting Processing Tools and Tribology
Magister thesis	1980	Faculty of Technical Sciences - Novi Sad	Cutting Processing Tools and Tribology
Bachelor's thesis	1972	Faculty of Mechanical Engineering - Novi Sad	Cutting Processing Tools and Tribology

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	P1404	Tribodiagnostics and Maintenance	(P00) Production Engineering, Undergraduate Academic Studies
2.	P1502A	Tribology	(P00) Production Engineering, Undergraduate Academic Studies
3.	P302	Tools for Cutting Processing	(P00) Production Engineering, Undergraduate Academic Studies
4.	P4409	Evolution Methods	(P00) Production Engineering, Undergraduate Academic Studies
5.	P1502B	Contemporary Tools in CIM Systems	(PM0) Production Engineering, Master Academic Studies
6.	BMIM4F	Biotribology	(BM0) Biomedical Engineering, Master Academic Studies
7.	PP103	Measurement and tools in precision engineering	(PM0) Production Engineering, Master Academic Studies
8.	SMI003	Software support for cutting tools and fixtures modeling	(PM0) Production Engineering, Master Academic Studies
9.	DM421	Design and Expoitation of Metal Cutting Machine Tools	(M00) Mechanical Engineering, Doctoral Academic Studies
10.	DM422	Tribology	(M00) Mechanical Engineering, Doctoral Academic Studies
11.	ZRD21	Tribodiagnostics and maintenance of tehnical systems-selected chapters	(Z01) Safety at Work, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1.	Sovilj, B.: Profilni noževi, Novi Sad, Univerzitet u Novom Sadu, Forum OJ Izdavačka delatnost, FTN-Institut za proizvodno mašinstvo, Jugoslovensko društvo za tribologiju, 1995. 268str.,
2.	Sovilj. B.: Identifikacija triboloških procesa pri odvalnom glodanju, Novi Sad, IPM, FTN, 1988.
3.	Sovilj B., Sovilj-Nikić I., Ješić D., Measurement Methodology of Characteristics and Election of Materials of Elements of Tribomechanical Systems, Metalurgija, Vol. 50, No. 1, pp. 107-111, 2011, ISSN 0543-5846
4.	SOVILJ, B., TODIĆ, V., BABIĆ, M., NIKIĆ, Z.:, Relationship between tool life and cutting speed by uncoated and coated end milling tool in dependence on wear criterion, Tribology in industry, 1998, Vol. 4, str. 105- 110,
5.	Sovilj, B., Sovilj-Nikić, I., Ješić, D., The effect of specific relationship between material and coating on tribological and protective features of product, Metalurgija, Vol. 51, No. 1, pp. 21-24, 2012, ISSN 0543-5846
6.	SOVILJ, B., PRAPOTNIK, B., MITROVIĆ, R., TODIĆ, V.: ,Influence of gearing process on the occurence of cutting edge break by hob milling tools, Tribology in industry, 1999, Vol. 21, No. 2, str. 53- 58,,
7.	SOVILJ, B., TODIĆ, V., BABIĆ, M., NIKIĆ, Z.:, Relationship between tool life and cutting speed by uncoated and coated end milling tool in dependence on wear criterion, Tribology in industry, 1998, Vol. 4, str. 105- 110,,
8.	SOVILJ, B., PRAPOTNIK, B., MITROVIĆ, R., TODIĆ, V.: ,Influence of gearing process on the occurence of cutting edge break by hob milling tools, Tribology in industry, 1998, Vol. 3, str. 73- 78,,
9.	SOVILJ B., ZLOKOLICA M., ĐOKIĆ V., SOVILJ-NIKIĆ I.: Identification of tribological processes on uncoated and coated cutting elements of hob milling tools in model and real conditions, 2-nd World Tribology Congress, Vienna, Austria: 2001,
10.	Sovilj-Nikić, I., Sovilj, B., Kandeva, M., Gajić, V., Sovilj-Nikić, S., Legutko, S., Kovač, P., Tribological characteristics of hob milling tools from economical aspect, Journal of the Balkan Tribological Association, Vol.18, No. 4, pp. 577-585, 2012, ISSN 1310-4772

Summary data for teacher's scientific or art and professional activity:

Quotation total :	3			
Total of SCI(SSCI) list papers :	3			
Current projects :	Domestic :	1	International :	2

Science, arts and professional qualifications

Name and last name:		Spasić T. Dragan	
Academic title:		Full Professor	
Name of the institution where the teacher works full time and starting date:		Faculty of Technical Sciences - Novi Sad	
		01.09.1985	
Scientific or art field:		Mechanics	
Academic carieer	Year	Institution	Field
Academic title election:	2005	Faculty of Technical Sciences - Novi Sad	Mechanics
PhD thesis	1993	Faculty of Technical Sciences - Novi Sad	Mechanics
Magister thesis	1991	Faculty of Mathematics - Beograd	Mechanics
Bachelor's thesis	1884	Faculty of Technical Sciences - Novi Sad	Information-Communication Systems

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	A207	Mechanics	(A00) Architecture, Undergraduate Academic Studies
			(F10) Engineering Animation, Undergraduate Academic Studies
2.	H112	Mechanics 1 – Fundamentals	(H00) Mechatronics, Undergraduate Academic Studies
			(S00) Traffic and Transport Engineering, Undergraduate Academic Studies
3.	H201	Mechanics 2 - General	(H00) Mechatronics, Undergraduate Academic Studies
4.	H303	Mechatronics 3 – Further Chapters	(H00) Mechatronics, Undergraduate Academic Studies
5.	I600	Industrial Robotics	(F10) Engineering Animation, Undergraduate Academic Studies
			(MR0) Measurement and Control Engineering, Undergraduate Academic Studies
			(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
6.	M4302	Biomechanics and mechanics of sport	(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
7.	ASO	Introduction to engineering	(AS0) Scenic Architecture, Technique and Design, Undergraduate Academic Studies
8.	BMI127	Biomechanics	(BM0) Biomedical Engineering, Undergraduate Academic Studies
			(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
9.	BMI128	Continuum Biomechanics	(BM0) Biomedical Engineering, Undergraduate Academic Studies
10.	BMI96	Mechanics	(BM0) Biomedical Engineering, Undergraduate Academic Studies
11.	II1004	Mechanics and Industrial Engineering	(I10) Industrial Engineering, Undergraduate Academic Studies
12.	M44041	Dynamics of non-smooth mechanical systems	(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
13.	M44061	Optimization of mechanical systems	(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
14.	BMIM4A	Transport phenomena and Living systems	(BM0) Biomedical Engineering, Master Academic Studies
15.	M45991	Biomechanics of cardiovascular system	(M40) Technical Mechanics and Technical Design, Master Academic Studies
16.	SZD051	Applications of optimal control theory in living environment protection	(Z00) Environmental Engineering, Specialised Academic Studies
17.	DM406	Nonsmooth Mechanics and Optimization	(H00) Mechatronics, Doctoral Academic Studies
			(M00) Mechanical Engineering, Doctoral Academic Studies
			(M40) Technical Mechanics, Doctoral Academic Studies
			(OM1) Mathematics in Engineering, Doctoral Academic Studies
18.	DZ003	Selected Chapters in Mechanics	(M00) Mechanical Engineering, Doctoral Academic Studies

		List of courses being held by the teacher in the accredited study programmes	
	ID	Course name	Study programme name, study type
19.	ZD051	Applications of optimal control theory in living environment protection	(Z00) Environmental Engineering, Doctoral Academic Studies
20.	DM801	Biomedical mechanics	(M40) Technical Mechanics, Doctoral Academic Studies
21.	DTM02	Theory of impact	(H00) Mechatronics, Doctoral Academic Studies (M00) Mechanical Engineering, Doctoral Academic Studies (M40) Technical Mechanics, Doctoral Academic Studies (S00) Traffic Engineering, Doctoral Academic Studies
22.	DTM03	Biomechanical models and analysis of impact	(M40) Technical Mechanics, Doctoral Academic Studies
23.	ZRD16A	Selected chapters in mechanics and elasticity theory	(Z01) Safety at Work, Doctoral Academic Studies

	Representative refferences (minimum 5, not more than 10)
1.	Spasić D., Glavardanov V.: Does generalized elastica lead to bimodal optimal solutions?, International Journal of Solids and Structures, 2009, Vol. 46, No 14-15, pp. 2939-2949, ISSN 0020-7683
2.	Grahovac N., Žigić M., Spasić D.: On impact scripts with both fractional and dry friction type of dissipation, INT J BIFURCAT CHAOS, 2012, No Prihvaćen za štampu, ISSN 0218-1274
3.	D. T. Spasic and T. M. Atanackovic (2004), "Bimodal optimization of a compressed rotating rod", Acta Mechanica, 173, N 1-4, 77-87
4.	Spasić D.: Optimizing the elctrodynamical stabilization method for a man-made Earth satellite, AUTOMAT REM CONTR , 2011, Vol. 72, No 9, pp. 112-121, ISSN 0005-1179
5.	Petrović Lj., Spasić D., Atanacković T.: On a mathematical model of a human root dentin , Dental Materials, 2005, Vol. 21, pp. 125-128, ISSN 0109-5641
6.	Mitić G., Spasić D.: Clinical Characteristic and type of thrombophilia in women with pregnancy-related venous thromboembolic disease, GYNECOL OBSTET INVES, 2011, Vol. 72, No 2, pp. 103-108, ISSN 0378-7346
7.	T. M. Atanackovic and D. T. Spasic, (2004): "On viscoelastic compliant contact-impact models", Transactions of ASME Journal of Applied Mechanics, 71, 134-138
8.	Radovic R., Spasic D.T., Karadzic B., Novakovic B., Atanackovic J., Jelicic Z.. and Tepavcevic B., (2002), ""New challenges and opportunities for the city of Novi Sad"", Coordinated by T. Atanackovic, The Danube Commision of EU and The University of Novi Sad, (monograph 157 pages in English and Serbian)
9.	Spasić D.: Boudary elements, theory and applications (English to serbian traslation done by D.T. Spasić), Beograd, Gradjevinska knjiga, 2011
10.	BD Vujanović, DT Spasić: Metodi optimizacije: primenjeni varijacioni račun, analitička mehanika, optimalno upravljanje, UNS, 1997.

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	16			
Total of SCI(SSCI) list papers :	8			
Current projects :	Domestic :	1	International :	0

Science, arts and professional qualifications

Name and last name:			Stojaković M. Mila	
Academic title:			Full Professor	
Name of the institution where the teacher works full time and starting date:			Faculty of Technical Sciences - Novi Sad	
			01.12.1975	
Scientific or art field:			Mathematics	
Academic carieer	Year	Institution		Field
Academic title election:	1993	Faculty of Technical Sciences - Novi Sad		Mathematics
PhD thesis	1980	Faculty of Sciences - Novi Sad		Mathematical Sciences
Magister thesis	1978	Faculty of Mathematics - Beograd		Mathematical Sciences
Bachelor's thesis	1975	Faculty of Sciences - Novi Sad		Mathematical Sciences

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	E121	Mathematical Analysis 2	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
2.	E135	Probability, Statistics and Stochastic Processes	(MR0) Measurement and Control Engineering, Undergraduate Academic Studies
			(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
3.	E221A	Mathematical Analysis 2	(E20) Computing and Control Engineering, Undergraduate Academic Studies
			(MR0) Measurement and Control Engineering, Undergraduate Academic Studies
4.	E224A	Probability and Stochastic Processes	(E20) Computing and Control Engineering, Undergraduate Academic Studies
			(ES0) Power Software Engineering, Undergraduate Academic Studies
			(SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies
			(SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies
5.	ZC006	Probability, Statistics and Random Processes	(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
6.	0M504	Operational Research	(OM1) Mathematics in Engineering, Master Academic Studies
7.	0M505	Stochastic Processes	(OM1) Mathematics in Engineering, Master Academic Studies
8.	0ML504	Operational Research	(OM1) Mathematics in Engineering, Master Academic Studies
9.	0ML505	Stochastic Processes	(OM1) Mathematics in Engineering, Master Academic Studies
10.	DZ01MS	Selected Chapters in Mathematics	(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
			(I12) Industrial Engineering, Specialised Academic Studies
			(I22) Engineering Management, Specialised Academic Studies
			(Z00) Environmental Engineering, Specialised Academic Studies
11.	IAM005	Mathematical Game Theory	(F20) Engineering Animation, Master Academic Studies
			(OM1) Mathematics in Engineering, Master Academic Studies
12.	SD0M03	Operational Research	(GI0) Geodesy and Geomatics, Specialised Academic Studies
13.	SD0M15	Statistics	(GI0) Geodesy and Geomatics, Specialised Academic Studies
14.	ZR503	Statistical Advanced Models	(Z01) Safety at Work, Master Academic Studies
15.	D0M03	Operational Research	(OM1) Mathematics in Engineering, Doctoral Academic Studies

