



UNIVERSITY OF NOVI SAD

FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

MASTER ACADEMIC STUDIES

Mechatronics



STUDY PROGRAMME ACCREDITATION MATERIAL:

# MECHATRONICS

MASTER ACADEMIC STUDIES

Novi Sad

2012.

Prevod sa srpskog jezika:

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Programme name	Mechatronics
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	Interdisciplinary
Scientific, professional or art field	Mechatronics: Electrical and Computer Engineering; Mechanical Engineering
Type of studies	Master Academic Studies
Study scope, expressed in ECTS	60
Academic degree, abbreviation	Master in Mechatronics, M.Mechatron.
Study length	1
Programme implementation starting year	2009
Future course implementation starting year (for new programme)	
Number of students attending this programme	14
Planned number of students to be enrolled in this programme	32
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	<a href="http://www.ftn.uns.ac.rs">http://www.ftn.uns.ac.rs</a>

**Study Programme Accreditation**

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Mechatronics

**Standard 00. Introduction**

The study programme for the Graduate Academic Studies – Master in Mechatronics represents a continuation of the undergraduate academic study programme in Mechatronics at the Faculty of Technical Sciences, University of NovSad in organization of the Department of Industrial Engineering and Management, which is parent department for this study program. In addition to the parent department, lectures are performed also by teachers and staff from the following departments: Department of Power, Electronic and Telecommunication Engineering, Department of Computing and Control Engineering, Department of Mechanization and Design Engineering, Department of Technical Mechanics, Department of Fundamental Science, Department of Environment Engineering and Safety at Work and Department of Production Engineering.

Traditional division into scientific and educational disciplines (e.g. Mechanical and Power Engineering) led to misunderstanding between engineers of various fields when working jointly in the same project, as well as to insufficient knowledge of various fields in realization of complex systems nowadays present in practical work. Engineers of different fields when discussing a problem do not “speak the same language”. Each field recognizes dominantly only their aspects. Since power and mechanical systems become more and more numerous, complex and sophisticated, during their creation beside having knowledge of Mechanical and Power Engineering, it is also required to have knowledge of management and programming.

Therefore, in terms of education, Mechatronics should be considered as a study programme created to meet the real needs in practical work. This study programme will enable students to additionally acquire their knowledge based on understanding of fundamental physics principles in various fields of engineering, to acquire professional knowledge for realization of contemporary engineering systems, to acquire ability to integrate knowledge required for each individual case and to be introduced to scientific and research work.



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### Standard 01. Programme Structure

The name of this study programme of graduate academic studies – Master in Mechatronics. Academic name acquired is Master in Mechatronics. The outcome of the study process is knowledge which enables students to use professional literature, to solve professional problems and to continue studies if students choose to do so.

A candidate to be enrolled must have completed four years of undergraduate academic study, an appropriate direction, which are measured with at least 240 ECTS.

Application procedures, grading and registration of candidates, as defined in the Regulations of enrollment in approved study programs at the faculty level.

The study programme of graduate academic studies in Mechatronics last one year.

There are two study groups at the graduate academic studies in Mechatronics which last one year: Mechatronics. Robotics and Automation and Mechatronics in Mechanization. Students choose one of the two groups in accordance with the previous education and professional aspirations. Lectures are realized if there are sufficient number of students. In case of insufficient number of students the lectures will not be organized or the Faculty management reaches a special decision on lectures organization (mentor work).

The study group Mechatronics, Robotics and Automation puts stress on the application of mechatronics in robotics and automation (in companies, modern automation in residential environments, etc.) and the study group Mechatronics in Mechanization puts stress on the application of mechatronics in modern mechanization. There are mandatory and selective courses. The selective courses are chosen from the suggested list of courses. However, students are given the opportunity, with the consent of the Head of the Study programme, to choose any of the courses at the Faculty of Technical Sciences and University of Novi Sad and any other university in the country or abroad. All necessary requirements for attending those courses must be met.

Lectures are realized through lectures and practical classes. During education process emphasis is placed on independent and research student work, as well as on their personal involvement in the process. During lectures, modern didactic tools are used for presenting subject content and students are informed about research trends in the field. During practical classes, which follow the lectures, actual exercises and problems are solved and appropriate examples are presented. Also additional explanations of the subject content are offered in practical classes. Practical classes can be auditory, laboratory and computer. Partially practical classes can be realized in factories and other institutions.

The student gains a certain number of ECTS by passing each exam. Studies are considered complete when a student fulfills all obligations required in the study program and collect at least 60 ECTS (pass all the required courses, and defend the final work - master thesis).





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### Standard 02. Programme Objectives

The purpose of the study programme is set in accordance with the needs of the society. The study program of the Master studies is set so that it enables students to acquire competences socially justifiable and purposeful. The Faculty of Technical Sciences has clearly defined educational assignments and objectives for highly competent experts in the field of technical engineering. The aim of the study programme – Mechanics is completely in accordance with the Faculty of Technical Sciences objectives. Realization of such a study programme creates experts in the field of Mechatronics competent in European and global standards and in accordance with social needs.



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### Standard 03. Programme Goals

The objective of the graduate academic studies in Mechatronics is acquiring competences and academic skills in the field of Mechatronics. In addition, this programme will provide graduates with practical skills, as well as form and develop competences necessary for critical thinking and team work and acquiring specific practical skills necessary for the profession.

The objective of the study programme of graduate academic studies in Mechatronics is to educate and form highly qualified experts able to perform tasks in production technologies and designing contemporary production process.

In addition, this programme will provide graduates with practical skills, as well as form and develop competences necessary for the technical sciences. The objective of this study programme is also education of experts in team working as well as development of abilities of presentation of results to professional public.

**Study Programme Accreditation**

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**Standard 04. Graduates` Competencies**

Having completed the graduate academic studies in Mechatronics, a student acquires general and subject-specific abilities in the function of qualitative performance of professional, scientific and artistic activities. Having completed this study programme, a student acquires the following general abilities:

- Ability to analyse, generate and anticipate consequences,
- Ability of critical thinking,
- Ability to solve problems by applying scientific methods and procedures

Master student acquires thorough knowledge and understanding of all disciplines of the selected study group, as well as skills for solving actual problems with utilization of scientific methods and procedures. Students at the Mechatronics are capable to write and present in an appropriate way the results of their work. Utilization of information and communication technologies is insisted upon.

The students at this level have competencies for following and application of novelties in the line of profession, as well as for cooperation with local social and international environment.

The students are enabled to design, organize and manage production. During education process student is enabled to independently conduct experiments, for statistical data processing as well as to formulate and reach appropriate results.

Upon graduation, student acquires knowledge to economically use natural resources of the Republic of Serbia in accordance of principles of sustainable development.

Special attention is paid to skill development for team work and professional ethics.



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### Standard 05. Curriculum

The curriculum of the study programme of Mechatronics is formulated so that it meets all set objectives. The structure of the study programme provides the choice of selective courses with at least 30% ECTS. Master students expand knowledge of production engineering in specific characteristics of problems which each study group deals with. Through selective courses satisfy their interests that they developed during the studies.

All subjects are one semester long and are awarded appropriate number of ECTS, and one credit equals approximately 30 hours of student activities.

The curriculum is defined description of subjects which contains title, subject type, academic year and semester, ECTS, professors name, subject objective with expected outcomes, knowledge and competences, prerequisites for attending the subject, subject content, recommended literature, teaching methods and knowledge evaluation.

The study programme is in accordance with European standards in terms of enrolment, study duration, preconditions for transferring to the following academic year, acquiring diploma and studying way.

The integral part of the curriculum of production engineering is professional practice and practical work in duration of 45 hours, realized in appropriate scientific and research institutions, in organizations for innovation activities. Student finishes the studies with elaboration of master thesis consisting of theory and methodological application of preparation necessary for understanding the field of master thesis.

Prior to defending the thesis, student passes theoretical and methodological fundamentals before a commission which is appointed for thesis defence. The final master grade is calculated on the bases of results of passed theoretical and methodological preparation and evaluation of elaboration and defence of the thesis. The thesis is defended before the commission which consists of at least 3 teachers among which at least one needs to be from another department of faculty.

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Table 5.2 Course specification

Course:		<b>Professional Practice</b>				
Course id:	H15SP					
Number of ECTS:	3					
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	3		
Precondition courses		None				
1. Educational goal:						
One of the integral segments of the curriculum for the study programme Mechatronics is professional practice carries out in adequate scientific and research. The objective of professional practice is to acquire direct and practical knowledge for which the student is being educated and the possibility of applying the previously acquired knowledge in practice.						
2. Educational outcomes (acquired knowledge):						
Educating students to apply previously acquired theoretical and professional knowledge for solving concrete practical problems. Acquired professional knowledge students will apply in further education and further practice (professional work).						
3. Course content/structure:						
The content of professional practice is created for each candidate separately, in agreement with the management of the institution or establishment in which the practice is performed, and in accordance with demands of the profession for which the student is being educated.						
4. Teaching methods:						
Practical work, tutorials and writing a professional practice diary in which students describe activities and jobs they performed during professional practice.						
Knowledge evaluation (maximum 100 points)						
Pre-examination obligations		Mandatory	Points	Final exam		
Project		Yes	50.00	Oral part of the exam	Yes	
					50.00	
Literature						
Ord.	Author	Title		Publisher	Year	

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Table 5.2 Course specification

Course:		<h2>Digital Controlling Electronics</h2>					
Course id:	H1402						
Number of ECTS:	6						
Teacher:	Živanov B. Miloš						
Course status:	Elective						
Number of active teaching classes (weekly)							
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:			
3	1	2	0	0			
Precondition courses							
1. Educational goal:							
Acquiring practical knowledge in the field of digital controlling electronics; optoelectronics components, lasers, optical fibers, sensors, practical work on the diagnostics of optical fibres.							
2. Educational outcomes (acquired knowledge):							
<ul style="list-style-type: none"> <li>- Ability of designing systems with modern electronic circuits</li> <li>- Ability of analysing complex mechatronics systems for practical realization</li> <li>- Ability of creating complex digital electronic systems with DSP</li> <li>- Ability of designing systems with complex mechatronics sensors</li> </ul>							
3. Course content/structure:							
Significance of electronics in mechatronics. Specialized sensors in mechatronics. Electric engines (DC, AC, pulse). Electronic drivers for electric engines. Engine control (continuously, impulsively). Stability problems. Management Algorithms (analogous and digital). Development environment. Digital signal processors. Industry examples. Technical documentation. Writing project.							
4. Teaching methods:							
The communicative method is used in the foreign language course. Students read the text on their own and find new words in the dictionary after a short introduction on the certain topic. This is followed by discussion on the topics related to the text and on conclusions provided in the text. Part of the class is devoted to adoption and exercising of the new vocabulary using oral and written exercises, as well as reviewing and extending the knowledge in grammar. Students are encouraged to communicate in English as much as possible during the work in groups or in group discussions.							
Knowledge evaluation (maximum 100 points)							
Pre-examination obligations		Mandatory	Points	Final exam	Mandatory	Points	
Project defence		Yes	50.00	Written part of the exam - tasks and theory	Yes	20.00	
					Theoretical part of the exam	Yes	30.00
Literature							
Ord.	Author	Title		Publisher	Year		
1.	Čedomir Milosavljević	Osnovi automatike I, II, III deo		Elektronski fakultet u Nisu	2002		
2.	Stojić Milić	Kontinualni sistemi upravljanja			1998		
3.	Stojić Milić	Digitalni sistemi upravljanja		Akadska Misao Beograd	2004		
4.	Miloš Živanov	Elektronika, pojačavačka kola, teorija i zadaci		FTN Izdavaštvo, Novi Sad	2004		
5.	S.Lj. Tešić, D.M. Vasiljević	Osnovi elektronike: komponente, pojačavačka kola, impulsna i digitalna kola		Građevinska knjiga, Beograd	1997		

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Table 5.2 Course specification