	List of courses being held by the teacher in the accredited study programmes		
	ID	**Course name**	**Study programme name, study type**
16.	D0M04	Random Processes	(OM1) Mathematics in Engineering, Doctoral Academic Studies
17.	D0M15	Statistics	(OM1) Mathematics in Engineering, Doctoral Academic Studies
18.	D0M27	StatisticsApplied in Engineering	(OM1) Mathematics in Engineering, Doctoral Academic Studies
19.	DAU004	Selected Chapters in Mathematics 2	(E20) Computing and Control Engineering, Doctoral Academic Studies
			(H00) Mechatronics, Doctoral Academic Studies
20.	DOM59	Fixed point theory	(OM1) Mathematics in Engineering, Doctoral Academic Studies
21.	DZ01M	Selected Chapters in Mathematics	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies
			(E20) Computing and Control Engineering, Doctoral Academic Studies
			(F00) Graphic Engineering and Design, Doctoral Academic Studies
			(F20) Engineering Animation, Doctoral Academic Studies
			(G00) Civil Engineering, Doctoral Academic Studies
			(GI0) Geodesy and Geomatics, Doctoral Academic Studies
			(H00) Mechatronics, Doctoral Academic Studies
			(I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
			(M00) Mechanical Engineering, Doctoral Academic Studies
			(M40) Technical Mechanics, Doctoral Academic Studies
			(OM1) Mathematics in Engineering, Doctoral Academic Studies
			(S00) Traffic Engineering, Doctoral Academic Studies
			(Z00) Environmental Engineering, Doctoral Academic Studies
			(Z01) Safety at Work, Doctoral Academic Studies

	Representative refferences (minimum 5, not more than 10)
1.	Mila Stojaković, Decomposition and representation of fuzzy valued measure, Fuzzy Sets and Systems, 112(2000) 251-256
2.	Mila Stojaković, Fuzzy conditional expectation, Fuzzy Sets and Systems, 52(1992) 49-54
3.	Mila Stojaković, Fuzzy random variable, expectation, martingales, J.Math.Anal.Appl., 184(1994) 594-606.
4.	Mila Stojaković, Fuzzy martingales, Stochastic Analysis and Applications, 14(1996), 355-368.
5.	Mila Stojaković, Zoran Stojaković, Support function for fuzzy set, Proceedings of Royal Society, London A, 452(1996), 421-438.
6.	Mila Stojaković, Zoran Stojaković, Addition and series of fuzzy sets, Fuzzy Sets and Systems, 83(1996) 341-346.
7.	Mila Stojaković, Representation of fuzzy valued mappings, Fuzzy Sets and Systems, 98(1998) 375-381.
8.	Mila Stojaković, Fuzzy valued measure, Fuzzy Sets and Systems,65(1994) 95-104 .
9.	Mila Stojaković, Common fixed point theorems in complete metric and probabilistic spaces,Bull. Australian Math. Soc.,36(1987)73-88.
10.	Mila Stojaković, Zoran Ovcin,Fixed point theorems and variational principle..., Fuzzy Sets and Systems, 66(1994)353-356.

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	71			
Total of SCI(SSCI) list papers :	16			
Current projects :	Domestic :	1	International :	1

Science, arts and professional qualifications

Name and last name:	Šiđanin P. Leposava
Academic title:	Emeritus Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	01.10.2012
Scientific or art field:	Material Science and Engineering Materials

Academic carieer	Year	Institution	Field
Academic title election:	2008	Faculty of Technical Sciences - Novi Sad	Material Science and Engineering Materials
PhD thesis	1983	Faculty of Natural Sciences and Engineering - Ljubljana	Metallurgical Engineering
Magister thesis	1976	Faculty of Natural Sciences and Engineering - Ljubljana	Metallurgical Engineering
Bachelor's thesis	1965	Faculty of Natural Sciences and Engineering - Ljubljana	Metallurgical Engineering

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	P2501	Process Design in Welding Technology	(PM0) Production Engineering, Master Academic Studies
2.	P2502	Properties and Selection of Materials	(PM0) Production Engineering, Master Academic Studies
3.	PTS01	Technology of sintering	(PM0) Production Engineering, Master Academic Studies
4.	DP001	Design and Research Methods in Production Engineering	(M00) Mechanical Engineering, Doctoral Academic Studies
5.	DP016	Advanced Characterization of Materials	(M00) Mechanical Engineering, Doctoral Academic Studies
6.	DP023	Joining technologies - selected topics	(M00) Mechanical Engineering, Doctoral Academic Studies
7.	DP024	Welding technology - selected topics	(M00) Mechanical Engineering, Doctoral Academic Studies
8.	DP025	Materials Corrosion and Protection	(M00) Mechanical Engineering, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)
1. L. Sidjanin, R. E. Smallman, J. M. Young: Electron Microstructure and Mechanical Properties of Silicon and Aluminium Ductile Irons, Acta Metallurgica and Materials, Vol. 42 No9 (1994) 3149-3156
2. L. Sidjanin, R. E Smallman: Metallography of Bainitic Transformation in Austempered Ductile Iron, Materials Science and Technology, Vol.8 (1992) 1095-1103
3. O. Erić, D. Rajnović, S. Zec, L. Sidjanin T. Jovanović: Microstructure and fracture of alloyed austempered ductile iron, Materials Characterization, 57 (2006) 211-217
4. P. Kovač, L. Sidjanin: Investigation of Chip Formation During Milling, International Journal of Production Economics, 51 (1997) 149 –153
5. L. Sidjanin, R.E. Smallman, S. M. Boutorabi: Electron Microstructure and Fracture of Aluminum Austempered Ductile Iron, Materials Science and Tecnology, Vol.X (1994) 711-720
6. L. Sidanin(Šiđanin), S. Milicev and N. Matovic: Fatigue failure of ductile iron crankshafts, Cast Metals, Vol.4. 1 (1991) 50-54, reprinted in International Journal of Fatigue, 14 (3), (1992) 204-208
7. M. Skunca, P. Skakun, Z. Keran, L. Sidjanin, M.D. Math: Relations between numerical simulation and experiment in closed die forging of a gear, Journal of Materials Processing Technology, Vol. 177, Iss. 1-3, (2006), 256-260
8. O. Erić, L. Sidjanin, Z. Misković, S. Zec, M.T. Jovanović: Microstructure and Toughness of CuNiMo austempered ductile iron, Materials Letters, 58 (2004) 2707 - 2711
9. Baloš S., Šiđanin (Sidjanin) L.: Metallographic study of non-homogenousarmour impacted by armour-piercing incendiary ammunition, Materials and Design, 2011, Vol. 32, pp. 4022-4029, ISSN 0261-3069
10. Šiđanin (Sidjanin) L., Rajnović D., Erić O., Smallman R.: Austempering study of unalloyed and alloyed ductile irons, Materials Science and Technology, 2010, Vol. 26, No 5, pp. 567-571, ISSN 0267-0836

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	149			
Total of SCI(SSCI) list papers :	41			
Current projects :	Domestic :	2	International :	0

Science, arts and professional qualifications

Name and last name:	Škorić N. Branko
Academic title:	Full Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	21.03.1985
Scientific or art field:	Surface Engineering, Micro and Nano Technologies

Academic carieer	Year	Institution	Field
Academic title election:	2011	Faculty of Technical Sciences - Novi Sad	Surface Engineering, Micro and Nano Technologies
PhD thesis	2001	Faculty of Technical Sciences - Novi Sad	Casting and Thermal Processing Technology and Surface Engineering, Micro and Nano
Magister thesis	1994	Faculty of Technical Sciences - Novi Sad	Casting and Thermal Processing Technology and Surface Engineering, Micro and Nano
Bachelor's thesis	1984	Faculty of Technical Sciences - Novi Sad	Casting and Thermal Processing Technology and Surface Engineering, Micro and Nano

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	P105	Heat Processing	(P00) Production Engineering, Undergraduate Academic Studies
2.	P110	Casting Technology	(P00) Production Engineering, Undergraduate Academic Studies
3.	P210	Surface Engineering	(P00) Production Engineering, Undergraduate Academic Studies
4.	P211	Devices and Plasma Procedures in Mechanical Engineering	(P00) Production Engineering, Undergraduate Academic Studies
5.	P2402	Designing of Thermal Processing Technologies	(P00) Production Engineering, Undergraduate Academic Studies
6.	P2403	Contemporary Casting Technologies	(P00) Production Engineering, Undergraduate Academic Studies
7.	P3401	Characteristics and Application of Plastic Materials	(P00) Production Engineering, Undergraduate Academic Studies
8.	P3405	Thermal Processing of Contemporary Tools	(P00) Production Engineering, Undergraduate Academic Studies
9.	II1001	Engineering materials	(I10) Industrial Engineering, Undergraduate Academic Studies
10.	ZRI42A	Safety at work in metallurgy and thermochemical treatment of metal	(Z01) Safety at Work, Undergraduate Academic Studies
11.	P2503	Process Design in Casting Technology	(PM0) Production Engineering, Master Academic Studies
12.	P2507	Nanotechnologies	(M40) Technical Mechanics and Technical Design, Master Academic Studies
			(PM0) Production Engineering, Master Academic Studies
13.	PP2I11	Mechanical Engineering in Medicine and Bioengineering	(PM0) Production Engineering, Master Academic Studies
14.	SMI002	Modeling and simulation of thermo chemical and metallurgical processes	(PM0) Production Engineering, Master Academic Studies
15.	DP001	Design and Research Methods in Production Engineering	(M00) Mechanical Engineering, Doctoral Academic Studies
16.	DP004	Advanced Technologies in Casting and Heat Treatment	(M00) Mechanical Engineering, Doctoral Academic Studies
17.	DP007	Procedures of Plasma Depozition	(M00) Mechanical Engineering, Doctoral Academic Studies
18.	DP011	Nanotechnologies and Nanomaterials Forming	(M00) Mechanical Engineering, Doctoral Academic Studies
19.	DP014	Nano and Micro Layers Characterization	(M00) Mechanical Engineering, Doctoral Academic Studies
20.	ZRD213	Current state and development tendencies of quality management of work environment	(Z01) Safety at Work, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)	
1.	Škorić B., Kakaš D., Influence of type of plasma coatings on friction coeficient and contact temperature on wear of tool steel, Oxidation Communications, vol.17, Bulgarian-English Academic Publishing House ,1994, 214-219
2.	Škorić B., Kakaš D., Tribologycal behaviour of TiN and TiAlN deposited layers on substrates plasma nitrided at low pressure, Materials and Manufacturing Processes, Vol 10, 1 ,New York, USA,1995, 133-138
3.	Škorić B., Kakaš D., Sovilj B., Microstructural and tribological study of magnetron sputtered coating, Journal of the Balkan Tribological Association, Vol.3, No.3, 1997,142-147.

	Representative refferences (minimum 5, not more than 10)
4.	Škorić B., Kakaš D., Influence of plasma Nitriding on Mechanical and Tribological Properties of Steel with subsequent PVD Surface Treatments., Thin Solid Films, Elsevier Science, Oxford, England, 317 ,1998, 486-489
5.	Škorić B., Kakaš D., Examination of tribological properties of plasma surface layer using special test equipment, Computer Standards & Interfaces, Elsevier Science, Oxford, England, Volume 21, Issue 2, 1999, 123.
6.	Kakaš D., Škorić B., Rakita M., Tribological behavior of duplex coating improved by ion implantataion, Thin Solid Films, Elsevier Science, Oxford, England, Volume 459, Issues 1-2, Oxford, England, 2004, 152-155.
7.	Škorić B., Kakaš D., Rakita M., Bibić N., Peruško D Structure, hardness and adhesion of TiN coatings deposited by PVD and IBAD on nitrided steels, Vacuun, Pergamon, England, Volume 76, Issue 2-3, 2004,169-172
8.	Škorić B., Kakaš D., Bibić N., Rakita M., Microstructural studies of TiN coatings prepared by PVD and IBAD, Surface Science, Elsevier Science B V , North-Holland, Volumes 566-568, Part 1, 2004, 40-44.
9.	Škorić B., Kakaš D., Karakterizacija mikro i nano slojeva, monografija, FTN, Novi Sad, 2007
10.	Škorić B.: Tribological characterizationof duplex coatings with additional ion bombardment, Brussels, European science foundation, 2008, str. 289-299, ISBN 978-92-898-0040-2

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	38			
Total of SCI(SSCI) list papers :	16			
Current projects :	Domestic :	1	International :	1

Science, arts and professional qualifications

Name and last name:	Šostakov S. Rastislav
Academic title:	Assistant Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	01.03.1974
Scientific or art field:	Machine Constructions, Transport Systems and Logistics

Academic carieer	Year	Institution	Field
Academic title election:	2012	Faculty of Technical Sciences - Novi Sad	Machine Constructions, Transport Systems and Logistics
PhD thesis	2007	Faculty of Technical Sciences - Novi Sad	Machine Constructions, Transport Systems and Logistics
Magister thesis	1983	Faculty of Technical Sciences - Novi Sad	Machine Constructions, Transport Systems and Logistics
Bachelor's thesis	1974	Faculty of Mechanical Engineering - Novi Sad	Machine Constructions, Transport Systems and Logistics