Course:		<h2 style="margin: 0;">Fundamentals in Mechanical Vision</h2>			
Course id:	H1420				
Number of ECTS:	4				
Teachers:	Crnojević S. Vladimir, Petrović S. Vladimir				
Course status:	Elective				
Number of active teaching classes (weekly)					
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:	
2	2	0	0	0	
Precondition courses		None			
1. Educational goal:					
Introducing students to basic terms in the field of mechanical vision; introduction to contemporary methods in mechanical vision.					
2. Educational outcomes (acquired knowledge):					
Review of the contemporary procedures in mechanical vision. Ability to understand fundamental principles and methods utilized in digital image processing, ability to independently realize simple systems of digital image processing, as well as possibility to simply expand knowledge with working on a certain problem.					
3. Course content/structure:					
Introduction to digital image processing – Basic terms in image processing – Image improvement in spatial domain – Image improvement in frequency domain – Image restoration – Colour image processing – Morphological image processing – Image segmentation.					
4. Teaching methods:					
Lectures; Computer practical classes; Consultations					
Knowledge evaluation (maximum 100 points)					
Pre-examination obligations		Mandatory	Points	Final exam	
Project defence		Yes	30.00	Theoretical part of the exam	
				Mandatory	Points
				Yes	70.00
Literature					
Ord.	Author	Title		Publisher	Year
1,	Gonzalez, Woods	Digital Image Processing		Prentice Hall	2000

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Table 5.2 Course specification

Course:		<h2 style="margin: 0;">Non Industrial Robotics and Automation in Buildings</h2>			
Course id:	H1503				
Number of ECTS:	6				
Teachers:	Borovac A. Branislav, Ostojić M. Gordana				
Course status:	Elective				
Number of active teaching classes (weekly)					
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:	
3	0	2	0	0	
Precondition courses		None			
1. Educational goal:					
<p>The course objective is to introduction to new fields of non-industrial robotics (service robotics, humanoid robotics, medical robotics, etc) and automation which becomes more and more important . The additional objective is to introduce scientific and research work.</p>					
2. Educational outcomes (acquired knowledge):					
<p>The course outcome is students ability to understand problems of non-industrial robotics and automation and to be able to take active part in this fields.</p>					
3. Course content/structure:					
<p>The course consists of two parts. During the first one problems of non-industrial robotics are presented with main focus on "behaviour based robotics" which is a new way for controlling robots in non-structured environment such as human environment. Non-industrial robotics includes: overview of potential service</p>					
4. Teaching methods:					
<p>The course is realized through lectures and practical classes and they are mandatory for all students. They also need to fulfill all requirements. Students can choose whether they will take exam in non-industrial robotics or automation in buildings. For each of these exams they need to complete a project and to defend it orally.</p>					
Knowledge evaluation (maximum 100 points)					
Pre-examination obligations		Mandatory	Points	Final exam	
Project		Yes	50.00	Written part of the exam - tasks and theory	Mandatory
				Yes	Points
					50.00
Literature					
Ord.	Author	Title		Publisher	Year
1,	George A. Bekey	Autonomous robots – From biological inspiration to implementation and control		The MIT Press, ISBN 0-262-02578-7	2005
2,	Rodney A. Brooks	Cambrian Intelligence – The Early History of the New AI		A Bradford Book, The MIT Press	1999
3,	Ronald Arkin	Behavior-based Robotics		The MIT Press, ISBN 0-262-01165-4	1998
4,	Borovac, B., Ostojić, G.,	Neindustrijska robotika i automatizacija - skripta		FTN	2012



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Table 5.2 Course specification

Course:		<h2 style="margin: 0;">Implementation of automated systems</h2>					
Course id:	H505						
Number of ECTS:	5						
Teachers:	Stankovski V. Stevan, Šešlija D. Dragan, Dudić P. Slobodan, Šormaz N. Dušan						
Course status:	Elective						
Number of active teaching classes (weekly)							
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:			
2	0	2	0	1			
Precondition courses		None					
1. Educational goal:							
The objective of the subject is that the students acquire necessary knowledge in designing, operating and maintaining automated systems.							
2. Educational outcomes (acquired knowledge):							
The outcome of this subject is the necessary knowledge in designing, operating and maintaining automated systems.							
3. Course content/structure:							
Introduction to IAS. Requirements specifications. Requirements analysis. Criteria for selecting equipment. Designing method selection. Project models. Installation/operation. Maintenance. Error search.							
4. Teaching methods:							
Teaching is conducted through lectures and exercises. During the exercises the student is required to do practice-oriented tasks. Evaluation of knowledge is carried out through the subject project and the final exam. The requirement for taking the final exam is that the student must successfully complete the project. The final exam is in written form.							
Knowledge evaluation (maximum 100 points)							
Pre-examination obligations		Mandatory	Points	Final exam	Mandatory	Points	
Project defence		Yes	50.00	Written part of the exam - tasks and theory	Yes	50.00	
					Coloquium exam	No	20.00
Literature							
Ord.	Author	Title		Publisher	Year		
1,	Hess, S.	Example of Pneumatic Applications		FESTO PNEUMATIC	2000		
2,	Lotter, B.	Manufacturing Assembly Book		FESTO PNEUMATIC	1991		
3,	Plagemann	ICP Recipe book		FESTO PNEUMATIC	2000		
4,	Stevan Stankovski	Implementacija automatizovanih sistema (Puštanje u rad i održavanje sistema sa programabilno logičkim kontrolerima)		FTN, Novi Sad	2007		
5,	Dragan Šešlija	Implementacija automatizovanih sistema (puštanje u rad, održavanje i otkrivanje kvarova kod pneumatskih sistema) skripta		FTN, Novi Sad	2012		

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Table 5.2 Course specification

Course:		<h2 style="margin: 0;">Equipment and IC Engines Mechatronics</h2>			
Course id:	H2403				
Number of ECTS:	6				
Teacher:	Klinar J. Ivan				
Course status:	Elective				
Number of active teaching classes (weekly)					
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:	
3	1	2	0	0	
Precondition courses		None			
1. Educational goal:					
Acquiring expended theoretical and practical knowledge in the field of functionality and element construction, devices and systems, as well as individual mechatronic components which make IC engine equipment.					
2. Educational outcomes (acquired knowledge):					
Ability to independently and creatively use acquired knowledge and skills to consider and solve new problems, as well as interdisciplinary approach to the problems in the field of functionality and element construction, devices and systems as well as individual mechatronic components which make IC engines equipment.					
3. Course content/structure:					
Definition, history and division of IC engines. Theoretical IC engine cycles. Theoretical engine cycles: Otto, diesel, combining-analysis and comparison. Theoretical cycles. Actual cycles analysis and selection of calculation cycle parameters. Process of working matter change of four-stroke engines with suction and with specific features of two-stroke engines. Process of compression. Process of combustion. Analysis of engine indicators: middle indicating pressure, indicating power, specific indicating fuel consumption. Analysis of effective engine indicators. Forsage engine indicators: litar and specific power. Heat balance. Combustion processes analysis in Otto and diesel engines. Normal combustion flow phases. Forms of unnormal combustion. Forming space for combustion in Otto and diesel engines. Engines driving characteristics: speed analysis, load, combining, and other characteristics.					
4. Teaching methods:					
Oral presentation in lectures accompanied with appropriate images, diagrams and schemes projected aided by PC computers. Auditory practical classes and laboratory practical classes in testing tables for IC engines testing with appropriate laboratory equipment.					
Knowledge evaluation (maximum 100 points)					
Pre-examination obligations		Mandatory	Points	Final exam	
		Mandatory	Points		
Lecture attendance		Yes	5.00	Oral part of the exam Yes 50.00	
Project task		Yes	15.00		
Test		Yes	10.00		
Test		Yes	10.00		
Test		Yes	10.00		
Literature					
Ord.	Author	Title		Publisher	Year
1,	Klinar Ivan	Oprema motora SUS		Fakultet tehničkih nauka	1995
2,	Klinar Ivan	Sistemi napajanja motora gorivom		Fakultet tehničkih nauka - N.Sad	1991

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Table 5.2 Course specification

Course:		<b>IT in Biosystems</b>				
Course id:	H2405					
Number of ECTS:	6					
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:		
3	0	2	0	0		
Precondition courses		None				
1. Educational goal: To acquire knowledge on sense and needs for locationally specific agriculture.						
2. Educational outcomes (acquired knowledge): Acquired knowledge on locationally specific agriculture, procedures, machines and equipment.						
3. Course content/structure: Subject introduction, introduction to subject schedule and students assignments. Fundamental principles of locational specific agricultural production. Defining of ecological, economical and ethical principles of precise agricultural production. Identification of location specific resources and needs. Procedures for defining local resources and needs. Identification of state and quality of the land and other resources. Locating processes of resources and objects, GPS and DGPS, satellite system, precision. GIS and planning procedures for implementation of precise agricultural production. Integral principles of precise agricultural production. Web sites in the field of Precision Farming.						
4. Teaching methods: Auditory classes, Power Point Presentation						
Knowledge evaluation (maximum 100 points)						
Pre-examination obligations		Mandatory	Points	Final exam	Mandatory	Points
Exercise attendance		Yes	5.00	Oral part of the exam	Yes	50.00
Lecture attendance		Yes	5.00			
Project		Yes	40.00			
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Anonim	Yearbook Agricultural Engineering		KTBL, LAV, VDI-MEG	2007	
2,	Eichhorn, H.	Landtechnik		Verlag Eugen Ulmer, Stuttgart	1999	
3,	Auernhammer, H.	Elektronik in Traktoren und Maschinen		Verlagsunion Agrar, Münch., Wien, Zürich	1991	
4,	Timmerman G.J., Kamp P.G.H.	Computerised Environmental Control in Greenhouses		PCT, Holandija	2003	

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Table 5.2 Course specification

Course:		<b>Motor Vehicle Equipment</b>				
Course id:	H2501					
Number of ECTS:	4					
Teacher:	Zuber F. Ninoslav					
Course status:	Elective					
Number of active teaching classes (weekly)						
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:		
2	1	1	0	0		
Precondition courses		None				
1. Educational goal: Acquiring knowledge on motor vehicle equipment, excluding their driving aggregate – engine.						
2. Educational outcomes (acquired knowledge): Multidisciplinary engineering knowledge in the field of general vehicle equipment, especially in the field of modern car electrics and electronics, necessary for independent work in automobile industry.						
3. Course content/structure: Definition and classification of motor vehicle equipment. Equipment for reduction of noise and mechanical oscillations of vehicles. Equipment of normalization of micro climate in the cabin. Vehicle electric system. Equipment for assuring good visibility from the vehicle. Equipment for light and audio signalization. Indicators and measurement devices. Airbags. Systems for protection of pedestrians. Specific mechatronic vehicle equipment.						
4. Teaching methods: Teaching forms: Lectures, practical classes, fairs and companies visits, consultations.						
Knowledge evaluation (maximum 100 points)						
Pre-examination obligations		Mandatory	Points	Final exam	Mandatory	Points
Exercise attendance		Yes	5.00	Oral part of the exam	Yes	70.00
Lecture attendance		Yes	5.00			
Test		Yes	10.00			
Test		Yes	10.00			
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Časnji F.	Oprema motornih vozila (skripta)		Fakultet tehničkih nauka-Novi Sad	2006	
2,	Časnji F., Klinar I., Muzikarvić V.	Savremene tendencije u automobilske tehnici		DDOR "Novi Sad"-Novi Sad	2001	

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Table 5.2 Course specification

Course:		<h2 style="margin: 0;">Transportation and Manipulation Systems</h2>				
Course id:	H2504					
Number of ECTS:	5					
Teacher:	Vladić M. Jovan					
Course status:	Elective					
Number of active teaching classes (weekly)						
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:		
2	0	2	0	0		
Precondition courses		None				
1. Educational goal:						
Acquiring knowledge for designing transport processes, material flow, transport machines, and logistics.						
2. Educational outcomes (acquired knowledge):						
The acquired knowledge can be used in practical work for making designs, optimal selection and exploitation of transportation systems.						
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 interrupted transport. Building machine for land works. Machines for stone fractioning and classification. Machines for production, transport of concrete. Production, transport asphalt machines. Simulations and logistics. Warehouses and equipment.						
4. Teaching methods:						
Lectures. Calculation (H), computer (C) and laboratory practical classes. Consultations. The final mark is formed on the basis of score of laboratory and computer practical classes and oral examination.						
Knowledge evaluation (maximum 100 points)						
Pre-examination obligations		Mandatory	Points	Final exam	Mandatory	Points
Exercise attendance		Yes	5.00	Oral part of the exam	Yes	70.00
Lecture attendance		Yes	5.00			
Term paper		Yes	20.00			
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Vladić J.	Transportno manipulacioni sistemi, skripta		FTN, Novi Sad	2006	

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Table 5.2 Course specification

Course:		<b>Mechanisms in Mechatronics</b>			
Course id:	H570				
Number of ECTS:	5				
Teacher:	Čavić M. Maja				
Course status:	Elective				
Number of active teaching classes (weekly)					
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:	
2	2	1	0	0	
Precondition courses					
1. Educational goal: Introduction to specific mechanisms, improvement of skills of dynamic analysis and mechanisms synthesis.					
2. Educational outcomes (acquired knowledge): Ability to apply specific mechanisms in practical problems as well as performing dynamic analysis of mechanisms in real conditions. Application of mechanisms synthesis methods in practical problems.					
3. Course content/structure: Transmissions with variable gear ratio. Harmonic drive. Planetary-differential gears. Freewheel mechanism. Cam mechanisms. Mechanisms with intermittent motion. Clutch and brake mechanisms. Universal joint. Fundamentals of spatial mechanisms. Reduced mass and moment of inertia. Reduced power and torque. Equations of mechanism motion . Speed ??control of mechanical systems. Flywheel sizing . General conditions of mechanism efficiency . Mechanism synthesis for the prescribed kinematic task. Graphical and analytical synthesis methods of mechanisms for motion generation , path generation and mechanisms for function generation.Mechanism synthesis for the prescribed dynamic task. Cam mechanisms synthesis.					
4. Teaching methods: Class forms: lectures, graphic and computer practical classes, consultations.					
Knowledge evaluation (maximum 100 points)					
Pre-examination obligations		Mandatory	Points	Final exam	
Computer exercise attendance		Yes	5.00	Written part of the exam - tasks and theory	
Lecture attendance		Yes	5.00	Mandatory	
Presentation		Yes	10.00	Points	
Project		Yes	30.00		
Literature					
Ord.	Author	Title		Publisher	Year
1,	Zlokolica M, Čavić M., Kostić M	Mehanika mašina		Univerzitet u Novom Sadu, FTN, Novi Sad	2005
2,	Zlokolica M., Cvetičanin L.	Prenos snage i kretanja		Univerzitet u Novom Sadu, FTN, Novi Sad	1989
3,	Norton R. L	Design of Machinery		McGraw-Hill, Inc	204

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Table 5.2 Course specification

Course:		<h2 style="margin: 0;">Logistic Processes Management</h2>			
Course id:	M2535				
Number of ECTS:	5				
Teacher:	Georgijević S. Milosav				
Course status:	Elective				
Number of active teaching classes (weekly)					
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:	
2	0	2	0	0	
Precondition courses					
1. Educational goal:					
Objective is to expand general systematic knowledge for managing material flow from raw materials to recycling necessary for designing.					
2. Educational outcomes (acquired knowledge):					
Students should acquire knowledge and first experience how to relate the idea of construction or product with consideration of material flow and process management which include planning of the whole logistic chain from the design and production to distribution and recycling.					
3. Course content/structure:					
Forms of management in logistics, logistics as an extended form of local management, short-term and strategic management in a company. Project defining, product life cycle, concepts of project and resource management, monitoring and control – managing project realization, planning and managing logistic systems in a company, planning and managing global goods and material flow, SWOT analysis, supply chains, VDI suggestions for logistic processes management. Supply Chain Management, logistic controlling, Internet der Dinge. Availability and tools for system evaluation, role of simulations. Examples of companies worldwide.					
4. Teaching methods:					
Active participation of students. Knowledge testing during lectures and oral and written part of the examination.					
Knowledge evaluation (maximum 100 points)					
Pre-examination obligations		Mandatory	Points	Final exam	
Exercise attendance		Yes	5.00	Theoretical part of the exam	
Lecture attendance		Yes	5.00		
Presentation		Yes	10.00		
Project		Yes	50.00		
				Mandatory	Points
				Yes	30.00
Literature					
Ord.	Author	Title		Publisher	Year
1,	Martin X.	Planiranje logističkih sistema		Mašinski fakultet Niš	2004
2,	Barac N, Milovanović G.	Menadžment poslovne logistike		Ekonomski fakultet Niš	2003
3,	Juenemann R, Beyer A.	Steuerung von Materialfluss-und Logistiksystemen		Springer, Berlin	1998

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Table 5.2 Course specification

Course:		<b>Study-Research Work on the Master Thesis Theoretical Framework</b>				
Course id:	HSIR01					
Number of ECTS:	7					
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:						
<p>The application of basic, theoretical, methodological, scientific-professional and professional-applicative knowledge and methods in solving specific problems within the chosen field. Within this part of the work on the master thesis, the student studies the problem, its structure and complexity draws conclusions on possible solutions based on the carried out analysis. By studying the literature the student becomes familiar with the methods used in solving similar problems and the engineering practice of these solutions. The goal of the student's activity within this part of research is to acquire the sufficient experience by solving complex problems and tasks and the ability to apply the acquired knowledge in the engineering practice.</p>						
2. Educational outcomes (acquired knowledge):						
<p>Students are able to independently apply the previously acquired knowledge in the fields that they had previously studied, and understand the structure of the chosen problem. Students conduct a systematic analysis of the problem and draw conclusion about the possible solutions. By the independent use of professional literature, students widen their knowledge in the chosen field and study different methods and scientific papers related to the topic. In that way, students develop the ability to do analysis and identify problems within the given topic. The practical application of the acquired knowledge in different fields enables the student to develop the ability to understand the position and role of an engineer in the chosen field, and the necessity of cooperation with other professionals and team work.</p>						
3. Course content/structure:						
<p>The course structure is formed individually according to the needs of a specific master thesis, its complexity and structure. The student studies professional literature, graduation and master thesis of students who have previously done work on a similar topic, does analysis in order to find solutions to a specific problem defined by the thesis. A part of the course is done through individual study-research work. The study involves the active study of the primary literature and discoveries on the topic, the organization and realization of experiments, numerical simulation, statistical processing of data, writing and/or presenting a scientific essay at a conference in the specific scientific field of the master thesis.</p>						
4. Teaching methods:						
<p>The mentor of the master thesis defines and writes the task for the thesis and hands it to the student. The student is obliged to write the thesis within the given topic which is defined by the master thesis task by using professional literature suggested by the mentor. While working on the thesis, the mentor can give additional instructions to the student, direct them to specific literature and advise him in order to enhance the quality of the master thesis. Within the study-research work, the student consults with the mentor, and, if necessary, with other professors teaching the subjects related to the master thesis topic. Within the given topic, the student conducts measurements, research, counting, surveys, statistical processing of data, if defined by the task of the master thesis.</p>						
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 Kobson liste			sve	
2,	grupa autora	časopisi, diplomski i master radovi			sve	



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Table 5.2 Course specification

Course:		<h2 style="margin: 0;">Preparation and Defence of Master Thesis</h2>				
Course id:	HMAST1					
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	0	9		
Precondition courses		None				
<p>1. Educational goal:</p> <p>Students acquire the knowledge about the techniques, structure and form of writing a research report after completing analysis and other activities conducted within the given topic of the master thesis. By writing a master thesis students gain the experience of writing papers which require the description of the problem, the methods and procedures in conducting research and the obtained results. In addition, preparation and defence of master thesis has the goal of developing the students' ability to prepare the results of their individual form and present it in a suitable form to a wider audience as well as respond to comments and questions related to the thesis topic.</p>						
<p>2. Educational outcomes (acquired knowledge):</p> <p>Students are able to develop a systematic approach to the given problem, conduct analysis, apply the acquired knowledge and gain knowledge in other areas for the purpose of finding a solution to the given problem. By working independently on solving the given tasks, students gain awareness of the complexity of the problem in their professional field. By working on the master thesis students gain experience which they can use in practice when solving the problems in their professional field. In preparation for defending their results in public and answering the questions and comments of the thesis committee, the student attains the necessary practical experience on how to present the results of their individual or collective work before an audience.</p>						
<p>3. Course content/structure:</p> <p>The content is defined individually, in accordance with the needs and field to be covered by the master thesis. In consultation with the supervisor the student produces the master thesis in written form according to the rules of the Faculty of Technical Sciences. After preparation the student defends the thesis in public as arranged with the thesis supervisor and in accordance with the prescribed rules and procedures.</p>						
<p>4. Teaching methods:</p> <p>During the preparation of the master thesis the student consults with the thesis supervisor, and, if necessary, other professors who work in the area covered by the master thesis. The students writes the paper and, having obtained the approval of the thesis committee, provides them with bound copies of the work. The master thesis is defended in public, and the student is obliged to answer the questions and comments after the oral presentation.</p>						
Knowledge evaluation (maximum 100 points)						
Pre-examination obligations		Mandatory	Points	Final exam	Mandatory	Points
Writing the master thesis		Yes	50.00	Master thesis defence	Yes	50.00

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Table 5.2 Course specification

Course:		<b>Advanced robotics</b>				
Course id:	H828					
Number of ECTS:	5					
Teachers:	Borovac A. Branislav, Heraković S. Niko, Kozak V. Dražen, Stankovski V. Stevan					
Course status:	Elective					
Number of active teaching classes (weekly)						
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:		
2	0	2	0	0		
Precondition courses		None				
1. Educational goal:						
<p>The course objective is acquiring of advanced knowledge in robotics. This includes modelling and simulation of complex robotic systems and its dynamic behaviour, as well as control synthesis (on the basis of force feedback, visual information, mor cognitive system). The course objective is that student gain competences for deep insight of complex robotic systems as well as for use of advanced techniques to control them.</p>						
2. Educational outcomes (acquired knowledge):						
<p>Students will be able to model and simulate dynamics, recognize relevant dynamic effects and, on the basis of required behavior of the robot in concrete environmental situation, synthesize control system.</p>						
3. Course content/structure:						
<p>Expansion of robotics, specialized robots and robors of wide spectrum of activity, problems associated with dealing in real world, (non-structured environment), artificial vision as basic sensor information anout robot situadness in the world, force as a basic information about interraction in real world, cognition and control system synthesis.</p>						
4. Teaching methods:						
<p>The course is held through lectures and practice. On lectures will be explained theorethical fundamentals, while on the practices students will be demonstrated practical issues with maximal involvement of students. Students will be focused on research componentof course. All practical lectures will be done in labs.</p>						
Knowledge evaluation (maximum 100 points)						
Pre-examination obligations		Mandatory	Points	Final exam	Mandatory	Points
Project task		Yes	30.00	Theoretical part of the exam	Yes	70.00
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Siciliano B., Khatib O. (Eds.)	Springer handbook of robotics		Springer-Verlag	2008	
2,	Spong M., Hutchinson S., Vidyasagar M.,	Robot Modeling and Control		John Wiley & Sons Inc.	2006	
3,	R. Dorf, R. Bishop	Modern Control Systems		Pearson Education - Prentice Hall	2011	
4,	G. Franklin, J. D. Powell, A. Emami-naeini	Feedback Control of Dynamic Systems		Pearson Education - Prentice Hall	2010	
5,	G. Bradski, A. Kaehler	Learning OpenCV		O'Reilly Media, Inc.	2008	

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Table 5.2 Course specification