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	H2404	Driving Systems Mechatronics	(H00) Mechatronics, Undergraduate Academic Studies
2.	M2408	Cranes	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
3.	M2507	Methods of experimental testing of machines	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
4.	M301	Driving Systems	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
5.	M312A	Fundamentals of Transportation Machines	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
6.	ZR308A	Security and Safety Equipment for working	(Z01) Safety at Work, Undergraduate Academic Studies
7.	ZR407A	Occupational safety in internal transport, reloading and warehouse	(Z01) Safety at Work, Undergraduate Academic Studies
8.	M2526	Working Strength	(M22) Mechanization and Construction Engineering, Master Academic Studies
9.	M2541	Occupational Safety and Protection in Operation with Machinery	(M22) Mechanization and Construction Engineering, Master Academic Studies
10.	LIM12	Transport Technique and Material Flow	(LIM) Logistic Engineering and Management, Master Academic Studies
11.	LIM27	Logistics of Warehousing and Commissioning	(LIM) Logistic Engineering and Management, Master Academic Studies
12.	LIM29	Simulation of Large Logistic Systems	(LIM) Logistic Engineering and Management, Master Academic Studies
13.	H797	Mechatronics in mechanization - advanced topics	(H00) Mechatronics, Master Academic Studies
14.	DM214	Selected Chapters in Working Strength	(M00) Mechanical Engineering, Doctoral Academic Studies
15.	DM331	Selected Chapters in Transport and Construction Machines	(M00) Mechanical Engineering, Doctoral Academic Studies
16.	DM410	Selected Chapters in Food Processing Machines and Equipment	(M00) Mechanical Engineering, Doctoral Academic Studies
17.	DOM25	Contemporary Procedures for Mobile Machine Designing	(M00) Mechanical Engineering, Doctoral Academic Studies
18.	DOM28	Modeling and Simulation of Driving Systems	(M00) Mechanical Engineering, Doctoral Academic Studies
19.	ZRD238	State and trends of development safety and health at work in the area mechanical engineering	(Z01) Safety at Work, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)	
1.	J. Vladić, P. Malešev, R. Šostakov, N. Brkljač: Dynamic Analysis of the Load Lifting Mechanisms, Strojniski vestnik - Journal of Mechanical Engineering, Vol. 54, No 10, pp. 655-661, 2008, ISSN: 0039-2480.
2.	N. Zuber, R. Šostakov, R. Bajrić: Application of vibration signal analysis and artificial intelligence methods in fault identification of rolling element bearings, Technics Technologies Education Management - TTEM, Vol. 6, No 1, pp. 3-10, 2011, ISSN: 1840-1503.
3.	R. Šostakov, D. Uzelac, F. Časnji: Surveying The Transient Operating Regimes Of A Driving Mechanism With A Hydrodynamic Coupling, "Mobility&Vehicles Mechanics, Kragujevac, 1999, Vol. 25, No 2&3, p. 47-54

	Representative refferences (minimum 5, not more than 10)
4.	D. Uzelac, R. Šostakov, S. Tašin: Starting Of An Electric Motor Drive With Hydrodynamic Coupling, "Facta Universitatis", Series "Mechanical Engineering", Nis, 1998, Vol. 1, No 5, p. 537-545
5.	R. Šostakov, D. Uzelac, N. Brkljač: Metodologija praćenja rada pogonskog mehanizma sa hidrodinamičkom spojnicom i određivanja trajanja njegovog zaleta, "Tehnika, Mašinstvo", Beograd, 54(2005)3, str. 17-24
6.	R. Šostakov, N. Babin, N. Brkljač: Analiza mogućnosti i postupaka uklapanja domaćih u međunarodne bazne standarde iz oblasti dizalica, I međunarodni naučno-stručni skup "Teška mašinogradnja "93", Kruševac, Vrnjačka Banja, 1993, Zbornik radova, str. 85-90
7.	R. Sostakov, N. Babin, M. Zubic: The Concept Of Surveying The Transient States Of Crane Driving Mechanisms Operation Based On The Operating Point Motion - Didactical And Practical Aspect, XIV International Conference on Material Handling and Warehousing, Belgrade, 11. - 12. 12. 1996, Collected Papers, p. 2.20.-2.25
8.	R. Sostakov, J. Vladic, D. Uzelac, N. Brkljac: Berechnung der Anlaufdauer eines Antriebssystems mit hydrodynamischer Kupplung aufgrund des vereiniges M-n Diagrams, XIV International Conference on Material Handling and Ware¬housing, ??lgrade, 11. - 12. 12. 1996, Collected Papers, p. 4.67.-4.72
9.	R. Sostakov, P. Dragicevic, N. Babin, H. Licen: Subroutine For ON-LINE Discretisation And Classification Of A Stress-Time Function Using Modified Full Cycles Method, XIV International Conference on Material Handling and Warehousing, Belgrade, 11. - 12. 12. 1996, Collected Papers, p. 4.99.-4.102
10.	R. Sostakov, R. Jevremovic, M. Zubic: Electrical Motor Modelling As A Part Of Crane Driving Mechanism Modelling, XIV International Conference on Material Handling and Warehousing, Belgrade, 11. - 12. 12. 1996, Collected Papers, p. 4.162.-4.167

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	0			
Total of SCI(SSCI) list papers :	2			
Current projects :	Domestic :	1	International :	0

Science, arts and professional qualifications

Name and last name:	Teofanov Đ. Ljiljana
Academic title:	Assistant Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	18.12.1995
Scientific or art field:	Mathematics

Academic carieer	Year	Institution	Field
Academic title election:	2009	Faculty of Technical Sciences - Novi Sad	Mathematics
PhD thesis	2008	Faculty of Sciences - Novi Sad	Mathematical Sciences
Magister thesis	2000	Faculty of Sciences - Novi Sad	Mathematical Sciences
Bachelor's thesis	1994	Faculty of Sciences - Novi Sad	Mathematical Sciences

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	A101	Mathematics	(A00) Architecture, Undergraduate Academic Studies
2.	EE204	Selected Chapters in Mathematics	(MR0) Measurement and Control Engineering, Undergraduate Academic Studies
			(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
3.	GG00	Mathematical Methods 1	(G00) Civil Engineering, Undergraduate Academic Studies
4.	GI101	Algebra	(GI0) Geodesy and Geomatics, Undergraduate Academic Studies
5.	IAM001	Mathematical Shape Modeling for Computer Animation	(F10) Engineering Animation, Undergraduate Academic Studies
6.	M102	Mathematics 1	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
			(M30) Energy and Process Engineering, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
			(P00) Production Engineering, Undergraduate Academic Studies
7.	M106	Mathematics 2	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
			(M30) Energy and Process Engineering, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
			(P00) Production Engineering, Undergraduate Academic Studies
8.	E101A	Discrete Mathematics	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
9.	IM1523	Discrete Mathematics	(M30) Energy and Process Engineering, Undergraduate Academic Studies
			(I20) Engineering Management, Undergraduate Academic Studies
10.	P216	Numerical Analysis	(P00) Production Engineering, Undergraduate Academic Studies
11.	SE0009	Discrete Mathematics	(SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies
			(SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies
12.	DZ01MS	Selected Chapters in Mathematics	(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
			(I12) Industrial Engineering, Specialised Academic Studies
			(I22) Engineering Management, Specialised Academic Studies
			(Z00) Environmental Engineering, Specialised Academic Studies

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
13.	IA022	Numerical Optimization	(F20) Engineering Animation, Master Academic Studies
14.	D0M48	Numerical Methods for Solving Differential Equations	(OM1) Mathematics in Engineering, Doctoral Academic Studies
15.	DZ01M	Selected Chapters in Mathematics	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies (E20) Computing and Control Engineering, Doctoral Academic Studies (F00) Graphic Engineering and Design, Doctoral Academic Studies (F20) Engineering Animation, Doctoral Academic Studies (G00) Civil Engineering, Doctoral Academic Studies (GI0) Geodesy and Geomatics, Doctoral Academic Studies (H00) Mechatronics, Doctoral Academic Studies (I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies (M00) Mechanical Engineering, Doctoral Academic Studies (M40) Technical Mechanics, Doctoral Academic Studies (OM1) Mathematics in Engineering, Doctoral Academic Studies (S00) Traffic Engineering, Doctoral Academic Studies (Z00) Environmental Engineering, Doctoral Academic Studies (Z01) Safety at Work, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)	
1.	Surla, K., Teofanov, Lj., Uzelac, A Robust Layer-Resolving Spline Collocation Method for a Convection-Diffusion Problem, Applied Mathematics and Computation,(2009), 208(1): 76-89
2.	Teofanov, Lj., Roos, H. -G, An elliptic singularly perturbed problem with two parameters II: robust finite element solution, J. Comput. Appl. Math. Vol. 212, 2008, 374-389
3.	Teofanov, Lj., Roos, H. -G, An elliptic singularly perturbed problem with two parameters I: solution decomposition, J. Comput. Appl. Math. Vol. 206, 2007, 1082-1097
4.	Surla, K., Uzelac, Z., Teofanov, Lj., The discrete minimum principle for quadratic spline discretization of a singularly perturbed problem, Math. Comput. Simul. 2009, Vol. 79, No 8, pp.2490-2505
5.	Teofanov, Lj., Zarin, H., Superconvergence for two-parameter singularly perturbed problem, BIT Numerical Mathematics, Vol. 49, No. 4, 2009, 743-765
6.	Vulanović, R., Teofanov, Lj., A uniform numerical method for semilinear reaction-difusion problems with a boundary turning point, Numer. Algor. 54, 2010, 431-444
7.	Teofanov, Lj., Uzelac, Z., Family of Quadratic Spline Difference Schemes for a Convection-Diffusion Problem, Int. J. Comput. Math., Vol. 84, No. 1, 2007, 33-50
8.	Surla, K., Uzelac, Z., Teofanov, Lj., On collocation methods for singular perturbation problems of convection-diffusion type, Novi Sad J. Math, Vol. 31, No. 1, 2001, 125-132
9.	Surla, K., Uzelac, Z., Pavlović, Lj., On collocation methods for singular perturbation problems, Novi Sad J. Math., Vol. 30, No. 3, 2000, 173-183
10.	Čomić, I., Pavlović, Lj., Funkcije više promenljivih, Fakultet tehničkih nauka, Novi Sad, 2000, 95 str.

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	12			
Total of SCI(SSCI) list papers :	7			
Current projects :	Domestic :	1	International :	0

Science, arts and professional qualifications

Name and last name:	Todić V. Velimir
Academic title:	Full Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	01.01.1971
Scientific or art field:	Tecnological Process Design and Optimization and Technical Preparation

Academic carieer	Year	Institution	Field
Academic title election:	1998	Faculty of Technical Sciences - Novi Sad	Tecnological Process Design and Optimization and Technical Preparation for Manufacturing
PhD thesis	1987	Faculty of Technical Sciences - Novi Sad	Technological Processes, Techno-Economic Optimization and Virtual Design
Magister thesis	1978	Faculty of Technical Sciences - Novi Sad	Technological Processes, Techno-Economic Optimization and Virtual Design
Bachelor's thesis	1970	Faculty of Technical Sciences - Novi Sad	Technological Processes, Techno-Economic Optimization and Virtual Design

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	P1403	Integrated CAPP Systems and Technological Database	(P00) Production Engineering, Undergraduate Academic Studies
2.	P1503	Technological Logistics and Entrepreneurship	(P00) Production Engineering, Undergraduate Academic Studies
3.	P308	Process Planning	(P00) Production Engineering, Undergraduate Academic Studies
4.	P4408	Entrepreneurship in Small and Medium Enterprises	(P00) Production Engineering, Undergraduate Academic Studies
5.	P320	Technological Preparation of Production in Precision Engineering	(P00) Production Engineering, Undergraduate Academic Studies
6.	P1506	Internet Technologies in Production Engineering	(PM0) Production Engineering, Master Academic Studies
7.	P315	Intelligent Process Planning	(PM0) Production Engineering, Master Academic Studies
8.	PLIS1	Logistics and Simulation in Technologies of Plastics Processing	(PM0) Production Engineering, Master Academic Studies
9.	SM1	Methods and Software Tools for Collaborative Design	(PM0) Production Engineering, Master Academic Studies
10.	DP001	Design and Research Methods in Production Engineering	(M00) Mechanical Engineering, Doctoral Academic Studies
11.	DP017	Selected Chapters in e-Manufacturing	(M00) Mechanical Engineering, Doctoral Academic Studies
12.	DP018	Modern Approach in Development Technological Preparation of Production	(M00) Mechanical Engineering, Doctoral Academic Studies
13.	ZRD232	Logistics in the Security Services and Health at Work	(Z01) Safety at Work, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)	
1.	Todić, V.: Projektovanje tehnoloških procesa, udžbenik, FTN Izdavaštvo, Novi Sad, 2004.
2.	Todić, V., Stanić, J.: Osnove optimizacije tehnoloških procesa izrade i konstrukcije proizvoda, udžbenik, FTN, Novi Sad, 2002.
3.	Todić, V., Banjac, D.: Projektovanje i optimizacija tehnoloških procesa obrade, priručnik, FTN, Novi Sad, 2000.
4.	Todić, V., Penezić, N., Lukić, D., Milošević, M.:Tehnološka logistika i preduzetništvo, Fakultet tehničkih nauka, Novi Sad, 2012.
5.	Todić V., Tepić J., Milošević M., Lukić D., Hadžistević M.: Design of Casting Blanks in CAPP System for Parts of Piston-Cylinder Assembly of Internal Combustion Engines, Metalurgija, 2012, Vol. 51, No 1, pp. 75-78, ISSN 0543-5846, UDK: 621.824:621.886.6:621.887=111
6.	Todić V., Tepić J., Kostelac M., Lukić D., Milošević M.: Design and economic justification of group blanks application, Metalurgija, 2012, Vol. 51, No 2, pp. 269-272, ISSN 0543-5846, UDK: 65.01:658.5:65.011=111
7.	Todić V., Zeljković M., Tepić J., Milošević M., Lukić D.: Techno-economic method for evaluation and selection of flexible manufacturing systems, Metalurgija, 2012, Vol. 51, No 3, ISSN 0543-5846
8.	Todić V., Lukić D., Hadžistević M., Milošević M.: Integrated CAPP System for Plastic Injection Molds Manufacturing, Materiale Plastice, 2008, Vol. 45, No 4, pp. 381-389, ISSN 0025-5289
9.	Tepić J., Todić V., Lukić D., Milošević M., Borojević S.: Development of the computer-aided process planning (CAPP) system for polymer injection molds manufacturing, Metalurgija, 2011, Vol. 50, No 4, pp. 273-277, ISSN 0543-5846, UDK: 621.824:621.886.6:621.887=111
10.	Tepić J., Todić V., Tanackov I., Lukić D., Stojić G., Sremac S.: Modular System Design for Plastic Euro Pallets, Metalurgija, 2012, Vol. 51, No 4, ISSN 0543-5846, UDK: 621.824:621.886.6:621.887=111
Summary data for teacher's scientific or art and professional activity:	