Course:		<b>Motion control</b>				
Course id:	H845					
Number of ECTS:	4					
Teachers:	Stankovski V. Stevan, Ostojić M. Gordana, Ivandić I. Željko, Đurić M. Nikola					
Course status:	Elective					
Number of active teaching classes (weekly)						
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:		
2	0	2	0	0		
Precondition courses						
1. Educational goal: The aim of the course is to master the knowledge necessary for the design and implementation of systems for motion control.						
2. Educational outcomes (acquired knowledge): Outcomes of the subject are skills that primarily cover the area of linear motion control and include sensors, actuators and control algorithms used in manipulation devices, machines and systems.						
3. Course content/structure: Introduction to motion control. Defining basic categories of industrial motor control systems (sequential, control the speed, control from point to point, incremental changes). Linear motion systems with servo pneumatics. Linear motion systems with servo hydraulics. Linear motion systems with DC motors. Linear motion systems with AC motors. Linear motion systems with servo motors. Proximity sensors. Position sensors. Pressure sensors. Speed sensors. Flow sensors. Other significant industrial sensors.						
4. Teaching methods: Teaching is conducted through lectures and exercises. During the exercises the student is required to do practice-oriented tasks. Knowledge testing is carried out through two tests and the final exam, while before that student has to do all the exercises provided. The final exam is in written form.						
Knowledge evaluation (maximum 100 points)						
Pre-examination obligations		Mandatory	Points	Final exam	Mandatory	Points
Exercise attendance		Yes	5.00	Written part of the exam - tasks and theory	Yes	70.00
Lecture attendance		Yes	5.00	Coloquium exam	No	20.00
Test		Yes	10.00	Coloquium exam	No	20.00
Test		Yes	10.00			
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Tan K. K., T. H. Lee and S. Huang	Precision motion control: Design and implementation, 2nd ed.		London, Springer	2008	
2,	Robert H. Bishop	The Mechatronics Handbook		CRC PRESS	2002	
3,	Andrzej Pawlak	Sensors and Actuators in Mechatronics, Design and Applications		Taylor & Francis	2007	
4,	Stankovski, S.	Upravljanje kretanjem - u pripremi		FTN	2012	

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Table 5.2 Course specification

Course:		<h2>Automated Assembly Systems for High Accuracy</h2>				
Course id:	I907					
Number of ECTS:	5					
Teachers:	Lazarević M. Milovan, Ostojić M. Gordana, Jovanović M. Vukica, Budak M. Igor, Heraković S. Niko, Maksimović M. Rado, Vukelić B. Đorđe					
Course status:	Elective					
Number of active teaching classes (weekly)						
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:		
2	0	2	0	0		
Precondition courses <span style="float: right;">None</span>						
<p>1. Educational goal:</p> <p>The goal of course is to master the basic knowledge of the technologies and systems for automated merging of parts and components increased accuracy to the results obtained, assembled and functionally correct product. From subject content engineer acquires competence to apply this knowledge in the design procedure and system for automated assembly and use of modern technology in the subject area.</p>						
<p>2. Educational outcomes (acquired knowledge):</p> <p>After completing the course and passing the exam, the student is qualified to perform product structuring, notice necessary assembly procedures and define the optimal sequence of their execution. Then able to accomplish the design and production process for mechanized system for manual, robotic and automated assembly operations, and a reconciliation of the individual elements in a complex system.</p>						
<p>3. Course content/structure:</p> <p>Introduction to the Theory of assembly systems. Basic concepts and deficije. Mounting position in the overall production process. The entities that affect the assembly process. The influence of structure on the assembly process. DFA methodology for assessing the suitability of the product for assembly. Outlining products. Analysis of the characteristics of products and production program. Selection of variants of the assembly process. Determination of the number and sequence of the intervention - the network diagram. The level of specialization. Determination of the time and cost of operations. Making technological tickets for each operation. Design of technological systems for manually mechanized, automated and robotic assembly. The choice of standard elements. Non-standard design elements for assembly. Design of complex technological systems for assembly. Selection of material handling and storage. Shaping the spatial structure of the system for assembly. Principles and methods of application of sensor and actuator in assembly systems. Management activities by installing a programmable logic controller. Visualization and monitoring through HMI (Human Machine Interface) displays. Video surveillance assembly process. Protocols and interfaces in the application of industrial networks for the exchange of information on the state of the process.</p>						
<p>4. Teaching methods:</p> <p>Teaching of subject involves oral presentation of lectures with slides on a video monitor supported by appropriate practices for the corresponding field theory. The function of teaching the exercises provided the table and use written materials, as well as computer exercises geared toward the introduction of specialized software tools in the subject area and work in a lab with equipment provided by the curriculum.</p>						
Knowledge evaluation (maximum 100 points)						
Pre-examination obligations		Mandatory	Points	Final exam	Mandatory	Points
Exercise attendance		Yes	5.00	Coloquium exam	No	20.00
Lecture attendance		Yes	5.00	Coloquium exam	No	20.00
Term paper		Yes	20.00	Theoretical part of the exam	Yes	70.00
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Stankovski, S., Rakić Skoković, M., Šešlija, D., Ostojić, G.	Primena RFID tehnologije u automatizovanim sistemima		Centar za automatizaciju i mehatroniku	2009	
2,	Čosić I., Z. Anišić, Lazarević M.	Tehnologije montaže		FTN Novi Sad	2012	
3,	Čosić I., Z. Anišić, Lazarević M.	Montažni sistemi – priručnik za vežbe		FTN Novi Sad	2011	
4,	Sekulić Sava	Tehnološke strukture procesa rada		FTN Novi Sad	1986	
5,	Delchambre, A.	Computer-Aided Assembly Planning		Springer	1992	

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Table 5.2 Course specification

Course:		<h2 style="margin: 0;">System Modeling and Symulation</h2>				
Course id:	H301					
Number of ECTS:	5					
Teachers:	Erdeljan M. Aleksandar, Ivandić I. Željko, Kozak V. Dražen					
Course status:	Elective					
Number of active teaching classes (weekly)						
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:		
2	2	0	0	0		
Precondition courses		None				
1. Educational goal:						
<p>Introduction to the fundamental criteria and techniques that are deterministically based and used in the planning of the power system. Considering main drawbacks of these criteria which do not reflect the stochastic nature of the system. Survey of the main areas for probabilistic modelling of the system behaviour and adequate probabilistic methods and techniques developed. Developing knowledge and understanding of the specificities in modelling electric sources, transfer and distribution systems. Encouraging students to apply their skills and knowledge from probabilistic theory and statistic onto the problems of planning a power system.</p>						
2. Educational outcomes (acquired knowledge):						
<p>Students will be able to design the power sources and transfer systems in order to increase their reliability. They will be able to understand the differences between analytic and simulation modelling methods. They will develop simple power system models for reliability studies. They will be able to estimate adequate power system reliability parameters. They will know to develop the power system technology and the working processes in the sense of overall reliability and feasibility. They will be able to use the specialized software for power system reliability studies, to write technical reports and use software for the analysis of alternative configurations to find the optimal one. They will be competent to utilize the acquired knowledge in solving all problems concerning the power system reliability studies.</p>						
3. Course content/structure:						
<p>Introduction to deterministic criteria for the application in power systems. Main reliability development concept for power systems. Main performances of the power system reliability indicators. Markov modelling. Analytical methods for the production reliability estimation and electric power transfer. Monte Carlo methods. Simulation methods for the production reliability estimation and electric power transfer. Stochastic modelling for hydro-power plants and wind mills parks. Reliability parameters for the power system equipment. Market-oriented performances of the transfer and distribution system indicators working on the competitive market of electric power.</p>						
4. Teaching methods:						
<p>Lectures. Computing practice. Tutorials. Homework. Lectures are performed in a combined manner. Theoretical part is performed using the contemporary tools with characteristic examples contributing to the explanations of the theoretical lecturing part. In practice that follow the lectures, a specialized software is introduced, and adequate tasks are done to elaborate the content presented in lectures.</p>						
Knowledge evaluation (maximum 100 points)						
Pre-examination obligations		Mandatory	Points	Final exam	Mandatory	Points
Homework		Yes	5.00	Coloquium exam	No	20.00
Homework		Yes	5.00	Coloquium exam	No	20.00
Homework		Yes	5.00	Oral part of the exam	Yes	30.00
Homework		Yes	5.00	Practical part of the exam - tasks	Yes	40.00
Test		Yes	10.00			
Literature						
Ord.	Author	Title		Publisher	Year	
1,	A. Erdeljan, D. Čapko	Štampani materijal koji pokriva predavanja i vežbe			2005	
2,	Latinka Calasan, Menka Petkovska	MATLAB i dodatni moduli Control System Toolbox i SIMULINK		Mikro knjiga, Beograd	1995	
3,	Duane Hanselman, Bruce Littlefield	Mastering MATLAB 6 - A Comprehensive Tutorial and Reference		Prantice Hall, ISBN: 0-13-019468-9	2001	
4,	C.M.Close, D.K.Frederick, J.C.Newell	Modeling and Analysis of Dynamic Systems		John Wiley & Sons, Inc.	2002	

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Table 5.2 Course specification

Course:		<h2 style="margin: 0;">Production and Service Systems</h2>				
Course id:	IM2124					
Number of ECTS:	5					
Teachers:	Čuš - Franci, Ćosić P. Ilija, Heraković S. Niko, Lalić P. Bojan, Lazarević M. Milovan					
Course status:	Elective					
Number of active teaching classes (weekly)						
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:		
2	2	1	0	0		
Precondition courses		None				
1. Educational goal:						
<p>The aim of the course is to enable students for developing and designing product systems, defining their characteristics, and designing production processes that take place within them. Students master tools for designing the system structure and the working process and acquire foundations for designing energy systems. During classes, students acquire knowledge necessary for determining the spatial distribution of system elements as a manner of selecting micro and macro locations.</p>						
2. Educational outcomes (acquired knowledge):						
<p>Student will be prepared to develop and design a production system, to recognize and understand the importance of production and product as an essential objective of the production system, as well as to learn basic determinations related to the energy support to the system functioning. During lectures, practice and practical work, students obtain knowledge on a company as an integrated unity of production and other system functions, i.e. the flows of materials, energy and information.</p>						
3. Course content/structure:						
<p>Theoretical lectures: Basic elements of a production system. Development conditions of production systems. Product and production programme. Working process and system capacity. Forming material flows. Individual approach in flow formation. Group approach in flow formation. General model of material flows. Balancing flows in a system. Forming flows in service systems. Forming the production system structure. Process approach in structure formation. Object approach in structure formation. Basic foundations for structure formation. Determining the system elements. Modelling the spatial system structures. Modelling the energy flows. Determining energy demands. Designing energy structures. Location of production systems. Determining the system location in narrow and wider sense. Outsourcing functions or processes to another location or in another production system. Conditions for outsourcing, dividing responsibility and competences, managing the working processes. Organizational readiness for accepting contemporary technological solutions. Simulation of production systems.</p> <p>Practical classes: Discussions with practical examples of production systems from developed countries and the region countries. Analysis on system structures. Elaboration of a seminar paper in a real system. Interactive work and acquiring knowledge in laboratory conditions.</p>						
4. Teaching methods:						
Oral presentations with slides from a video projection. Usage of tables and handouts for practice, work in a laboratory and visits to real contemporary business systems						
Knowledge evaluation (maximum 100 points)						
Pre-examination obligations		Mandatory	Points	Final exam	Mandatory	Points
Exercise attendance		Yes	5.00	Written part of the exam - tasks and theory	Yes	30.00
Lecture attendance		Yes	5.00			
Project		Yes	50.00			
Test		Yes	10.00			
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Zelenović, D.	PROJEKTOVANJE PROIZVODNIH SISTEMA		Naučna knjiga	2009	
2,	Zelenović, D., Ćosić, I., Maksimović, R.	PROJEKTOVANJE PROIZVODNIH SISTEMA- priručnik za vežbe		FTN Novi Sad	2003	
3,	Zelenović, D., Ćosić, I., Maksimović, R., Maksimović, A.	Priručnik za projektovanje proizvodnih sistema - pojedinačni prilaz		FTN Novi Sad	2003	

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Table 5.2 Course specification