Quotation total :	8			
Total of SCI(SSCI) list papers :	6			
Current projects :	Domestic :	1	International :	0

Science, arts and professional qualifications

Name and last name:	Uzelac S. Zorica
Academic title:	Full Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	01.10.1975
Scientific or art field:	Mathematics

Academic carieer	Year	Institution	Field
Academic title election:	2000	Faculty of Technical Sciences - Novi Sad	Mathematics
PhD thesis	1989	Faculty of Sciences - Novi Sad	Mathematical Sciences
Magister thesis	1980	Faculty of Mathematics - Beograd	Mathematical Sciences
Bachelor's thesis	1974	Faculty of Sciences - Novi Sad	Mathematical Sciences

	List of courses being held by the teacher in the accredited study programmes		
	ID	**Course name**	**Study programme name, study type**
1.	GG00	Mathematical Methods 1	(G00) Civil Engineering, Undergraduate Academic Studies
2.	GG05	Mathematical Methods 2	(G00) Civil Engineering, Undergraduate Academic Studies
3.	II1052	Mathematics 2	(I10) Industrial Engineering, Undergraduate Academic Studies
4.	IM1002	Mathematics 1	(I10) Industrial Engineering, Undergraduate Academic Studies
			(I20) Engineering Management, Undergraduate Academic Studies
5.	IM1006	Mathematics 2	(I20) Engineering Management, Undergraduate Academic Studies
6.	IM1120	Knowledge management	(I20) Engineering Management, Undergraduate Academic Studies
7.	0M518	Numerical Solutions of Differential Equations	(OM1) Mathematics in Engineering, Master Academic Studies
8.	0ML518	Numerical Solution of Differential Equations	(OM1) Mathematics in Engineering, Master Academic Studies
9.	DZ01MS	Selected Chapters in Mathematics	(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
			(I12) Industrial Engineering, Specialised Academic Studies
			(I22) Engineering Management, Specialised Academic Studies
			(Z00) Environmental Engineering, Specialised Academic Studies
10.	HR013	Knowledge Economy	(I20) Engineering Management, Specialised Professional Studies
			(IB0) Engineering Management - MBA, Specialised Professional Studies
11.	MBA309	Human Resource Management in Knowledge Economy	(IB0) Engineering Management - MBA, Specialised Professional Studies
12.	OIR010	Mathematics for Business and Finance	(I20) Engineering Management, Specialised Professional Studies
13.	IA022	Numerical Optimization	(F20) Engineering Animation, Master Academic Studies
14.	D0M16	Differential Equations	(OM1) Mathematics in Engineering, Doctoral Academic Studies
15.	D0M18	Numerical Analysis	(OM1) Mathematics in Engineering, Doctoral Academic Studies
16.	DM322	Numeric Methods in Power Machines and Plants	(M00) Mechanical Engineering, Doctoral Academic Studies

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
17.	DZ01M	Selected Chapters in Mathematics	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies
			(E20) Computing and Control Engineering, Doctoral Academic Studies
			(F00) Graphic Engineering and Design, Doctoral Academic Studies
			(F20) Engineering Animation, Doctoral Academic Studies
			(G00) Civil Engineering, Doctoral Academic Studies
			(GI0) Geodesy and Geomatics, Doctoral Academic Studies
			(H00) Mechatronics, Doctoral Academic Studies
			(I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
			(M00) Mechanical Engineering, Doctoral Academic Studies
			(M40) Technical Mechanics, Doctoral Academic Studies
			(OM1) Mathematics in Engineering, Doctoral Academic Studies
			(S00) Traffic Engineering, Doctoral Academic Studies
			(Z00) Environmental Engineering, Doctoral Academic Studies
			(Z01) Safety at Work, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)	
1.	Surla K., Teofanov Lj., Uzelac Z.: A robust layer-resolving spline collocation method for a convection-diffusion problem, Applied Mathematics and Computation, 2009, Vol. 208, No 1, pp. 76-89, ISSN 0096-3003
2.	Surla K., Uzelac Z., Teofanov Lj.: The discrete minimum principle for quadratic spline discretization of a singularly perturbed problem, Math. Comput. Simul, 2009, Vol. 79, No 8, pp. 2490-2505, ISSN 0378-4754
3.	Surla, K., Uzelac, Z., Some uniformly convergent spline difference schemes for singularly perturbed boundary value problems, IMA J. Numer. Anal.10(1990) 209-222
4.	Sekulić, D., Edeskuty, F.J.,Uzelac, Z., Heat Transfer Through a High Temperature Superconducting Current Lead at Criogenic temperatures, Int.J. Heat Mass Transfer, Vol. 40,No 16, 1997, 3917-3926,
5.	Uzelac, Z., Surla, K., Discretization of the Semilinear Singularly Perturbed Problem, Nonlinear Analysis: Theory, Methods and Applications, Vol.30, No.8, (1997), 4741-4747
6.	Sekulic, D., Uzelac, Z., Edeskuty, F., J., Entropy generation in a high temperaturesuperconducting current lead, Cryogenics, Vol 32(1992) 1154-1161
7.	Cvetićanin, L., Uzelac, Z., Longitudinal Vibration of Rod with Non-Linear Constitutive Equation, Journal of Vibration and Control,5, (1999), 827-849
8.	Teofanov, Lj., Uzelac, Z., Family of Quadratic Spline Difference Schemes for a Convection-Diffusion Problem, International Journal of Computer Mathematics, Vol. 84, No. 1, 2007, 33-50
9.	Z. Uzelac, L. Nešić, D. Hristić, A Contribution to Research the Caracteristics of Women Managers and a New Style of Leadedrship, Proceedings of IC-Congress, Haarlem, The Netherlands, 3-4. May 2007
10.	Dj. Ćelić, Z. Uzelac, Vrednosne mreže, Zborniki radova XIII Medjunarodna konferncija industrijski sistemi-IS05, Herceg Novi, 07-09. septembar, 2005, 921-931

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	52			
Total of SCI(SSCI) list papers :	26			
Current projects :	Domestic :	1	International :	0

Science, arts and professional qualifications

Name and last name:	Vasić V. Veran
Academic title:	Full Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	01.04.1995
Scientific or art field:	Power Electronics, Machines and Facilities

Academic carieer	Year	Institution	Field
Academic title election:	2011		Power Electronics, Machines and Facilities
PhD thesis	2001	School of Electrical Engineering - Beograd	Power Electronics, Machines and Facilities
Magister thesis	1996	School of Electrical Engineering - Beograd	Power Electronics, Machines and Facilities
Bachelor's thesis	1994	Faculty of Technical Sciences - Novi Sad	Power Electronics, Machines and Facilities

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	E133	Power Converters	(MR0) Measurement and Control Engineering, Undergraduate Academic Studies
			(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
			(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
2.	EE304	Electric Machines 1	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
3.	EE307	Electric Machines 2	(MR0) Measurement and Control Engineering, Undergraduate Academic Studies
			(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
4.	EE401	Electric Machines 3	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
5.	EE520	Design of Electrical Machines and Converters	(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies
			(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
6.	EOS18	Industrial Protocols and Network	(E01) Power Engineering - Renewble Sources of Electrical Energy, Undergraduate Professional Studies
7.	F203	Electrical Machines	(F00) Graphic Engineering and Design, Undergraduate Academic Studies
8.	H351	Electrical Machines	(H00) Mechatronics, Undergraduate Academic Studies
9.	EE424A	Power Electronic in Drive and Industry	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
10.	DE210S	Selected topics in electrical machines	(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
11.	EE520	Design of Electrical Machines and Converters	(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies
			(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
12.	DE210	Selected Chapters in Electric Machinery	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies
13.	DOM28	Modeling and Simulation of Driving Systems	(M00) Mechanical Engineering, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1.	Dumnić B., Katić V., Vasić V., Milićević D., Delimar M.: An Improved MRAS Based Sensorless Vector Control Method for Wind Power Generator" Journal of Applied Research and Technology – JART, October 2012, Center for Applied Sciences and Technological Development, National Autonomous University of Mexico (UNAM), ISSN: 1665-6423, [Online]. Available: http://www.jart.ccadet.unam.mx/volumen10_5.htm
2.	Kulić F., Matić D., Dumnić B., Vasić V.: Optimal fuzzy controller tuned by TV-PSO for induction motor speed control, Journal of Advances in Electrical and Computer Engineering, 2011, Vol. 11, No 1, pp. 49-54, ISSN 1582-7445
3.	Vasić V., Marčetić D., Jeftenić B., Vladan J.: Speed-Sensorless Control of Induction Motor Based on Reactive Power with Rotor Time Constant Identification, IET ELECTR POWER APP, 2010, Vol. 4, No 6, ISSN 1751-8660
4.	Vasić V., Marčetić D., Oros Đ.: Prediction of Local Instabilities in Open-loop Induction Motor Drives, COMPEL - The international journal for computation and mathematics in electrical engineering, 2010, Vol. 29, No 3, ISSN 0332-1649

	Representative refferences (minimum 5, not more than 10)
5.	Oros Đ., Vasić V., Marčetić D., Kulić F.: Influence of parameters detuning on induction motor NFO shaft-sensorless scheme, Journal of Advances in Electrical and Computer Engineering, 2010, Vol. 10, No 4, pp. 121-124, ISSN 1582-7445
6.	Oros Đ., Vasić V., Marčetić D.: NFO sensorless induction motor drive with on-line stator resistance parameter update, Electric Power Components&Systems, 2008,Vol.36.No.12,pp.1318-1336.
7.	Reljić D., Vasić V., Ostojić D., Dumnić B.: A Comparision of PI Current Controllers in Field Oriented Induction Motor Drive, Journal of Advances in Electrical and Computer Engineering, 2006, Vol. 6, No 2, pp. 46-51, ISSN 1582-7445
8.	V. Vasić, S. Vukosavić, E. Levi, "A stator resistance estimation scheme for speed sensorless rotor flux oriented induction motor drives", IEEE Transaction on Energy conversion, vol. 18 no.4, pp. 476-483, december 2003.
9.	V. Vasić, S. Vukosavić, "Sensorless MRAS Based Induction Motor Control with Paralelle Speed And Stator Resistance Estimation", European Transactions on Electrical Power – ETEP, Vol. 12 no.2 pp. 135-139. March/April 2002.
10.	V. Vasić, S. Vukosavić, "Robust MRAS based algorithm for stator resistance and rotor speed identification", IEEE Power Engineering Review, vol. 21 no.11, November 2001.

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	73			
Total of SCI(SSCI) list papers :	9			
Current projects :	Domestic :	3	International :	1

Science, arts and professional qualifications

Name and last name:	Veselinov V. Branislav
Academic title:	Associate Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	01.08.1974
Scientific or art field:	Biosystems Engineering

Academic carieer	Year	Institution	Field
Academic title election:	2009	Faculty of Technical Sciences - Novi Sad	Biosystems Engineering
PhD thesis	2003	Faculty of Technical Sciences - Novi Sad	Biosystems Engineering
Magister thesis	1989	Faculty of Technical Sciences - Novi Sad	Biosystems Engineering
Bachelor's thesis	1973	Faculty of Mechanical Engineering - Novi Sad	Internal Combustion Engines

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	M2407	Biosystem Machines 2	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
2.	M304	Biosystem Machines 1	(H00) Mechatronics, Undergraduate Academic Studies
			(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
3.	URZP54	Devices in the Process Industry	(ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies
4.	Z475A	Environmental engineering in biosystems	(Z20) Environmental Engineering, Undergraduate Academic Studies
5.	Z476	Energy and renewable energy sources in rural areas	(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
			(Z20) Environmental Engineering, Undergraduate Academic Studies
6.	ZRI421	Occupational Safety in Agriculture and Forestry	(Z01) Safety at Work, Undergraduate Academic Studies
7.	Z475	Inženjerstvo zaštite životne sredine u biosistema(uneti naziv na engleskom)	(Z20) Environmental Engineering, Undergraduate Academic Studies
8.	Z476	Energija i obnovljivi izvori energije u ruralnim oblastima(uneti naziv na engleskom)	(Z20) Environmental Engineering, Undergraduate Academic Studies
9.	H2405	IT in Biosystems	(H00) Mechatronics, Master Academic Studies
			(M22) Mechanization and Construction Engineering, Master Academic Studies
10.	M2651	Tractors	(M22) Mechanization and Construction Engineering, Master Academic Studies
11.	M2652	Agricultural machinery for renewable energy sources	(M22) Mechanization and Construction Engineering, Master Academic Studies
12.	Z477	Sustainable Agriculture Engineering	(Z20) Environmental Engineering, Master Academic Studies
13.	Z478A	Information technology support sustainable biosystems	(Z20) Environmental Engineering, Master Academic Studies
14.	Z477	Inženjerstvo održive poljoprivrede(uneti naziv na engleskom)	(Z20) Environmental Engineering, Master Academic Studies
15.	Z478	Informaciono-tehnološka podrška održivom razvoju biosistema(uneti naziv na engleskom)	(Z20) Environmental Engineering, Master Academic Studies
16.	SZSP14	Contemporary approach to the biosystems engineering	(Z00) Environmental Engineering, Specialised Academic Studies
17.	SZSP16	Engineering of renewable enery sources in agriculture	(Z00) Environmental Engineering, Specialised Academic Studies
18.	DOM24	Procedure and Machines for Sustainable Agriculture	(M00) Mechanical Engineering, Doctoral Academic Studies
19.	ZSP14	Contemporary Approaches to Sustainable Engineering Biosystems	(Z00) Environmental Engineering, Doctoral Academic Studies
20.	ZSP16	Engineering of Renewable Energy in Agriculture	(OM1) Mathematics in Engineering, Doctoral Academic Studies
			(Z00) Environmental Engineering, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