Course:		<b>Vibrodiagnostics</b>				
Course id:	M2540					
Number of ECTS:	4					
Teacher:	Zuber F. Ninoslav					
Course status:	Elective					
Number of active teaching classes (weekly)						
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:		
2	0	2	0	0		
Precondition courses		None				
1. Educational goal:						
Enabling students to apply fundamental knowledge in the field of technical diagnostics of machines – measurement and analysis of vibrations of rotating machines and noise, application of infrared thermography.						
2. Educational outcomes (acquired knowledge):						
Acquiring knowledge for early identification of machine damage, application during various phases of designing and through predictive and proactive machine maintenance techniques.						
3. Course content/structure:						
Signal analysis, description in time, amplitude and frequency; Deterministic and random processes; Correlation analysis; Fourier transformation; Spectral analysis, RTVA (Real Time Vibration Analysis), System analysis; System excitation and response; Transmission function; Digital signal and error processing, Measurement chain for vibration measuring; Measurement methods and characteristics; Vibrations of rotating machines; Spectral maps; Phase analysis; Campbell diagram; Orbit analysis; Modal analysis; Oscillation forms, Measurement of excitation and response; Types and characteristics of excitation; Modal parameter determination; Modification structure; Technical diagnostics and maintenance; Transmissive vibration analyzers, Diagnostics in the domain of low ( $\omega$ ), middle ( $\omega$ ) and high frequencies ( $\omega$ ); Identification and methods; Designing low cost systems for online monitoring and rotating machine protection; Transmission function; Time constant; Microphones; Fundamental elements of phonometer and systems for noise measurement in working and living environment; Regulations that define methodology of testing and border noise levels.						
4. Teaching methods:						
Lectures. Auditory classes. Consultations.						
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,	Taylor J.	The vibration analysis handbook		VCI	2003	
2,	Harris C., Piersol A.	Shock and vibration handbook		McGraw Hill	2001	
3,	Silva C.	Vibration fundamentals and practice		CRC	1999	
4,	Taylor F.	Noise control in industry			1999	

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Table 5.2 Course specification

Course:		<b>Fieldbuses and protocols</b>				
Course id:	H799					
Number of ECTS:	5					
Teachers:	Juhas T. Anamarija, Stankovski V. Stevan, Jovanović M. Vukica, Heraković S. Niko, Đurić M. Nikola					
Course status:	Elective					
Number of active teaching classes (weekly)						
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:		
2	0	2	0	0		
Precondition courses		None				
1. Educational goal: The aim of the course is that students master the areas of fieldbus technology and competition in these areas.						
2. Educational outcomes (acquired knowledge): Students will be able to understand the principles of fieldbus technology, based on which they will be able to design and developed simpler automated devices and systems.						
3. Course content/structure: Introduction in fieldbus technology and protocols. Standards in fieldbus technology. Real time characteristics Examples of fieldbuses: ASI, IO Link, CAN, Interbus, Profibus, Modbus, Industrial Ethernet, Foundation Fieldbus. Industrial protocols. Application of fieldbus technology.						
4. Teaching methods: Teaching is conducted through lectures and exercises. During the exercises the student is required to do practice-oriented tasks. Knowledge testing is carried out through two tests and the final exam, while before that student has to do all the exercises provided. The final exam is in written form.						
Knowledge evaluation (maximum 100 points)						
Pre-examination obligations		Mandatory	Points	Final exam	Mandatory	Points
Exercise attendance		Yes	5.00	Written part of the exam - tasks and theory	Yes	70.00
Lecture attendance		Yes	5.00		No	20.00
Test		Yes	10.00	Coloquium exam	No	20.00
Test		Yes	10.00			
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Gordana Ostojić, Stevan Stankovski	Industrijske komunikacione mreže i protokoli - skripta		Fakultet tehničkih nauka	2012	



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Table 5.2 Course specification

Course:		<h2 style="margin: 0;">Mechatronics in mechanization - advanced topics</h2>				
Course id:	H797					
Number of ECTS:	5					
Teachers:	Časnji F. Ferenc, Čavić M. Maja, Dorić Ž. Jovan, Georgijević S. Milosav, Martinov L. Milan, Šostakov S. Rastislav, Vladić M. Jovan, Zuber F. Ninoslav					
Course status:	Elective					
Number of active teaching classes (weekly)						
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:		
2	0	2	0	0		
Precondition courses: None						
1. Educational goal: Acquisition of in-depth knowledge of mechatronic systems in mechanization, referring to the field of a student's final work.						
2. Educational outcomes (acquired knowledge): Acquisition of advanced knowledge for student's final work completion and scientific work in the field of mechatronic systems in mechanization.						
3. Course content/structure: Depends on the field of student's final work.						
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. Parts of the course can be taken in several parts (which makes up the entirety) during the semester and also through course projects which are presented orally.						
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,	A. Piersol, J. Bendat	Random data		Wiley	2000	
2,	Keith Cheattle	Fundamentals of Test Measurement Instrumentation		ISA	2006	
3,	Robert Northrop	Introduction to instrumentation and measurements		Taylor and Francis	2011	

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Table 5.2 Course specification

Course:		<b>Maintenance effectiveness</b>				
Course id:	I843					
Number of ECTS:	5					
Teachers:	Beker A. Ivan, Kamberović L. Bato					
Course status:	Elective					
Number of active teaching classes (weekly)						
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:		
2	0	2	0	0		
Precondition courses						
1. Educational goal:						
The goal of the course is to teach students how to identify objectives of maintenance and how to align with the objectives of the entire organization, and then to identify the factors that affect the defined objectives and values ??that can be measured in order to determine the extent to which the objectives are met.						
2. Educational outcomes (acquired knowledge):						
After completing courses and passing the exam, students will be able to define the objectives of maintenance that are in line with the objectives of the whole organization, to define a procedure that will present exact way to determine the extent of achieving defined objectives, and procedures that will ensure the collection of data necessary to calculate the level of achieving those objectives						
3. Course content/structure:						
The purpose of maintenance, maintenance objectives and objectives of the organization and the procedure for determining the realization of the objectives, define the values required for determining the successfulness of maintenance, defining the procedure for the collection of those values, controlling the implementation of the defined process, identifying problems and collecting and systematizing knowledge, improvement of the process of determining the effectiveness of maintenance						
4. Teaching methods:						
Teaching is done through auditory lectures are accompanied by slides and exercises that further elaborate on solving specific problems. Both lectures and exercises are accompanied by a large number of practical examples.						
Knowledge evaluation (maximum 100 points)						
Pre-examination obligations		Mandatory	Points	Final exam	Mandatory	Points
Exercise attendance		Yes	5.00	Written part of the exam - tasks and theory	Yes	70.00
Lecture attendance		Yes	5.00			
Term paper		Yes	20.00			
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Ivan Beker, Dragoljub Šević	Uspešnost održavanja, skripte sa predavanja		Fakultet tehničkih nauka	2013	



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### Standard 06. Programme Quality, Contemporaneity and International Compliance

The study programme is coordinated with contemporary trends and situation in profession, science and art in adequate educational scientific or educational artistic field and it is compatible with similar programmes in international higher education institutions.

The study programme of Mechatronics is created as a comprehensive programme and provides students latest scientific knowledge in the field.

The programme of Mechatronics is comparable and coordinated with the following faculties:

1. <http://www.et.tu-dresden.de/mechatronik-diplom/ET.html>

2. <http://www.tu-ilmenau.de/modultafeln/Mechatronik/Master/2008/>

3

[http://www.tuhh.de/t3resources/tuhh/download/studium/pruefungsamtpo/imp/Studienplan\\_IMP\\_MEC\\_201](http://www.tuhh.de/t3resources/tuhh/download/studium/pruefungsamtpo/imp/Studienplan_IMP_MEC_201)



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## Study Programme Accreditation

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### Standard 07. Student Enrollment

The Faculty of Technical Science, in accordance with social demands and its resources, enrolls students to adequate study programme based on their success in the previous education and entrance examination testing their knowledge, aptitudes and skills. Selection of students and their enrolment is based on success in previous education and success in the enrolment exam and in accordance with Faculty Regulation for student enrolment to study programmes. The enrolment exam is organized only in case of a larger number of candidates.

Students from other study programme can transfer to this study programme as well as persons who completed studies. The evaluation commission evaluates all passed exams and on the basis of recognized exams decides whether the candidate's previous success can completely or partially be recognized. The Commission can require appropriate additional differential exam or not to recognize any of the previously passed exam.

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**Standard 08. Student Evaluation and Progress**

The evaluation of students is performed by continual monitoring of students` accomplishments and the points obtained in fulfilling prerequisites and taking examinations.

The students master the study programme by taking examinations and thus obtaining a certain number of ECTS credits, in accordance with the study programme of graduate academic studies in Mechatronics.

Each course at the study programme has a set number of ECTS credits which students obtain on successfully passing the examination. Students` success in mastering a certain course is constantly monitored during classes and is presented in points. Maximum number of points obtained in a course is 100. Students obtain points from a course through their work during classes, fulfilment of their prerequisites and taking the examination. Each course at the study programme has a clear and publicly known mode of obtaining points.

A students final achievement at a course is presented using grades from 5 (fail) to 10 (excellent). A 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.

For a student to be allowed to take an exam, he/she needs to be awarded at least 15 ECTS credits in subject`s prerequisites. Additional terms for taking an exams are defined for each subject individually. Student`s advancement during the studying is determined by Regulations for studying at graduate academic studies.

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**Standard 09. Teaching Staff**

For the realization of the study programme, there is the faculty staff with necessary scientific, artistic and professional qualifications.

Total number of lecturers and associates employed at the study programme is adequate to accomplish the total number of classes in the study programme so that the professor performs on average 180 active classes annually (lectures, consultations, practical classes, practical work, etc), that is 6 classes weekly. All necessary lecturers are full time employed at the Faculty.

Number of associates corresponds the needs of the study programme. Total number of associates in study programme is enough to cover total number of classes so that associates realize 300 classes on average of active classes annually, that is 10 classes weekly.

Scientific and professional qualifications of lecturers and assistants is in relation to educational and scientific field. Each professor has at least five references in the professional field in which he/she performs the lectures.

Group size for classes is up to 32, practical classes groups is up to 16, and laboratory practical classes groups up to 8 students.

None of the professors has more than 12 classes weekly. All data on lecturers and assistants (CV, references) are publicly available.

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Science, arts and professional qualifications

Name and last name:	Beker A. Ivan		
Academic title:	Associate Professor		
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad 01.12.1987		
Scientific or art field:	Quality, Effectiveness and Logistics		
Academic carieer	Year	Institution	Field
Academic title election:	2012		Quality, Effectiveness and Logistics
PhD thesis	2001	Faculty of Technical Sciences - Novi Sad	Engineering Management
Magister thesis	1996	Faculty of Technical Sciences - Novi Sad	Engineering Management
Bachelor's thesis	1986	Faculty of Technical Sciences - Novi Sad	Engineering Management

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

	ID	Course name	Study programme name, study type
1.	URZP49	Logistics in the Conditions of Catastrophic Events	( ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies
2.	II1016	Reliability of technical systems and Maintenance	( I10) Industrial Engineering, Undergraduate Academic Studies
3.	II1040	Organization and mamangement of maintenance	( I10) Industrial Engineering, Undergraduate Academic Studies
4.	II1043	Maintenance techniques and technologies	( I10) Industrial Engineering, Undergraduate Academic Studies
5.	IM1030	Integral Systems Support - Logistic	( I10) Industrial Engineering, Undergraduate Academic Studies ( I20) Engineering Management, Undergraduate Academic Studies
6.	IM1036	Reliability Theory	( I20) Engineering Management, Undergraduate Academic Studies
7.	IM1049	Supply chain Management	( I20) Engineering Management, Undergraduate Academic Studies
8.	IM1614	Organization and Management of Logistic	(I20) Engineering Management, Undergraduate Academic Studies
9.	IM1615	Maintenance of Technical Equipment	(I20) Engineering Management, Undergraduate Academic Studies
10.	IM1618	Design and Analysis of Maintenance Procedure	( I10) Industrial Engineering, Undergraduate Academic Studies (I20) Engineering Management, Undergraduate Academic Studies
11.	IM1620	Reverse and Green Logistic	(I20) Engineering Management, Undergraduate Academic Studies
12.	IM1622	Information Security Management System	(I20) Engineering Management, Undergraduate Academic Studies
13.	IM1623	Occupational Health and Safety Management System	(I20) Engineering Management, Undergraduate Academic Studies
14.	I501	Risk Management	( I10) Industrial Engineering, Master Academic Studies
15.	I841	Spare parts management	( I10) Industrial Engineering, Master Academic Studies
16.	IMDR0S	Selected chapters in enterprise's design, organization and control	( I12) Industrial Engineering, Specialised Academic Studies ( I22) Engineering Management, Specialised Academic Studies
17.	IMDS95	Trends in Customer Relationship Management	( I12) Industrial Engineering, Specialised Academic Studies ( I22) Engineering Management, Specialised Academic Studies
18.	PLM10	Product Servicing and Maintenance	( I1U) Industrial Engineering - Product Lifecycle Management and Development, Master Academic Studies
19.	LIM16	Production Logistics	( LIM) Logistic Engineering and Management, Master Academic Studies
20.	LIM18	Life Cycle Costs and Supply	( LIM) Logistic Engineering and Management, Master Academic Studies



## Study Programme Accreditation

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

ID	Course name	Study programme name, study type
21.	LIM30 Inventory Planning and Management	( LIM) Logistic Engineering and Management, Master Academic Studies
22.	I843 Maintenance effectiveness	( H00) Mechatronics, Master Academic Studies ( I10) Industrial Engineering, Master Academic Studies
23.	IIDS12 Quality and organizational performance	( I12) Industrial Engineering, Specialised Academic Studies ( I22) Engineering Management, Specialised Academic Studies
24.	IIDS30 Trends in the environmental management systems	( I12) Industrial Engineering, Specialised Academic Studies ( I22) Engineering Management, Specialised Academic Studies
25.	IIDS7 Selected topics in quality engineering and logistics	( I12) Industrial Engineering, Specialised Academic Studies
26.	IM2607 Risk management	( M50) Energy Management, Master Academic Studies ( I20) Engineering Management, Master Academic Studies
27.	IM2615 Lean Logistics	( I20) Engineering Management, Master Academic Studies
28.	IM2617 Information Systems to Support Quality, Logistics and Maintenance	( I20) Engineering Management, Master Academic Studies
29.	IM2618 Transportation management	( I20) Engineering Management, Master Academic Studies
30.	IM2619 Stock planning and management	( I20) Engineering Management, Master Academic Studies
31.	IM2620 Lean Maintenance	( I10) Industrial Engineering, Master Academic Studies ( I20) Engineering Management, Master Academic Studies
32.	IM2622 Design and Implementation of Health and Safety System	( I20) Engineering Management, Master Academic Studies
33.	IMDS74 Selected Topics in Quality Management and Logistics	( I22) Engineering Management, Specialised Academic Studies
34.	IMDR0 Science of Industrial Engineering and Management	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
35.	IMDR94 Trends in the environmental management systems	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
36.	IMDR95 Trends in Customer Relationship Management	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
37.	IMDR74 Selected Topics in Quality Management and Logistics	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
38.	IMDR79 Selected topics in quality engineering and logistics	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
39.	IMDR83 Quality and organisational performance	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
40.	ZRD232 Logistics in the Security Services and Health at Work	( Z01) Safety at Work, Doctoral Academic Studies
41.	ZRD29A Selected Topics in Systems Reliability	( Z01) Safety at Work, Doctoral Academic Studies

### Representative references (minimum 5, not more than 10)

1.	Brkljač N., Šević D., Beker I., Kesić I., Milisavljević S.: Procedure for treatment of hazardous waste by MID-MIX procedure in Serbia, International Journal of the Physical Sciences, 2012, Vol. 7, No 18, pp. 2639-2646, ISSN 1992-1950
2.	Radlovački V., Pečujlija M., Kamberović B., Jovanović R., Delić M., Beker I.: SATISFACTION OF HIGH SCHOOL STUDENTS WITH THE APPLICABILITY OF THEIR KNOWLEDGE, TTEM. Tehnics technologies education management, 2012, Vol. 7, No 2, pp. 777-785, ISSN 1840-1503
3.	Jocanović M., Šević D., Karanović V., Beker I., Dudić S.: Increased Efficiency of Hydraulic Systems Through Reliability Theory and Monitoring of System Operating Parameters, Strojniški vestnik - Journal of Mechanical Engineering, 2012, Vol. 58, No 4, pp. 281-288, ISSN 0039-2480
4.	Radlovački V., Beker I., Majstorović V., Pečujlija M., Stanivuković D., Kamberović B.: Quality Managers' Estimates of Quality Management Principles Application in Certified Organisations in Transitional Conditions - Is Serbia Close to TQM, Strojniški vestnik - Journal of Mechanical Engineering, 2011, Vol. 57, No 11, pp. 851-861, ISSN 0039-2480
5.	Pouzdanost tehničkih sistema, autori prof. dr Gradimir Ivanović, prof. dr Dragutin Stanivuković, prof. dr Ivan Beker; Univerzitet u Novom Sadu, Fakultet tehničkih nauka, Novi Sad, 2010, ISBN 978-86-7892-247-3
6.	Beker I.: ZAPTIVANJE I ZAPTIVNI MATERIJALI, FTN -Institut za industrijske sisteme i IIS - Istraživački i tehnološki centar, Novi Sad, 2001
7.	D. Stanivuković, B. Sabo, T. Furman. I. Beker, V. Bajić, J. Dakić: Tehnologije reparature i regeneracije delova, Časopis Traktori i pogonske mašine, Novi Sad, oktobar 1998
8.	D. Šević, I. Beker, S. Milisavljević: UPOREDNA ANALIZA ZAHTEVA STANDARDA ISO 14001:2004 I STANDARDA ISO 14001:1996., International Journal Total Quality Management & Excellence, Vol.34, No 3 – 4, 2006.





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Representative references (minimum 5, not more than 10)

- |     |   |
|-----|---|
| 9.  | I. Beker, N. Radaković: ISKUSTVA NA IMPLEMENTACIJI ISO 27001 STANDARDA, International Journal Total Quality Management & Excellence, Vol.34, No 3 – 4, 2006.                  |
| 10. | D. Stanivuković, S. Kecojević, I. Beker: Projektovanje održavanja na modularnom principu, 1 str., Tribologija u industriji, godina XV, broj 2 - juni 1993., Kragujevac, 1993. |

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 :	4

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### 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.	HDOK1 S	Selected topics in industrial robotics	( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
11.	HDOK2 S	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

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UNIVERSITAS STUDIORUM NEOPLANTENSIS		Study Programme Accreditation	
MASTER ACADEMIC STUDIES		Mechatronics	
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 references (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 Misunderstandings, 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

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	<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>	

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 carier	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



## Study Programme Accreditation

MASTER ACADEMIC STUDIES

Mechatronics

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

ID	Course name	Study programme name, study type
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 references (minimum 5, not more than 10)

1.	Budak I., Vukelić Đ., Bračun D., Hodolić 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., Hodolić 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., Hodolić 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., Hodolić 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., Randelović 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., Randelović 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

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	<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>	

Science, arts and professional qualifications

Name and last name:	Crnojević S. Vladimir		
Academic title:	Associate Professor		
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad 10.11.1995		
Scientific or art field:	Telecommunications and Signal Processing		
Academic carieer	Year	Institution	Field
Academic title election:	2010		Telecommunications and Signal Processing
PhD thesis	2004	Faculty of Technical Sciences - Novi Sad	Telecommunications and Signal Processing
Magister thesis	1999	Faculty of Technical Sciences - Novi Sad	Telecommunications and Signal Processing
Bachelor's thesis	1995	Faculty of Technical Sciences - Novi Sad	Telecommunications and Signal Processing

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

	ID	Course name	Study programme name, study type
1.	EK412	Shape Recognition	( BM0) Biomedical Engineering, Undergraduate Academic Studies
2.	EK421	Digital Image Processing	( F10) Engineering Animation, Undergraduate Academic Studies ( S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
3.	URZP32	Systems for Detection, Alarm and Warning	( ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies
4.	BM129A	Digital Image Processing	( BM0) Biomedical Engineering, Undergraduate Academic Studies
5.	E137	Basics of Telecommunications	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
6.	EK463	Pattern Recognition	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
7.	DE311S	Selected topics in Pattern Recognition	( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
8.	DE412S	Digital image processing algorithms	( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
9.	DE511S	Wireless sensor networks	( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
10.	EK520	Medical Image Processing	(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies
11.	EK522	Computer Vision (Digital Image Processing 2)	( F20) Engineering Animation, Master Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies
12.	H1420	Fundamentals in Mechanical Vision	( H00) Mechatronics, Master Academic Studies
13.	IMDS54	Computer Vision in Industrial Engineering and Management	( I12) Industrial Engineering, Specialised Academic Studies ( I22) Engineering Management, Specialised Academic Studies
14.	ZP508	Design and Maintenance of the Fire Detection Systems	( ZP1) Disaster Risk Management and Fire Safety, Master Academic Studies
15.	DE311	Selected Chapters in Pattern Recognition	( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies
16.	DE412	Digital Image Processing Algorithms	( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies ( OM1) Mathematics in Engineering, Doctoral Academic Studies
17.	DE511	Wireless Sensor Networks	( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies
18.	IMDR54	Computer Vision in Industrial Engineering and Management	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies

Representative references (minimum 5, not more than 10)



## Study Programme Accreditation

MASTER ACADEMIC STUDIES

Mechatronics

### Representative references (minimum 5, not more than 10)

1.	Dejan Vukobratovic, Cedimir Stefanovic, Vladimir Crnojevic, Francesco Chiti, Romano Fantacci: "Rateless Packet Approach for Data Gathering in Wireless Sensor Networks", IEEE Journal on Selected Areas in Communications, Vol. 28, No. 7, pp. 1169-1179, September 2010.
2.	Petrovic, N.I.; Crnojevic, V.: Universal Impulse Noise Filter Based on Genetic Programming, IEEE Transactions on Image Processing, 2008, Vol. 17, No. 7, str. 1109- 1120, ISSN 1057-7149
3.	D. Culibrk, M. Mirkovic, V.Zlokolica, M. Pokric, V. crnojevic, D. Kukolj, "Salient Motion Features for Video Quality Assessment", IEEE Trans. on Image Processing, Volume: 20 Issue:4, pp(s): 948 - 958, ISSN: 1057-7149
4.	Cedimir Stefanovic, Dejan Vukobratovic, Francesco Chiti, Lorenzo Niccolai, Vladimir Crnojevic, Romano Fantacci: "Urban Infrastructure-to-Vehicle Traffic Data Dissemination Using UEP Rateless Codes", IEEE Journal on Selected Areas in Communications, Vol. 29, No. 1, pp. 94-102, January 2011.
5.	Vladimir Crnojević, Nemanja Petrović, „Impulse Noise Filtering Using Robust Pixel-Wise S-estimate of Variance“, EURASIP Journal on Advances in Signal Processing, vol. 2010, Article ID 830702, 10 pages, 2010,
6.	V. Crnojević, V. Šenk, Ž. Trpovski, "Advanced Impulse Detection Based on Pixel-Wise MAD", IEEE Signal Processing Letters, vol.11, No. 7, 2004, str. 589-593. Crnojević, V. Šenk, Ž. Trpovski, "Advanced Impulse Detection Based on Pixel-Wise MAD", IEEE Signal Processing Letters, vol.11, No. 7, 2004, str. 589-593.
7.	B. Antić, V. Crnojević, „Joint Domain-Range Modeling of Dynamic Scenes with Adaptive Kernel Bandwidth“, pp.777-788, LNCS 4678, Springer-Verlag, Berlin Heidelberg 2007.
8.	N. Petrović, V. Crnojević, „Evolutionary Tree-Structured Filter for Impulse Noise Removal“, pp.103-113, LNCS 4179, Springer-Verlag, Berlin Heidelberg 2006.
9.	N. Petrović, V. Crnojević, „Impulse Noise Detection Based on Robust Statistics and Genetic Programming“, pp.643-649, LNCS 3708, Springer-Verlag, Berlin Heidelberg 2005.
10.	V. Crnojević, „Impulse Noise Filter With Adaptive Mad-Based Threshold“, International Conference on Image Processing, Genoa, Italy, 11-14. September, 2005.