	Representative refferences (minimum 5, not more than 10)
1.	Veselinov, B.: Prilog razvoju sistema za presovanje vlaknastih biomaterijala kod presa za valjkaste bale sa promenljivom zapreminom komore za presovanje, Fakultet tehničkih nauka, Novi sad, Magistarski rad, 1989, 98 strana
2.	Veselinov, B.: Uticaj raznih postupaka mehaničkog usitnjavanja suve pitome nane na kvalitet dobijene biljne sirovine, Fakultet tehničkih nauka, Novi Sad, Doktorska disertacija, 2003, 110 strana
3.	Martinov, M., Veselinov, B., Bojić, S. 2007. Maize Cobs Processor – Preparations for its use as a Fuel. 11-th International Research/Expert Conference »Trends in the Development of Machinery and Associated Technology« TMT 2007, Hammamet, Tunisia, 05-09 Septembar, 1167-1170
4.	Martinov, M., Adamović, D., Veselinov, B., Mujić, I., Bojić, S. 2008. Fazno sušenje lekovitog bilja u šaržnoj sušari. Savremena poljoprivredna tehnika, 34(1-2), 1-12. (ISSN 0350-2953)
5.	Martinov, M., Veselinov, B., Bojić, S. 2008. Drobljenje oklasaka kukuruza – priprema za korišćenje kao gorivo. Savremena poljoprivredna tehnika, 34(1-2), 26-31
6.	Veselinov, B., Adamović, D., Martinov, M. 2008. Istraživanje mogućnosti mehanizovanog branja cvasti nevena, Bilten za hmelj, sirak i lekovito bilje, Institut za ratarstvo i povrtarstvo Novi Sad, 40(81), 22-33
7.	Martinov, M, Veselinov, B. 2009. Stanje u oblasti poljoprivrednog inženjerstva – Akcenti Konferencije VDI-MEG LAND-TECHNIK 2008. Savremena poljoprivredna tehnika, 35(3), 157-168. (ISSN 0350-2953)
8.	Martinov, M., Adamović, D., Veselinov, B., Matavuly, M., Bojic, S. and I. Mujic. 2008.Practice oriented investigation of chamomile and peppermint drying in batch dryer. 36. International Symposium Agricultural Engineering: Actual Tasks on Agricultural Engineering, Opatija, 11-15 February 2008, Book of Proc, 479-490. ISSN1533-2651
9.	Martinov M, Bojic S, Golub M, Veselinov B. 2012. Practice oriented investigation of hull-less oil pumpkin seeds, Cucurbita pepo L., drying in batch dryers. 7th Conference of Medicinal and Aromatic Plants of Southeastern European Countries. Subotica 27th-31st of Mai 2012, CD of Proc. 241-247. ISBN: 978-86-83-141-16-6
10.	Martinov M, Golub M, Djordje Dj, Bojic S, Veselinov B. 2012. Total and available yield of soybean residues. 4th International Scientific and Expert Conference TEAM 2012 Technique, Education, Agriculture & Management. Slavonski Brod, 17th to 19th October 2012, CD of proc. 307-310. ISSN 1847-9065

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	0			
Total of SCI(SSCI) list papers :	1			
Current projects :	Domestic :	5	International :	0

Science, arts and professional qualifications

Name and last name:	Vićević D. Marija
Academic title:	Assistant Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	01.09.2009
Scientific or art field:	Gas and Petroleum Technics

Academic carieer	Year	Institution	Field
Academic title election:	2009	Faculty of Technical Sciences - Novi Sad	Gas and Petroleum Technics
PhD thesis	2004	Essex university - Nepoznato	Technological Engineering
Bachelor's thesis	1997	Faculty of Technology and Metallurgy - Beograd	Technological Engineering
Magister thesis	-		Technological Engineering

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	M3451	Natural Gas and Oil Preparation Equipment	(M30) Energy and Process Engineering, Undergraduate Academic Studies
			(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
2.	M3507	Combustion Technology	(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
3.	M3201	Fuels and lubricants	(M30) Energy and Process Engineering, Undergraduate Academic Studies
4.	M3507	Combustion technology	(M30) Energy and Process Engineering, Undergraduate Academic Studies
5.	M3555	Bioenergy Fuels and Alternative Processes	(ZC0) Clean Energy Technologies, Master Academic Studies
6.	M3512	Combustion	(M30) Energy and Process Engineering, Master Academic Studies
7.	M3514	Engineering application programmes	(M30) Energy and Process Engineering, Master Academic Studies
8.	M3555	Bioenergy Fuels and Alternative Processes	(M30) Energy and Process Engineering, Master Academic Studies
9.	DM313	Process Kinetics	(M00) Mechanical Engineering, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)	
1.	Boodhoo K., Cartwright C., Vićević M., Prieto M., Tortajada M.: Development of a Higee bioreactor (HBR) for production of polyhydroxyalkanoate: Hydrodynamics, gas–liquid mass transfer and fermentation studies, CHEMICAL ENGINEERING AND PROCESSING, 2010, Vol. 49, No 7, pp. 748-758, ISSN 0255-2701
2.	Vićević M., Novaković K., Boodhoo K., Morris J.: Kinetics of Styrene Free Radical Polymerisation in the Spinning Disc Reactor , Chem. Eng. J., 2008, Vol. 135, No 1-2, pp. 78-82, ISSN 1385-8947
3.	Boodhoo K., Vićević M., Boodhoo C., Ndlovu T., Toogood E.: Intensification of gas–liquid mass transfer using a rotating bed of porous packings for application to an E. coli batch fermentation process, Chem. Eng. J., 2008, Vol. 135, No 1-2, pp. 141-150, ISSN 1385-8947
4.	Vićević M., Boodhoo K., Scott K.: Catalytic Isomerisation of alpha-pinene oxide to campholenic aldehyde using silica supported zinc triflate catalysts: II. Performance of immobilised catalysts in a continuous Spinning Disc Reactor, Chem. Eng. J., 2007, Vol. 133, pp. 43-57, ISSN 1385-8947
5.	Vićević M., Boodhoo K., Scott K.: Catalytic isomerisation of alpha-pinene oxide to campholenic aldehyde using silica supported zinc triflate catalysts: I. Kinetic and thermodynamic studies , Chem. Eng. J., 2007, Vol. 133, pp. 31-41, ISSN 1385-8947
6.	Boodhoo K., Dunk W., Vićević M., Jachuck R., Sage V., Macquarrie D., Clark J.: Classical cationic polymerization of styrene in a spinning disc reactor using silica-supported BF3 catalyst , Journal of Applied Polymer Science, 2006, Vol. 101, No 1, pp. 8-19
7.	Vićević M., Jachuck R., Scott K., Clark J., Wilson K.: Rearrangement of alpha-pinene oxide using supported catalyst in a spinning disc reactor, Green Chem., 2004, Vol. 6, No 10, pp. 533-537, ISSN 1463-9262
8.	Milojević Z., Navalušić S., Zeljković M., Vićević M., Beju L.: Haptic interaction program systems development as a part of virtual environment, Academic Journal of Manufacturing Engineering – AJME, 2011, Vol. 9, No 2/2011, pp. 61-66, ISSN 1583-7904
9.	Milojević Z., Navalušić S., Zeljković M., Vićević M., Beju L.: EXAMPLES OF DEVELOPMENT OF PROGRAM SYSTEMS WITH HAPTIC INTERACTION, 5. International Conference on Manufacturing Science and Education - MSE, Sibiu, 2-5 Jun, 2011
10.	Vićević M., Novaković K., Boodhoo K., Morris J.: Autori: M. Vicevic, K. Novakovic, K.V.K. Boodhoo and J. Morris Naziv: Kinetics of Styrene Free Radical Polymerisation in the Spinning Disc Reactor Naziv skupa: Process Intensification and Innovation Process (PI)2 Conference II, Christchurch, New Zealand

Summary data for teacher's scientific or art and professional activity:	
Quotation total :	14

Total of SCI(SSCI) list papers :	7			
Current projects :	Domestic :	1	International :	0

Science, arts and professional qualifications

Name and last name:	Vilotić Ž. Dragiša
Academic title:	Full Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	01.01.1975
Scientific or art field:	Plastic Deformation Technology, Rapid Prototyping, Virtual

Academic carieer	Year	Institution	Field
Academic title election:	1998	Faculty of Technical Sciences - Novi Sad	Plastic Deformation Technology, Rapid Prototyping, Virtual
PhD thesis	1986	Faculty of Technical Sciences - Novi Sad	Plastic Deformation Technology, Rapid Prototyping, Virtual
Magister thesis	1981	Faculty of Technical Sciences - Novi Sad	Plastic Deformation Technology, Rapid Prototyping, Virtual
Bachelor's thesis	1974	Faculty of Technical Sciences - Novi Sad	Plastic Deformation Technology, Rapid Prototyping, Virtual

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	P207	Metal forming	(P00) Production Engineering, Undergraduate Academic Studies
2.	P2401	Advanced Methods in Metal Forming	(P00) Production Engineering, Undergraduate Academic Studies
3.	P2413	Computer Aided Design of Tools and Dies for Metal Forming	(P00) Production Engineering, Undergraduate Academic Studies
4.	P303	Machines for Processing by Deforming	(P00) Production Engineering, Undergraduate Academic Studies
5.	P3403	Technology of Plastic Forming - Shaping of plastic material	(P00) Production Engineering, Undergraduate Academic Studies
6.	P3503	Machines and Devices for Plastic Processing	(P00) Production Engineering, Undergraduate Academic Studies
7.	M2062	Mechanical engineering technologies 2	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
8.	M3203	Technology of machinery	(M30) Energy and Process Engineering, Undergraduate Academic Studies
9.	P3402	Physical and Phase States of Polymers	(P00) Production Engineering, Undergraduate Academic Studies
10.	ZR408A	Safety at work on the machines for processing	(Z01) Safety at Work, Undergraduate Academic Studies
11.	P2407	Rapid Prototyping and Rapid Tooling	(PM0) Production Engineering, Master Academic Studies
12.	P3501	Tool Designing for Plastic	(PM0) Production Engineering, Master Academic Studies
13.	P3503A	Contemporary Process Systems for Plastic Treatment	(PM0) Production Engineering, Master Academic Studies
14.	BMIM4B	Technologies of shaping biomedical materials	(BM0) Biomedical Engineering, Master Academic Studies
			(PM0) Production Engineering, Master Academic Studies
15.	PMISP1	Modelling and Simulation of Metal Forming Processes	(PM0) Production Engineering, Master Academic Studies
16.	PTS01	Technology of sintering	(PM0) Production Engineering, Master Academic Studies
17.	DP001	Design and Research Methods in Production Engineering	(M00) Mechanical Engineering, Doctoral Academic Studies
18.	DP005	State and Tendencies in Development of Metrology, Quality and Equipment	(M00) Mechanical Engineering, Doctoral Academic Studies
19.	DP008	Contemporary Methods and TPD Systems	(M00) Mechanical Engineering, Doctoral Academic Studies
20.	DP012	Physical Modelling and TPD Simulation by Computers	(M00) Mechanical Engineering, Doctoral Academic Studies
21.	DP015	Nonconventional Procedures of Forming in TPD	(M00) Mechanical Engineering, Doctoral Academic Studies

	ID	Course name	Study programme name, study type
22.	SID04	Current State in the Field	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies (E20) Computing and Control Engineering, Doctoral Academic Studies (F00) Graphic Engineering and Design, Doctoral Academic Studies (F20) Engineering Animation, Doctoral Academic Studies (G00) Civil Engineering, Doctoral Academic Studies (GI0) Geodesy and Geomatics, Doctoral Academic Studies (H00) Mechatronics, Doctoral Academic Studies (I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies (M00) Mechanical Engineering, Doctoral Academic Studies (OM1) Mathematics in Engineering, Doctoral Academic Studies (S00) Traffic Engineering, Doctoral Academic Studies (Z00) Environmental Engineering, Doctoral Academic Studies
23.	DP026	Modern methods for polymers investigation	(M00) Mechanical Engineering, Doctoral Academic Studies
24.	DP028	Theoretical basis for forming polymer technology	(M00) Mechanical Engineering, Doctoral Academic Studies
25.	SID04	Present State in the Field	(A00) Architecture, Doctoral Academic Studies (AS0) Scenic Design, Doctoral Academic Studies (Z01) Safety at Work, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1. D. Vilotić, M. Plančak, Đ. Čupković, S. Aleksandrov, N. Aleksandrov: Free Surface Fracture in Three Upsettin Tests, Journal Experimental Mechanics, 2006., No. 46, pp 115-120.

2. Vilotić D., Plančak M., Grbić S., Alexandrov S., Chikanova N.: An approach to determining the workability diagram based on upsetting tests. Journal Fatigue and Fracture of Engineering Materials and Structures, Vol.1, No 26 (2003), pp.305-310, ISSN 8756-758X

3. Vilotić D.: Ponašanje čeličnih materijala u različitim obradnim sistemima hladnog zapreminskog deformisanja, naučno delo, FTN, N. Sad, 1987.