### Summary data for teacher's scientific or art and professional activity:

Quotation total :	135		
Total of SCI(SSCI) list papers :	10		
Current projects :	Domestic :	3	International : 10

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	<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>	

### Science, arts and professional qualifications

Name and last name:	Časnji F. Ferenc		
Academic title:	Full Professor		
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad 30.01.1971		
Scientific or art field:	Motor Vehicles		
Academic carieer	Year	Institution	Field
Academic title election:	1996	Faculty of Technical Sciences - Novi Sad	Motor Vehicles
PhD thesis	1985	Faculty of Technical Sciences - Novi Sad	Motor Vehicles
Magister thesis	1977	Faculty of Agriculture - Novi Sad	Motor Vehicles
Bachelor's thesis	1971	Faculty of Mechanical Engineering - Novi Sad	Motor Vehicles

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

	ID	Course name	Study programme name, study type
1.	H2402	Motor Vehicle Mechatronics	( H00) Mechatronics, Undergraduate Academic Studies
2.	M2404A	Motor Vehicles	( M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
3.	M303	Fundamentals of Motor Vehicles	( M20) Mechanization and Construction Engineering, Undergraduate Academic Studies ( M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
4.	M310A	Road Vehicle Theory	( M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
5.	S0I361	Road Vehicles	( S00) Traffic and Transport Engineering, Undergraduate Academic Studies
6.	ZR403A	Motor vehicles operation safety	( Z01) Safety at Work, Undergraduate Academic Studies
7.	M2515	Motor Vehicle Simulation and Modelling	( M22) Mechanization and Construction Engineering, Master Academic Studies
8.	M2549	ROAD TRAFFIC FORENSIC ENGINEERING	( 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.	H797	Mechatronics in mechanization - advanced topics	( H00) Mechatronics, Master Academic Studies

#### Representative references (minimum 5, not more than 10)

1.	Časnji F: Ergonomski nedostaci poljoprivrednih traktora, Monografija, Fakultet tehničkih nauka, Novi Sad, 1991, str.157.
2.	Časnji F., Ružić D: Pregled ergonomskih karakteristika traktora velike snage, Monografija povodom 30 godina izdavanja časopisa MVM, Kragujevac, 2005. str. 9-19.
3.	Časnji F., Stojić B: Razvoj hibridnih elektro-dizel traktora, Traktori i pogonske mašine, 13 (2008)4, Novi Sad 54-59
4.	Časnji F., Torović T., Muzikravić V: Energetska efikasnost traktora, Monografija, Fakultet tehničkih nauka - Novi Sad, 2009, str. 180
5.	Ružić D., Časnji F.: Thermo Interaction Between a Human Body and Vehicle Cabin, in: Heat transfer Phenomena and applications, ed. Salim N. Kazi, Vol. 1, pp. 295-318, In Tech. Rijeka, 2012.
6.	Časnji F: Smanjenje potrošnje goriva pomoću mehatroničkih sistema u transmisiji traktora, poglavlje u monografiji "Aktuelni pravci razvoja traktora", FTN Novi Sad, 2010, str. 41-57.
7.	Pantelić-Milinković Z., Časnji F., Demić M: Mogućnost snižavanja unutrašnje buke povećanjem akustičke apsorpcije, Zbornik radova međunarodnog naučnog simpozijuma Motorna vozila i motori, Kragujevac, 2004, str. 352-360.
8.	Časnji F., Klinar I., Muzikravić V: Savremene tendencije u automobilske tehnici - mehaničke komponente i elektronski sistemi, DDOR Novi Sad, Novi Sad, 2001.god. str.80
9.	Milidrag S., Časnji F., Muzikravić V., Poznanović N.: Sistemi upravljanja motornih vozila, monografija, Fakultet tehničkih nauka, Novi Sad, 1996, str. 137.
10.	Časnji F., Križnar M., Milidrag S.: Stanje i pravci razvoja motornih vozila i traktora, monografija naučne konferencije sa međunarodnim učešćem „Mašinstvo za XXI vek“, Novi Sad, 1995, str. 469-484.

#### Summary data for teacher's scientific or art and professional activity:

Quotation total :	38		
Total of SCI(SSCI) list papers :	0		
Current projects :	Domestic :	0	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 references (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



UNIVERSITY OF NOVI SAD

FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

**Study Programme Accreditation**

MASTER ACADEMIC STUDIES

Mechatronics

Representative references (minimum 5, not more than 10)

6.	Zlokolica, M., Cavic, M., Kostic, M.: Analytical description of polygonal holes boring - General approach, Strojnicki 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 KLASI, 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

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>	

### Science, arts and professional qualifications

Name and last name:	Čuš -. Franci		
Academic title:	Guest Professor		
Name of the institution where the teacher works full time and starting date:	-		
Scientific or art field:	Proizvodni sistemi, organizacija i menadžment (menadžment inovacija i		
Academic carieer	Year	Institution	Field
Academic title election:	2009		Proizvodni sistemi, organizacija i menadžment (menadžment inovacija i promena)
PhD thesis	1988	Faculty of Mechanical Engineering - Maribor	Processes for Material Removal Processing
Magister thesis	1985	Faculty of Mechanical Engineering - Maribor	Processes for Material Removal Processing
Bachelor's thesis	1978	Faculty of Mechanical Engineering - Maribor	Mechanical Engineering

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

	ID	Course name	Study programme name, study type
1.	Z421	Operacioni menadžment(uneti naziv na engleskom)	(Z20) Environmental Engineering, Undergraduate Academic Studies
2.	II1053	Production Systems	( F00) Graphic Engineering and Design, Undergraduate Academic Studies ( P00) Production Engineering, Undergraduate Academic Studies
3.	IM1114	Energy Flows in the Enterprise	(I20) Engineering Management, Undergraduate Academic Studies
4.	ZR401A	Science on Work	( Z01) Safety at Work, Undergraduate Academic Studies
5.	HDOK4 S	Selected chapters from automation of work processes	( I12) Industrial Engineering, Specialised Academic Studies
6.	IMDR0S	Selected chapters in enterprise's design, organization and control	( I12) Industrial Engineering, Specialised Academic Studies ( I22) Engineering Management, Specialised Academic Studies
7.	ZR502	Occupational Risk Assessment	( Z01) Safety at Work, Master Academic Studies
8.	IM2102	Manufacturing strategy (KAIZEN, LEAN, KANBAN, EFPS)	( I10) Industrial Engineering, Master Academic Studies ( M50) Energy Management, Master Academic Studies (I20) Engineering Management, Master Academic Studies
9.	IM2124	Production and Service Systems	( H00) Mechatronics, Master Academic Studies ( M50) Energy Management, Master Academic Studies
10.	IM2207	Technology management	(I20) Engineering Management, Master Academic Studies
11.	IM2215	Value engineering	(I20) Engineering Management, Master Academic Studies
12.	HDOK-4	Selected Chapters in Production Process Automation	( H00) Mechatronics, Doctoral Academic Studies ( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
13.	HDOKL4	Selected chapters from automation of work processes	( H00) Mechatronics, Doctoral Academic Studies
14.	IMDR57	Strategic Planning and Designing Procedures and Systems at the End of Product Lifecycle	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
15.	ZRD27A	Operations management in the security and occupational safety	( Z01) Safety at Work, Doctoral Academic Studies
16.	ZRD28A	Selected topics in the science of occupational safety	( Z01) Safety at Work, Doctoral Academic Studies

#### Representative references (minimum 5, not more than 10)

1.	ČUŠ, Franc, BALIČ, Jože. Optimization of cutting process by GA approach. Robot. comput.-integr. manuf.. [Print ed.], 2003, vol. 19, iss. 1/2, str. 113-121.
2.	ČUŠ, Franc, MURŠEC, Bogomir. Databases for technological information systems. J. mater. process. technol.. [Print ed.], Dec. 2004, vol. 157/158, str. 75-81.
3.	ČUŠ, Franc, ŽUPERL, Uroš, MILFELNER, Matjaž. Dynamic neural network approach for tool cutting force modelling of end milling operations. Int. j. gen. syst., October 2006, vol. 35, no 5, str. 603-618. [COBISS.SI-ID 10604310]
4.	ČUŠ, Franc, MILFELNER, Matjaž, BALIČ, Jože. An intelligent system for monitoring and optimization of ball-end milling process. J. mater. process. technol.. [Print ed.], June 2006, vol. 175, iss. 1/3, str. 90-97.
5.	ČUŠ, Franc, ŽUPERL, Uroš, KIKER, Edvard, MILFELNER, Matjaž. Adaptive controller design for feedrate maximization of machining process. J. Achiev. Mater. Manuf. Eng., Jul.-Aug. 2006, vol. 17, iss. 1/2, str. 237-240.



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**Study Programme Accreditation**

MASTER ACADEMIC STUDIES

Mechatronics

## Representative references (minimum 5, not more than 10)

6.	ČUŠ, Franc, ŽUPERL, Uroš. Approach to optimization of cutting conditions by using artificial neural networks. J. mater. process. technol.. [Print ed.], 2006, vol. 173, iss. 3, str. 281-290.
7.	ČUŠ, Franc, BALIČ, Jože, ŽUPERL, Uroš. Hybrid ANFIS-ants system based optimisation of turning parameters. J. Achiev. Mater. Manuf. Eng., Sep. 2009, vol. 36, iss. 1, str. 79-86.
8.	ŠOSTAR, Adolf, ČUŠ, Franc. Vpliv toplotne obdelave na obdelovalnost materialov pri vrтанju. Stroj. vestn., 1983, let. 29, št. 10-12, str. 215-218. [COBISS.SI-ID 3324444]
9.	ŠOSTAR, Adolf, ČUŠ, Franc. Načrtovanje preizkusov in izračun eksponentov za optimiranje odrezovanja. Stroj. vestn., 1984, let. 30, št. 9-10, str. 197-203. [COBISS.SI-ID 3324700]
10.	ČUŠ, Franc. Odvisnosti in zakonitosti postopka čelnega frezanja. Stroj. vestn., 1986, 32, št. 4/6, str. 60-63. [COBISS.SI-ID 94468]

## Summary data for teacher's scientific or art and professional activity:

Quotation total :	21			
Total of SCI(SSCI) list papers :	28			
Current projects :	Domestic :	0	International :	1

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>	

Science, arts and professional qualifications

Name and last name:	Ćosić P. Ilija		
Academic title:	Full Professor		
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad 22.12.1972		
Scientific or art field:	Production Systems, Organization and Management		
Academic carier	Year	Institution	Field
Academic title election:	1993	Faculty of Technical Sciences - Novi Sad	Production Systems, Organization and Management
PhD thesis	1983	Faculty of Technical Sciences - Novi Sad	Production Systems, Organization and Management
Magister thesis	1979	Faculty of Technical Sciences - Novi Sad	Production Systems, Organization and Management
Bachelor's thesis	1972	Faculty of Mechanical Engineering - 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.	M316	Production Systems	( G10) Geodesy and Geomatics, Undergraduate Academic Studies ( M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
2.	II1017	Production System Design	( I10) Industrial Engineering, Undergraduate Academic Studies
3.	II1053	Production Systems	( F00) Graphic Engineering and Design, Undergraduate Academic Studies ( P00) Production Engineering, Undergraduate Academic Studies
4.	IM1027	Production systems	( I20) Engineering Management, Undergraduate Academic Studies ( MR0) Measurement and Control Engineering, Undergraduate Academic Studies
5.	IM1039	Fundamentals of Operations management	( G10) Geodesy and Geomatics, Undergraduate Academic Studies ( S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies ( ZC0) Clean Energy Technologies, Undergraduate Academic Studies ( ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies
6.	IM1116	Work Study and Ergonomics	( I10) Industrial Engineering, Undergraduate Academic Studies (I20) Engineering Management, Undergraduate Academic Studies
7.	ZR401A	Science on Work	( Z01) Safety at Work, Undergraduate Academic Studies
8.	IMDR0S	Selected chapters in enterprise's design, organization and control	( I12) Industrial Engineering, Specialised Academic Studies ( I22) Engineering Management, Specialised Academic Studies
9.	IMDSPI	Selected Chapters in Design for Excellence	( I12) Industrial Engineering, Specialised Academic Studies
10.	IS001	Effective management	( I20) Engineering Management, Specialised Professional Studies ( IB0) Engineering Management - MBA, Specialised Professional Studies
11.	ZR502	Occupational Risk Assessment	( Z01) Safety at Work, Master Academic Studies
12.	IIDS5	Selected chapters in enterprise's design, organization and control	( I12) Industrial Engineering, Specialised Academic Studies
13.	IIDS9	Effective Production and Service Systems	( I12) Industrial Engineering, Specialised Academic Studies ( I22) Engineering Management, Specialised Academic Studies