4. Essa K., Kačmarčik I., Hartley P., Plančak M., Vilotić D.: Upsetting of bi-metallic ring billets, Journal of Materials Processing Technology, 2012, Vol. 212, No 4, pp. 817-824, ISSN 0924-0136

5. Alexandrov S., Vilotić D., Konjovoć Z., Vilotić M.: An Improved Experimental Method for Detrmining the Workability Diagram, Experimental Mechanics, 2012, Vol. 52, No 11340, ISSN 0014-4851

6. Alexandrov S., Vilotić D.: A study on an effect of geometric singularities on ductile fracture , Engineering Fracture Mechanics, 2009, Vol. 76, No 14, pp. 2309-2315, ISSN 0013-7944

7. Vilotić D., Plančak M., Čupković Đ., Aleksandrov S., Aleksandrov N.: Free Surface Fracture in Three Upsetting Tests , Experimental Mechanics, 2006, Vol. 46, pp. 115-120, ISSN 0014-4851

8. Plančak M., Hartley P., Esssa K., Vilotić D., Movrin D., Lužanin O.: Deformation analysis during bi-metallic coining operations, Steel Research International, 2012, pp. 1247-1250, ISSN 1611-3683

9. Vilotić D., Alexandrov S., Plančak M., Vilotić M., Ivanišević A., Kačmarčik I.: Material Formability at Upsetting by Cylindrical and Flat Dies, Steel Research International, 2012, pp. 1175-1178, ISSN 1611-3683

10. Vilotić D., Alexandrov S., Plančak M., Movrin D., Ivanišević A., Vilotić M.: Material Formability of Upsetting by V-Shape Dies , Steel Research International, 2011, pp. 923-928, ISSN 1611-3683

Summary data for teacher's scientific or art and professional activity:

Quotation total :	17			
Total of SCI(SSCI) list papers :	15			
Current projects :	Domestic :	1	International :	1

Science, arts and professional qualifications

Name and last name:	Vladić M. Jovan
Academic title:	Full Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	12.11.1975
Scientific or art field:	Machine Constructions, Transport Systems and Logistics

Academic carieer	Year	Institution	Field
Academic title election:	1999	Faculty of Technical Sciences - Novi Sad	Machine Constructions, Transport Systems and Logistics
PhD thesis	1989	Faculty of Technical Sciences - Novi Sad	Mechanical Engineering
Magister thesis	1982	Faculty of Technical Sciences - Novi Sad	Mechanical Engineering
Bachelor's thesis	1974	Faculty of Technical Sciences - Novi Sad	Mechanical Engineering

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	M207A	Computer-Aided Design	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
2.	M2402	Continuous and Automated Transport	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
3.	M2610	Graphic Communications and CAD	(H00) Mechatronics, Undergraduate Academic Studies
4.	M312A	Fundamentals of Transportation Machines	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
5.	M313A	CAD/CAE Course	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
6.	S0218	Reload Logistics	(S00) Traffic and Transport Engineering, Undergraduate Academic Studies
7.	S1218	Reload Logistics	(S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies
8.	ZR407A	Occupational safety in internal transport, reloading and warehouse	(Z01) Safety at Work, Undergraduate Academic Studies
9.	H2504	Transportation and Manipulation Systems	(H00) Mechatronics, Master Academic Studies
10.	M2503	Transport Systems and Devices	(M22) Mechanization and Construction Engineering, Master Academic Studies
11.	M2509A	Automated Machine Designing	(M22) Mechanization and Construction Engineering, Master Academic Studies
12.	M2532	Packaging Machines	(M22) Mechanization and Construction Engineering, Master Academic Studies
13.	LIM12	Transport Technique and Material Flow	(LIM) Logistic Engineering and Management, Master Academic Studies
14.	LIM13	Packaging Techniques and Packaging	(LIM) Logistic Engineering and Management, Master Academic Studies
15.	LIM24	Urban Logistics	(LIM) Logistic Engineering and Management, Master Academic Studies
16.	H797	Mechatronics in mechanization - advanced topics	(H00) Mechatronics, Master Academic Studies
17.	DM213	Contemporary Methods of Designing and Machine Constructing	(M00) Mechanical Engineering, Doctoral Academic Studies
18.	DM331	Selected Chapters in Transport and Construction Machines	(M00) Mechanical Engineering, Doctoral Academic Studies
19.	DM410	Selected Chapters in Food Processing Machines and Equipment	(M00) Mechanical Engineering, Doctoral Academic Studies
20.	DOM20	Engineering Analysis Methods	(M00) Mechanical Engineering, Doctoral Academic Studies
21.	DOM23	Product Development	(M00) Mechanical Engineering, Doctoral Academic Studies
22.	DOM25	Contemporary Procedures for Mobile Machine Designing	(M00) Mechanical Engineering, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1.	Vladić J., Đokić R., Kljajin M., Karakašić M.: Modelling and simulations of elevator dynamic behaviour, Tehnički vjesnik/Technical Gazette, 2011, Vol. 18, No 3, pp. 423-434, ISSN 1330-3651, UDK: 62(05)=163.42=111

Representative refferences (minimum 5, not more than 10)

2.	Vladić J., Malešev P., Šostakov R., Brkljač N.: Dynamic Analysis of the Load Lifting Mechanisms, Strojniski vestnik = Journal of Mechanical Engineering, 2008, No 10, pp. 655-661, ISSN 0039-2480
3.	Vladić J., Đokić R., Živanić D.: Simulations and dynamic models of electrical elevators, 7. Simpozijum o konstruisanju, oblikovanju i dizajnu – KOD, Balatonfured: Faculty of Technical Sciences, 24-26 Maj, 2012, pp. 121-126, ISBN 978-86-7892-399-9
4.	Đokić R., Vladić J., Živanić D.: Design and bases for assembling prefabricated industrial objects, 6. Simpozijum o konstruisanju, oblikovanju i dizajnu – KOD, Palić: Fakultet tehničkih nauka, 29-30 Septembar, 2010, pp. 189-192, ISBN 978-86-7892-278-7
5.	Vladić J., Đokić R.: Modeling and dynamic analysis as basis for elevators design, 6. Simpozijum o konstruisanju, oblikovanju i dizajnu – KOD, Palić: Fakultet tehničkih nauka, 29-30 Septembar, 2010, pp. 193-198, ISBN 978-86-7892-278-7
6.	Vladić J., Živanić D., Đokić R., Gajić A.: Analysis and Choice of Prefabricated Industrial Halls Elements , 19. International conference on MATERIAL HANDLING, CONSTRUCTIONS AND LOGISTICS, Beograd: Mašinski fakultet Beograd, 15-16 Oktobar, 2009, pp. 257-260, ISBN 978-86-7083-672-3
7.	Vladić J., Gajić A., Đokić R., Živanić D.: Choice of Optimal Transportation Mechanisation at Open Pit , 6. International Conference "Heavy Machinery" - HM, Kraljevo: Faculty of mechanical engineering Kraljevo, 24-29 Jun, 2008, pp. 63-68, ISBN 978-86-82631-45-3
8.	Vladić J., Živanić D., Đokić R., Gajić A.: Analysis of Material Flows and Logistics Approach in Design of Material Handling Systems, 6. International Conference "Heavy Machinery" - HM, Kraljevo: Faculty of mechanical engineering Kraljevo, 24-29 Jun, 2008, pp. 69-72, ISBN 978-86-82631-45-3
9.	Vladić J., Đokić R.: Dynamic behaviour of elevators and tribological processes in their driving systems, 2. Power Transmissions, Novi Sad: FTN Novi Sad, 25-26 April, 2006, pp. 537-542
10.	Vladić, J.: Računske i eksperimentalne metode za statičku i dinamičku analizu žičara, monografija, 1991., FTN Novi Sad

Summary data for teacher's scientific or art and professional activity:

Quotation total :	0			
Total of SCI(SSCI) list papers :	2			
Current projects :	Domestic :	0	International :	0

Science, arts and professional qualifications

Name and last name:		Vučinić-Vasić T. Milica	
Academic title:		Assistant Professor	
Name of the institution where the teacher works full time and starting date:		Faculty of Technical Sciences - Novi Sad	
		15.04.2000	
Scientific or art field:		Physics	

Academic carieer	Year	Institution	Field
Academic title election:	2007	Faculty of Technical Sciences - Novi Sad	Physics
PhD thesis	2007	Faculty of Sciences - Novi Sad	Physics
Magister thesis	2000	Faculty of Sciences - Novi Sad	Physics
Bachelor's thesis	1996	Faculty of Sciences - Novi Sad	Physics

	List of courses being held by the teacher in the accredited study programmes		
	ID	**Course name**	**Study programme name, study type**
1.	F102	Physics	(F00) Graphic Engineering and Design, Undergraduate Academic Studies
2.	GG06	Civil Engineering Physics	(G00) Civil Engineering, Undergraduate Academic Studies
3.	S014	Physics	(S00) Traffic and Transport Engineering, Undergraduate Academic Studies
			(S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies
4.	DZ01FS	Selected Chapters in Physics	(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
			(I12) Industrial Engineering, Specialised Academic Studies
			(I22) Engineering Management, Specialised Academic Studies
			(Z00) Environmental Engineering, Specialised Academic Studies
5.	DZ01F	Selected Chapters in Physics	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies
			(E20) Computing and Control Engineering, Doctoral Academic Studies
			(F00) Graphic Engineering and Design, Doctoral Academic Studies
			(G00) Civil Engineering, Doctoral Academic Studies
			(GI0) Geodesy and Geomatics, Doctoral Academic Studies
			(H00) Mechatronics, Doctoral Academic Studies
			(I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
			(M00) Mechanical Engineering, Doctoral Academic Studies
			(M40) Technical Mechanics, Doctoral Academic Studies
			(OM1) Mathematics in Engineering, Doctoral Academic Studies
			(S00) Traffic Engineering, Doctoral Academic Studies
			(Z00) Environmental Engineering, Doctoral Academic Studies
			(Z01) Safety at Work, Doctoral Academic Studies

	Representative refferences (minimum 5, not more than 10)
1.	Milica Vučinić-Vasić, Divko Ćirić, Tatjana Škrbić, Miroljub Đurić, Zbirka zadataka iz fizike, FTN Izdavaštvo, Novi Sad 2005.
2.	Ljuba Budinski-Petković, Milica Vučinić, Dušan Ilić, Praktikum eksperimentalnih vežbi iz fizike – odsek za računarstvo i automatiku, S PRINT, Novi Sad, 2003
3.	Ljuba Budinski-Petković, Milica Vučinić-Vasić, Dušan Ilić, Praktikum eksperimentalnih vežbi iz fizike – odsek za mašinstvo – odsek za grafičko inženjerstvo – odsek za mehatroniku, Delta press, Novi Sad, 2003.
4.	Vučinić-Vasić M.: Exchange-Bias and Grain-Surface Relaxations in Nanostructured NiO/Ni Induced by a Particle Size Reduction, Journal of Physical Chemistry C, 2012, Vol. 116, pp. 4356-4364, ISSN 1932-7447

Representative refferences (minimum 5, not more than 10)	
5.	Vučinić-Vasić M., Mihailović A., Kozmidis-Luburić U., Nemeš T., Ninkov J., Zeremski T., Antić B.: Metal contamination of short-term snow cover near urban crossroads: Correlation analysis of metal content and fine particles didtribution, Chemosphere, 2012, Vol. 6, No 86, pp. 585-592
6.	Kremenović A., Jančar B., Ristić M., Vučinić-Vasić M., Rogan J., Pacevski A., Antić B.: Exchange-Bias and Grain-Surface Relaxations in Nanostructured NiO/Ni Induced by a Particle Size Reduction, Journal of Physical Chemistry C, 2012, Vol. 116, pp. 4356-4364, ISSN 1932-7447
7.	Antić B., Kremenović A., Vučinić-Vasić M., Dohcević-Mitrović Z., Nikoloć A., Gruden-Pavlović M., Jančar B., Meden A.: Composition related properties of (Yb,Y)(2)O-3 nanoparticles synthesized by controlled thermal degradation of AA complexes, Materials chemistry and physics, 2010, Vol. 122, No 2-3, pp. 386-391, ISSN 0254-0584
8.	Antić B., Rogan J., Kremenović A., Nikoloć A., Vučinić-Vasić M., Božanić D., Goya G., Colomban P.: Optimization of photoluminescence of Y2O3:Eu and Gd2O3:Eu phosphors synthesized by thermolysis of 2,4-pentanedione complexes, NANOTECHNOLOGY, 2010, Vol. 21, No 24, pp. 2457-2457, ISSN 0957-4484
9.	Jović N., Vučinić-Vasić M., Kremenović A., Antić B., Jovalekić Č., Vulić P., Kahlenberg V., Kaindl R.: HEBM synthesis of nanocrystalline LiZn0.5Ti1.5O4 spinel and thermally induced order-disorder phase transition (P4332-Fd3m), Materials chemistry and physics, 2009, No 2-3, pp. 542-549, ISSN 0254-0584
10.	Vučinić-Vasić M., Antić B., Blanuša J., Rakić S., Kremenović A., Nikolić A., Kapor A.: Formation of nanosize Li-ferrites from acetylacetonato complexes and their crystal structure, microstructure and order-disorder phase transition , Applied Physics A, 2006, Vol. 82, No 1, pp. 49-54, ISSN 0947-8396

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	53			
Total of SCI(SSCI) list papers :	17			
Current projects :	Domestic :	2	International :	1

Science, arts and professional qualifications

Name and last name:	Vukelić B. Đorđe
Academic title:	Assistant Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad 23.10.2000
Scientific or art field:	Metrology, Quality, Fixtures and Ecological-Engineering Aspects

Academic carieer	Year	Institution	Field
Academic title election:	2010	Faculty of Technical Sciences - Novi Sad	Metrology, Quality, Fixtures and Ecological-Engineering Aspects
PhD thesis	2010	Faculty of Technical Sciences - Novi Sad	Metrology, Quality, Fixtures and Ecological-Engineering Aspects
Magister thesis	2005	Faculty of Technical Sciences - Novi Sad	Metrology, Quality, Fixtures and Ecological-Engineering Aspects
Bachelor's thesis	2000	Faculty of Technical Sciences - Novi Sad	Metrology, Quality, Fixtures and Ecological-Engineering Aspects

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	P1401	Fixture Design and Measuring Machines	(P00) Production Engineering, Undergraduate Academic Studies
2.	P1508	Reverse Engineering and CAQ	(P00) Production Engineering, Undergraduate Academic Studies (SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies (SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies
3.	P209	Measurements and Quality	(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies (P00) Production Engineering, Undergraduate Academic Studies
4.	P306	Fixtures	(P00) Production Engineering, Undergraduate Academic Studies
5.	Z207	Mechanical Engineering in Environmental Engineering	(Z20) Environmental Engineering, Undergraduate Academic Studies
6.	Z207A	Mechanical Engineering in Environmental Engineering	(Z01) Safety at Work, Undergraduate Academic Studies
7.	Z301	Pollution Measurement and Control	(Z01) Safety at Work, Undergraduate Academic Studies (Z20) Environmental Engineering, Undergraduate Academic Studies
8.	ZRI441	Material handling systems for environmental and labor protection	(Z01) Safety at Work, Undergraduate Academic Studies
9.	II1037	Disassembly and recycling technologies	(I10) Industrial Engineering, Undergraduate Academic Studies
10.	P322	Introduction to Precision Engineering	(P00) Production Engineering, Undergraduate Academic Studies
11.	ZC036	Measurement and control of pollution	(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
12.	P1409	Material Control Systems and CAI	(PM0) Production Engineering, Master Academic Studies
13.	P1501	Ecological Technologies and Systems	(M40) Technical Mechanics and Technical Design, Master Academic Studies (PM0) Production Engineering, Master Academic Studies
14.	Z416A	Environment Protection System Management	(PM0) Production Engineering, Master Academic Studies
15.	I907	Automated Assembly Systems for High Accuracy	(H00) Mechatronics, Master Academic Studies (PM0) Production Engineering, Master Academic Studies
16.	P321	Reverse Engineering and Rapid Prototyping	(I10) Industrial Engineering, Master Academic Studies
17.	PIP16	Plastics and environmental protection	(PM0) Production Engineering, Master Academic Studies
18.	PLIS1	Logistics and Simulation in Technologies of Plastics Processing	(PM0) Production Engineering, Master Academic Studies
19.	PP103	Measurement and tools in precision engineering	(PM0) Production Engineering, Master Academic Studies
20.	SM3	Software support for reverse engineering and CAQ	(PM0) Production Engineering, Master Academic Studies

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
21.	SMI003	Software support for cutting tools and fixtures modeling	(PM0) Production Engineering, Master Academic Studies
22.	SZDH1	Modern Methods of Eco-design	(Z00) Environmental Engineering, Specialised Academic Studies
23.	DM411	Contemporary Approach to Integration of Reverse Engineering of Rapid Prototyping, Tools, Products and Virtual Manufacturing	(M00) Mechanical Engineering, Doctoral Academic Studies
24.	DP001	Design and Research Methods in Production Engineering	(M00) Mechanical Engineering, Doctoral Academic Studies
25.	DP006	State and development trends of metrology, quality and fixtures	(M00) Mechanical Engineering, Doctoral Academic Studies
26.	DP013	Ecological Engineering Aspects	(M00) Mechanical Engineering, Doctoral Academic Studies
27.	DP019	Selected topics in technical diagnosis	(M00) Mechanical Engineering, Doctoral Academic Studies
28.	ZDH1	Modern Methods of Eco-design	(Z00) Environmental Engineering, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)	
1.	Budak I., Vukelić Đ., Bračun D., Hodolič J., Soković M.: Pre-Processing of Point-Data from Contact and Optical 3D Digitization Sensors, Sensors, 2012, Vol. 12, No 1, pp. 1100-1126, ISSN 1424-8220.
2.	Tadić B., Jeremić B., Todorović P., Vukelić Đ., Proso U., Mandić V., Budak I.: Efficient workpiece clamping by indenting cone-shaped elements, International Journal of Precision Engineering and Manufacturing, 2012, Vol. 13, No 10, pp. 1725-1735, ISSN 2234-7593.
3.	Tadić B., Todorović P., Vukelić Đ., Jeremić B.: Failure analysis and effects of redesign of a polypropylene yarn twisting machine, Engineering Failure Analysis, 2011, Vol. 18, No 5, pp. 1308-1321, ISSN 1350-6307.
4.	Matin I., Hadžistević M., Hodolič J., Vukelić Đ., Lukić D.: A CAD/CAE Integrated Injection Mold Design System for Plastic Products, International Journal of Advanced Manufacturing Technology, 2012, Vol. 63, No. 5-8, pp. 595-607, ISSN 0268-3768.
5.	Tadić B., Todorović P., Lužanin O., Miljanić D., Jeremić B., Bogdanović B., Vukelić Đ.: Using specially designed high-stiffness burnishing tool to achieve high-quality surface finish, DOI: 10.1007/s00170-012-4508-2, International Journal of Advanced Manufacturing Technology, 2012, ISSN 0268-3768.
6.	Mrkajić V., Stamenković M., Maleš M., Vukelić Đ., Hodolič J.: Proposal for reducing problems of the air pollution and noise in the urban environment, Carpathian Journal of Earth and Environmental Sciences, 2010, Vol. 5, No 1, pp. 49-56, ISSN 1842-4090.
7.	Vukelić Đ., Zuperl U., Hodolič J.: Complex system for fixture selection, modification, and design, International Journal of Advanced Manufacturing Technology, 2009, Vol. 45, No 7-8, pp. 731-748, ISSN 0268-3768.
8.	Vukelić Đ., Ostojić G., Stankovski S., Lazarević M., Tadić B., Hodolič J., Simeunović N.: Machining fixture assembly/disassembly in RFID environment, Assembly Automation, 2011, Vol. 31, No 1, pp. 62-68, ISSN 0144-5154.
9.	Trifković B., Budak I., Todorović A., Hodolič J., Puškar T., Jevremović D., Vukelić Đ.: Application of Replica Technique and SEM in Accuracy Measurement of Ceramic Crowns, Measurement Science Review, 2012, Vol. 12, No 3, pp. 90-97, ISSN 1335-8871.
10.	Tadić B., Vukelić Đ., Hodolič J., Mitrović S., Erić M.: Conservative-Force-Controlled Feed Drive System for Down Milling, Strojniški vestnik - Journal of Mechanical Engineering, 2011, Vol. 57, No 5, pp. 425-439, ISSN 0039-2480.

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	34			
Total of SCI(SSCI) list papers :	21			
Current projects :	Domestic :	3	International :	3

Science, arts and professional qualifications

Name and last name:	Zeljković V. Milan
Academic title:	Full Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	15.11.1977
Scientific or art field:	Machine Tools, Flexible Technological Systems and Automatization

Academic carieer	Year	Institution	Field
Academic title election:	2007	Faculty of Technical Sciences - Novi Sad	Machine Tools, Flexible Technological Systems and Automatization Processes Design
PhD thesis	1996	Faculty of Technical Sciences - Novi Sad	Machine Tools, Flexible Technological Systems and Automatization Processes Design
Magister thesis	1984	Faculty of Technical Sciences - Novi Sad	Machine Tools, Flexible Technological Systems and Automatization Processes Design
Bachelor's thesis	1977	Faculty of Technical Sciences - Novi Sad	Technological Processes, Techno-Economic Optimization and Virtual Design

List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	P1402	CAD/CAE/CAM i CIM Systems	(P00) Production Engineering, Undergraduate Academic Studies
2.	P1407	Machine Tools Designing	(P00) Production Engineering, Undergraduate Academic Studies
3.	P1410	Virtual Product Designing	(P00) Production Engineering, Undergraduate Academic Studies
			(SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies
			(SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies
4.	P301	Automation in Production Engineering	(P00) Production Engineering, Undergraduate Academic Studies
5.	P304	Processing and Technological Systems	(P00) Production Engineering, Undergraduate Academic Studies
6.	P307	Automated Flexible Technologial Systems	(P00) Production Engineering, Undergraduate Academic Studies
7.	ZR308A	Security and Safety Equipment for working	(Z01) Safety at Work, Undergraduate Academic Studies
8.	ZR408A	Safety at work on the machines for processing	(Z01) Safety at Work, Undergraduate Academic Studies
9.	P1405	Contemporary Approach to Product Designing	(PM0) Production Engineering, Master Academic Studies
10.	PR408	Fundamentals on Protection for Operation on Processing Machines	(PM0) Production Engineering, Master Academic Studies
11.	IM2118	Fundamentals of CAD / CAM technology	(I20) Engineering Management, Master Academic Studies
12.	P307A	Flexible technological systems	(E20) Computing and Control Engineering, Master Academic Studies
13.	PP102	Precision of machine tools	(PM0) Production Engineering, Master Academic Studies
14.	PP110	The dynamics of micro machining systems	(PM0) Production Engineering, Master Academic Studies
15.	PP2I12	Design of prosthetic devices	(BM0) Biomedical Engineering, Master Academic Studies
			(PM0) Production Engineering, Master Academic Studies
16.	DP001	Design and Research Methods in Production Engineering	(M00) Mechanical Engineering, Doctoral Academic Studies
17.	DP003	State and Developing Trend in the Field of Machine Tools, FTS, and Automation of Designing Processes	(M00) Mechanical Engineering, Doctoral Academic Studies
18.	DP010	Behaviour Modelling and Experimental Testing of Working Systems	(M00) Mechanical Engineering, Doctoral Academic Studies
19.	ZRD18A	Behaviour Modelling and Experimental Testing of Working Systems	(Z01) Safety at Work, Doctoral Academic Studies
20.	ZRD235	Systemic regulation in the field of occupational safety and health	(Z01) Safety at Work, Doctoral Academic Studies
21.	ZRD238	State and trends of development safety and health at work in the area mechanical engineering	(Z01) Safety at Work, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)	
1.	Zeljković M., Gatalo R.: Experimental and Computer Aided Analysis of High-Speed Spindle Assembly behaviour, CIRP Annals - Manufacturing Technology, 1999, Vol. 48, No 1, pp. 325-328, ISSN 0007-8506

	Representative reffences (minimum 5, not more than 10)
2.	Gatalo R., Hodolič J., Zeljković M., Milošević V., Konjović Z.: Achievements in the developoment and future development of SAPOR-S systems for automatic programming of NC Lathes , Robotics and Computer-integrated Manufacturing, 1988, Vol. 4, No 1/2, pp. 91-102, ISSN 0736-5845
3.	Gatalo R., Rekecki J., Hodolič J., Borojev Lj., Zeljković M., Milošević V., Konjović Z., Malbaški D.: Automatic design of the technological process for NC lathes by the use of SAPOR-S system, International Journal of Production Research, 1983, Vol. 21, No 2, pp. 197-213, ISSN 0020-7543
4.	Todić V., Zeljković M., Tepić J., Milošević M., Lukić D.: Techno-economic method for evaluation and selection of flexible manufacturing systems, Metalurgija, 2012, Vol. 51, No 3, ISSN 0543-5846
5.	Antić A., Petrović P., Zeljković M., Kosec B., Hodolič J.: The influence of tool wear on the chip-forming mechanism and tool vibrations, Materijali in tehnologije, 2012, Vol. 46, No 3, pp. 279-285, ISSN 1580-2949
6.	Milojević Z., Vićević M., Zeljković M., Navalušić S.: Methodology of the bone tissue diagnostic images processing, Academic Journal of Manufacturing Engineering – AJME, 2012, Vol. 10, No 3, pp. 63-70, ISSN 1583-7904
7.	Milojević Z., Navalušić S., Zeljković M., Vićević M., Beju L.: Haptic interaction program systems development as a part of virtual environment, Academic Journal of Manufacturing Engineering – AJME, 2011, Vol. 9, No 2/2011, pp. 61-66, ISSN 1583-7904
8.	Tabaković S., Živković A., Grujić J., Zeljković M.: Using CAD/CAE software systems in the design process of modular, revision total hip endoprosthesis, Academic Journal of Manufacturing Engineering – AJME, 2011, Vol. 9, No 2/2011, pp. 97-102, ISSN 1583-7904
9.	Živković A., Zeljković M., Tabaković S.: Matematical Model for the Roller Bearing Life Determination, Academic Journal of Manufacturing Engineering – AJME, 2010, Vol. 8, No 3/2010, pp. 108-115, ISSN 1583-7904
10.	Čiča Đ., Zeljković M., Lakić-Globočki G., Sredanović B., Borojević S.: Identification of contact parameters of spindle-holder-tool assembly using artification neural networks, 11. International Scientific Conference "Advanced Production Technologies" - MMA, Novi Sad: Fakultet tehničkih nauka, 20-21 Septembar, 2012, pp. 57-60, ISBN 978-86-7892-419-4

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	22			
Total of SCI(SSCI) list papers :	6			
Current projects :	Domestic :	1	International :	0

Science, arts and professional qualifications

Name and last name:	Zuber F. Ninoslav
Academic title:	Assistant Professor
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad
	16.03.1998
Scientific or art field:	Machine Constructions, Transport Systems and Logistics

Academic carieer	Year	Institution	Field
Academic title election:	2011	Faculty of Technical Sciences - Novi Sad	Machine Constructions, Transport Systems and Logistics
PhD thesis	2010	Faculty of Technical Sciences - Novi Sad	Machine Constructions, Transport Systems and Logistics
Magister thesis	2000	Faculty of Technical Sciences - Novi Sad	Machine Constructions, Transport Systems and Logistics
Bachelor's thesis	1997	Faculty of Technical Sciences - Novi Sad	Machine Constructions, Transport Systems and Logistics

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	M2507	Methods of experimental testing of machines	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
2.	M305A	Metal Structures	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies (M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
3.	H2501	Motor Vehicle Equipment	(H00) Mechatronics, Master Academic Studies
4.	M2508	Metal Constructions in Machine Building	(M22) Mechanization and Construction Engineering, Master Academic Studies
5.	M2531	Weighing and Dosing	(M22) Mechanization and Construction Engineering, Master Academic Studies
6.	M2540	Vibrodiagnostics	(H00) Mechatronics, Master Academic Studies (M22) Mechanization and Construction Engineering, Master Academic Studies (M40) Technical Mechanics and Technical Design, Master Academic Studies
7.	LIM13	Packaging Techniques and Packaging	(LIM) Logistic Engineering and Management, Master Academic Studies
8.	H797	Mechatronics in mechanization - advanced topics	(H00) Mechatronics, Master Academic Studies
9.	DM412	Experimental testing and analysis in mechanization - advanced topics	(M00) Mechanical Engineering, Doctoral Academic Studies (Z01) Safety at Work, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1.	Zuber N., Bajric R., Karic S.: Experimental vibration investigation of an industrial beater wheel mill, TTEM. Tehnics tehnologies education management, 2011, Vol. 5, No 4, pp. 688-692, ISSN 1840-1503
2.	Zuber N., Šostakov R., Bajrić R.: Application of vibration signal analysis and artificial intelligence methods in fault identification of rolling element bearings, Technics Technologies Education Management, 2011, Vol. 6, No 1, pp. 3-10, ISSN 1840-1503
3.	Zuber N., Ličen H., Bajrić R.: An innovative approach to the condition monitoring of excavators in open pits mines, Technics Technologies Education Management, 2010, Vol. 5, No 1, pp. 3-10, ISSN 1840-1503
4.	Bajrić R., Baričak V., Delalić S., Muratović P., Zuber N.: INVESTIGATION OF POSSIBLE RESONANT PROBLEMS DURING BEATER WHEEL MILL OPERATION, Technics Technologies Education Management, 2010, Vol. 5, No 1, pp. 32-37, ISSN 1840-1503
5.	Ninoslav Zuber, Rastislav Šostakov: Implementation of rotating machinery remote monitoring, Second Conference "Maintenance 2012", 13-16.06.2012, Zenica, pp. 141-148, ISSN 1986-583X
6.	Ninoslav Zuber: Application of artificial inteligence methods in automated vibrodiagnostics of rotating machines in mining industry – a case study, 4th International Conference "Noise and Vibration"2012, Niš, Serbia, pp 193-202, ISBN: 978-86-6093-042-4
7.	Ninoslav Zuber: Roller elements bearing vibrodiagnostics, 4th International Conference "Noise and Vibration"2012, Niš, Serbia, pp 185-192, ISBN: 978-86-6093-042-4
8.	Zuber N., Ličen H., Klašnja Milićević A.: Applied Remote condition monitoring of the bucket wheel excavator, Journal of Applied Engineering Science, 2009, Vol. 7, No 25, pp. 31-40, ISSN 1451-4117, UDK: 33

Representative refferences (minimum 5, not more than 10)	
9.	Zuber Ninoslav, Ličen Hotimir, mlađi: Mogućnosti primene metoda veštačke inteligencije u automatizaciji vibrodijagnostičkih metoda, Tehnička dijagnostika, vol. 10, br. 2, pp. 9-16, 2011, UDC: 62-51:612.321.12, ISSN 1451-1975
10.	Ninoslav Zuber, Hotimir Licen, Patrice Dannepond: PREDIKTIVNO ODRŽAVANJE OPREME NA BAZI MERENJA I ANALIZE VIBRACIJA: TIPOVI, STRATEGIJE UVOĐENJA I PRIMENE, PRIMER, Power Plants 2006, Vrnjacka Banja, Srbija: 2006,

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	0			
Total of SCI(SSCI) list papers :	4			
Current projects :	Domestic :	1	International :	0

Science, arts and professional qualifications

Name and last name:		Žigić M. Miodrag	
Academic title:		Assistant Professor	
Name of the institution where the teacher works full time and starting date:		Faculty of Technical Sciences - Novi Sad	
		01.10.2007	
Scientific or art field:		Mechanics	

Academic carieer	Year	Institution	Field
Academic title election:	2012	Faculty of Technical Sciences - Novi Sad	Mechanics
PhD thesis	2012	Faculty of Technical Sciences - Novi Sad	Mechanics
Magister thesis	2008	Faculty of Technical Sciences - Novi Sad	Mechanics
Bachelor's thesis	2004	Faculty of Technical Sciences - Novi Sad	Mechanics

List of courses being held by the teacher in the accredited study programmes

	ID	Course name	Study programme name, study type
1.	GG15	Strength of Materials	(G00) Civil Engineering, Undergraduate Academic Studies
2.	GG410	Selected Chapters in the Theory of Elasticity	(G00) Civil Engineering, Undergraduate Academic Studies
3.	H112	Mechanics 1 – Fundamentals	(H00) Mechatronics, Undergraduate Academic Studies
			(S00) Traffic and Transport Engineering, Undergraduate Academic Studies
4.	H201	Mechanics 2 - General	(H00) Mechatronics, Undergraduate Academic Studies
5.	H202	Strength of materials	(H00) Mechatronics, Undergraduate Academic Studies
6.	H303	Mechatronics 3 – Further Chapters	(H00) Mechatronics, Undergraduate Academic Studies
7.	M204	Strength of Materials	(M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
			(M30) Energy and Process Engineering, Undergraduate Academic Studies
			(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
			(P00) Production Engineering, Undergraduate Academic Studies
8.	M4302	Biomechanics and mechanics of sport	(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
9.	M4306	Similarity and dimensional methods	(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
10.	BMI128	Continuum Biomechanics	(BM0) Biomedical Engineering, Undergraduate Academic Studies
11.	II1004	Mechanics and Industrial Engineering	(I10) Industrial Engineering, Undergraduate Academic Studies
12.	M44061	Optimization of mechanical systems	(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
13.	M4504	Thermal Elasticity	(M40) Technical Mechanics and Technical Design, Master Academic Studies
14.	BMIM4A	Transport phenomena and Living systems	(BM0) Biomedical Engineering, Master Academic Studies
15.	M45991	Biomechanics of cardiovascular system	(M40) Technical Mechanics and Technical Design, Master Academic Studies
16.	SZD051	Applications of optimal control theory in living environment protection	(Z00) Environmental Engineering, Specialised Academic Studies
17.	DM801	Biomedical mechanics	(M40) Technical Mechanics, Doctoral Academic Studies
18.	DTM02	Theory of impact	(H00) Mechatronics, Doctoral Academic Studies
			(M00) Mechanical Engineering, Doctoral Academic Studies
			(M40) Technical Mechanics, Doctoral Academic Studies
			(S00) Traffic Engineering, Doctoral Academic Studies
19.	DTM03	Biomechanical models and analysis of impact	(M40) Technical Mechanics, Doctoral Academic Studies
20.	ZRD16A	Selected chapters in mechanics and elasticity theory	(Z01) Safety at Work, Doctoral Academic Studies

Representative refferences (minimum 5, not more than 10)

1.	N. M. Grahovac, M. M. Zigic: Modelling of the hamstring musle group by use of fractional derivatives, Computers and Mathematics with applications, Vol. 59, Issue 5 (2010), 1695-1700.

	Representative refferences (minimum 5, not more than 10)
2.	N. Grahovac., M. Žigić, D. Spasić, On impact scripts with both fractional and dry friction type of dissipation, International Journal of Bifurcation and Chaos, Vol. 22, No 4 (2012), 1250076 (10 pages).
3.	N. M. Grahovac, M. M. Zigić, and D. T. Spasić: On multiple impacts with fractional type of dissipation, 1st International Congress of Serbian Society of Mechanics, Beograd: Serbian Society of Mechanics, 10-13 April, 2007, str. 173- 180, UDK: 531/534(082), ISBN 978-86-909973-0-5.
4.	M. M. Žigić, N. M. Grahovac and D. T. Spasić: A simplified earthquake dynamics of a column like structure with fractional type of dissipation, 1st International Congress of Serbian Society of Mechanics, Beograd: Serbian Society of Mechanics, 10-13 April, 2007, str. 165- 172, UDK: 531/534(082), ISBN 978-86-909973-0-5.
5.	Grahovac N., Žigić M: Fractional derivative viscoelastic model of the hamstring muscle group, 3rd IFAC Workshop on Fractional Differentiation and its Applications, Ankara, Turkey: 05-07 november, 2008.
6.	M. M. Zigic, Viscoelastic response of the human hamstring muscle during a ramp-and-hold type of experiment, 2nd International Congress of Serbian Society of Mechanics, Palic: Serbian Society of Mechanics, 01-05 June, 2009, str. 165-173, UDK: 531/534(082), ISBN 978-86-7892-173-5.
7.	Grahovac N., Žigić M., Spasić D.: On impact scripts with both fractional and dry friction type of dissipation, 4. IFAC Workshop on Fractional Differentiation and Its Applications, Badajoz, 18-20 Oktobar, 2010
8.	Žigić M., Grahovac N.: Dynamical behavior of a polymer gel during impact. Fractional derivative viscoelastic model, 3. International Congress of Serbian Society of Mechanics, Vlasinsko jezero, 5-8 Jul, 2011, pp. 871-878, ISBN 978-86-909973-3-6, UDK: 531/534(082)
9.	Bačlić B., Žigić M., Phase spaces of rheonomic energy-like conservation laws, 25th Yugoslav Congress on Theoretical and Applied Mechanics, 1-3 June, 2005.
10.	Kovinčić N., Žigić M., Grahovac N., Spasić D.: On Impact in Biomechanical Systems, International scientific conference on mechanics, 6. International Scientific Conference on Mechanics - Sixth Polyakhov`s Reading, Saint Petersburg, 31-3 Januar, 2012, pp. 251-251, ISBN 978-5-91563-101-3

Summary data for teacher's scientific or art and professional activity:				
Quotation total :	5			
Total of SCI(SSCI) list papers :	2			
Current projects :	Domestic :	1	International :	0

Standard 10. Organizational and Material Resources

To perform the study programme, the adequate human, spatial, technical and technological, library and other resources suitable to the study programme features and predicted students` number are provided. To perform the study programme, the adequate space for lecturing is provided, as well as the adequate laboratory space necessary for the experimental work and the contemporary equipment necessary for qualitative and productive scientific and research work. Lectures are held in classrooms and specialized laboratories.

Faculty provides the usage of the library fund from its own or other sources (books, monographs, scientific magazines, other periodicals) in the amount necessary for the Doctoral study programme. Doctoral study students have the access to databases necessary for Doctoral dissertation elaboration and scientific and research work.

The library possesses more than 100 library units relevant for the performance of the study programme. All courses from the study programme have adequate textbooks, devices and supplementary equipment available on time and in a satisfactory number for the normal teaching process. There is also adequate information support.

Faculty has the library and the study room and provides a seat for each student in amphitheatres, classrooms and laboratories.

Faculty has a short-term and a long-term plan and the budget for the realization of scientific and research work.

Means for the realization of Doctoral studies, besides the ones provided by the resource ministries, are also provided in cooperation with other higher education institutions, accredited scientific institutions and international organizations.

Faculty provides students to utilize equipment or have access to necessary and adequate equipment in the possession of the Faculty, for scientific and research work.

Faculty provides students to utilize equipment or have access to the equipment necessary for scientific and research work on the basis of contracts on cooperation with other appropriate institutions.

Standard 11.   Quality Control

Estimation of the study programme quality is elaborated regularly and systematically via self-evaluation and external quality control. One should place an emphasis on the multi-decade practice of students` surveys.

Study programme quality control is elaborated in the following manners:

- Surveying students at final lecture from the given course.
- Surveying students on the quality of the study programme and logistic support to the studies in the event of awarding the Diploma. Also, the studying comfort (classroom cleanness and tidiness) is evaluated there.
- Surveying students during the confirmation on completing a year of studies. Then students evaluate the logistic support to the studies.
- Surveying students on enrolling each year of studies. Then students evaluate the study programme at the year they completed in the prior academic year.
- Surveying the teaching and non-teaching staff on the quality of the study programme and the logistic support to the studies. This survey evaluates the work of the Dean`s office, Registrar`s office, library, and other services at the Faculty.

To monitor the quality of the study programme, there is a committee whose members are Doctoral Studies Council (composed of Faculty of Technical Science professors), one teaching assistant, two member of non-faculty stuff (administrative officer), together with two students.

Additional quality is obtained by the obligatory scientific production of candidates. Prior to beginning the defense of the Doctoral dissertation, each candidate is obliged to publish (or accepted for publication) at least one paper in the journal from the SCI list.