## Study Programme Accreditation

MASTER ACADEMIC STUDIES

Mechatronics

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

ID	Course name	Study programme name, study type
14.	IM2101 Intelligent Enterprising and Effective Management	( M50) Energy Management, Master Academic Studies (I20) Engineering Management, Master Academic Studies
15.	IM2102 Manufacturing strategy (KAIZEN, LEAN, KANBAN, EFPS)	( I10) Industrial Engineering, Master Academic Studies ( M50) Energy Management, Master Academic Studies (I20) Engineering Management, Master Academic Studies
16.	IM2119 Layout and location of the enterprise	(I20) Engineering Management, Master Academic Studies
17.	IM2124 Production and Service Systems	( H00) Mechatronics, Master Academic Studies ( M50) Energy Management, Master Academic Studies
18.	IMDR0 Science of Industrial Engineering and Management	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
19.	IMDR31 Effective Production and Service Systems	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
20.	IMDR56 Traceability of Product Lifecycle	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
21.	IMDR57 Strategic Planning and Designing Procedures and Systems at the End of Product Lifecycle	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
22.	IMDRPI Selected Chapters in Design for Excellence	( F00) Graphic Engineering and Design, Doctoral Academic Studies ( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
23.	IMDR5 Selected chapters in enterprise's design, organization and control	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
24.	IMDR85 Effective technological and production structures	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
25.	ZRD27A Operations management in the security and occupational safety	( Z01) Safety at Work, Doctoral Academic Studies
26.	ZRD28A Selected topics in the science of occupational safety	( Z01) Safety at Work, Doctoral Academic Studies

## Representative references (minimum 5, not more than 10)

1.	Ćosić I.: Development of Knowledge-Based System for the Configuration of Assembly Systems, Knowledge-Based Selection and Arrangement of Parts Bins at Assembly Workplaces (TEBES) - European Communities Bruxelles, 1991
2.	Zelenović D., Ćosić I., Šormaz D., Šišarića Z.: An approach to the design of more effective production systems , International Journal of Production Research, 1987, Vol. 25, No 1, pp. 3-15, ISSN 0020-7543
3.	Suzić N., Stevanov B., Ćosić I., Anišić Z., Sremčev N.: Customizing Products through Application of Group Technology: A Case Study of Furniture Manufacturing, Strojniski vestnik = Journal of Mechanical Engineering, 2012, ISSN 0039-2480
4.	Lazarević M., Ostojić G., Ćosić I., Stankovski S., Vukelić Đ., Zečević I.: Product lifecycle management (PLM) methodology for product tracking based on radio-frequency identification (RFID) technology, Scientific Research and Essays, 2011, Vol. 6, No 22, pp. 4776-4787, ISSN 1992-2248
5.	Tešić Z., Lalić D., Ćosić I., Mitrović V.: Integration of information for manufacturing shop control, Strojniski vestnik = Journal of Mechanical Engineering, 2010, Vol. 56, No 3, pp. 217-223, ISSN 0039-2480
6.	Stankovski S., Lazarević M., Ostojić G., Ćosić I., Purić R.: RFID Technology in Product/Part Tracking During the Whole Life Cycle , Assembly Automation, 2009, Vol. 29, No 4, pp. 364-370, ISSN 0144-5154
7.	Ćosić I., Lazarević M., Šooš L., Onderova I.: Proizvodi na kraju životnog veka – demontaža i reciklaža, Novi Sad, Fakultet tehničkih nauka, FTN Grafički centar GRID, 2009, ISBN 978-86-7892-9
8.	Zelenović D., Ćosić I., Maksimović R.: IIM - prilaz u razvoju efektivnih proizvodnih sistema za budućnost, Tehnika, 2010, Vol. 65, No 3, pp. 125-133, ISSN 0040-2176, UDK: 322.5:330.352.46
9.	Lalić B., Ćosić I., Anišić Z.: SIMULATION BASED DESIGN AND RECONFIGURATION OF PRODUCTION SYSTEMS , International Journal of Simulation Modelling-IJSIMM, 2005, Vol. 4, No 4, pp. 173-183, ISSN 1726-4529
10.	Lalić B., Ćosić I., Poli M.: Project Strategy Matching Project Structure to Project Type to Achieve Better Success, International Journal of Industrial Engineering and Management - IJIEM, 2010, Vol. 1, No 1, pp. 29-40, ISSN 2217-2661

## Summary data for teacher's scientific or art and professional activity:

Quotation total :	96		
Total of SCI(SSCI) list papers :	15		
Current projects :	Domestic :	2	International : 2

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>	

### 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 career	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 Engineers Mechatronics	( 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 references (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 Science, 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 Cycle for IC Engines, FME Transactions, 2011, Vol. 29, No 3, pp. 97-104, ISSN 1451-2092.
6.	Nikolić N., Antonić Ž., Dorić J.: Usporedni 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



UNIVERSITY OF NOVI SAD

FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6



## Study Programme Accreditation

MASTER ACADEMIC STUDIES

Mechatronics

Total of SCI(SSCI) list papers :	3			
Current projects :	Domestic :	2	International :	0



	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>	

### Science, arts and professional qualifications

Name and last name:		Dudić P. Slobodan	
Academic title:		Assistant Professor	
Name of the institution where the teacher works full time and starting date:		Faculty of Technical Sciences - Novi Sad 21.08.1995	
Scientific or art field:		Mechatronics, Robotics and Automation and Intelligent Systems	
Academic carier	Year	Institution	Field
Academic title election:	2012	Faculty of Technical Sciences - Novi Sad	Mechatronics, Robotics and Automation and Intelligent Systems
PhD thesis	2012	Faculty of Technical Sciences - Novi Sad	Mechatronics, Robotics and Automation and Intelligent Systems
Magister thesis	1999	Faculty of Technical Sciences - Novi Sad	Production Systems, Organization and Management
Bachelor's thesis	1995	Faculty of Technical Sciences - Novi Sad	Production Systems, Organization and Management

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

	ID	Course name	Study programme name, study type
1.	H102	Fundamentals in Product Development	( H00) Mechatronics, Undergraduate Academic Studies
2.	H1401	Material Handling Technologies	( H00) Mechatronics, Undergraduate Academic Studies
3.	H1403	Automation of work processes	( H00) Mechatronics, Undergraduate Academic Studies
4.	H1504	Computer Integration of Production Systems	( H00) Mechatronics, Undergraduate Academic Studies
5.	H310	Components of technological systems	( H00) Mechatronics, Undergraduate Academic Studies
6.	II1011	Automation of work processes 1	( I10) Industrial Engineering, Undergraduate Academic Studies
7.	II1013	Material Handling Technologies	( I10) Industrial Engineering, Undergraduate Academic Studies
8.	II1023	Packaging technology	( I10) Industrial Engineering, Undergraduate Academic Studies
9.	II1038	Automation of work processes 2	( I10) Industrial Engineering, Undergraduate Academic Studies
10.	II1042	Automation of Continual Processes	( I10) Industrial Engineering, Undergraduate Academic Studies
11.	IM1114	Energy Flows in the Enterprise	(I20) Engineering Management, Undergraduate Academic Studies
12.	H505	Implementation of automated systems	( H00) Mechatronics, Master Academic Studies ( I10) Industrial Engineering, Master Academic Studies
13.	HDOK4 S	Selected chapters from automation of work processes	( I12) Industrial Engineering, Specialised Academic Studies
14.	I829	Automation of packaging processes	( I10) Industrial Engineering, Master Academic Studies
15.	I830	Energy efficiency of compressed air systems	( I10) Industrial Engineering, Master Academic Studies
16.	PLM02	Product Development and Management in PLM	( I10) Industrial Engineering, Master Academic Studies ( I1U) Industrial Engineering - Product Lifecycle Management and Development, Master Academic Studies
17.	PLM04	Sustainable Production and LCA	( I1U) Industrial Engineering - Product Lifecycle Management and Development, Master Academic Studies
18.	LIM34	Material Handling	( LIM) Logistic Engineering and Management, Master Academic Studies
19.	NIT02	Factory Automation	( NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies
20.	NIT05	Advanced Technology for Material Handling	( NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies
21.	BMIM4C	Fluid filtration and separation	( BM0) Biomedical Engineering, Master Academic Studies
22.	I911	Sustainable production	( I10) Industrial Engineering, Master Academic Studies
23.	IIDS27	Selected chapters of the energy efficiency of automated systems	( I12) Industrial Engineering, Specialised Academic Studies
24.	IIDS6	Selected chapters in automation	( I12) Industrial Engineering, Specialised Academic Studies



## Study Programme Accreditation

MASTER ACADEMIC STUDIES

Mechatronics

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

ID	Course name	Study programme name, study type
25.	IM2103 New technologies in engineering and management	( I10) Industrial Engineering, Master Academic Studies (I20) Engineering Management, Master Academic Studies
26.	IMDR86 Selected chapters from energy efficiency of compressed air systems	( H00) Mechatronics, Doctoral Academic Studies ( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
27.	IMDR80 Selected chapters in automation	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies

## Representative references (minimum 5, not more than 10)

1.	Šešlija D., Ignjatović I., Dudić S.: Increasing the Energy Efficiency in Compressed Air Systems, Rijeka, InTech, 2012, str. 151-174, ISBN 978-953-51-0800-9
2.	Dudić S., Ignjatović I., Šešlija D., Blagojević V., Miodrag S.: Leakage quantification of compressed air using ultrasound and infrared thermography, MEASUREMENT, 2012, Vol. 45, No 7, pp. 1689-1694, ISSN 0263-2241
3.	Ignjatović I., Šešlija D., Tarjan L., Dudić S.: Wireless sensor system for monitoring of compressed air filters, Journal of Scientific and Industrial Research (JSIR), 2012, Vol. 71, No 5, pp. 334-340, ISSN 0022-4456
4.	Jocanović M., Šević D., Karanović V., Beker I., Dudić S.: Increased Efficiency of Hydraulic Systems Through Reliability Theory and Monitoring of System Operating Parameters, Strojniški vestnik - Journal of Mechanical Engineering, 2012, Vol. 58, No 4, pp. 281-288, ISSN 0039-2480
5.	Dudić S., Ignjatović I., Šešlija D., Blagojević V., Stojiljković M.: Leakage quantification of compressed air on pipes using thermovision, Thermal Science, 2012, Vol. 16, No 2, pp. 621-631, ISSN 0354-9836
6.	Šešlija D., Ignjatović I., Dudić S., Lagod B.: Potential energy savings in compressed air systems in Serbia, African Journal of Business Management, 2011, Vol. 5, No 14, pp. 5637-5645, ISSN 1993-8233
7.	Blagojević V., Šešlija D., Stojiljković M., Dudić S.: Efficient control of servo pneumatic actuator system utilizing by-pass valve and digital sliding mode, Sadhana - Academy Proceedings in Engineering Science, 2012, ISSN 0256-2499
8.	Šešlija D., Ignjatović I., Dudić S.: Compressed air system structure and energy efficiency, 15. Symposium on Thermal Science and Engineering of Serbia, Soko Banja: University of Nis, Faculty of Mechanical Engineering and Society of Thermal Engineers of Serbia, 18-21 Oktobar, 2011, pp. 649-658, ISBN 978-86-6055-018-9
9.	Šešlija D., Dudić S., Ignjatović I.: Cost effectiveness t of pressure regulation on return stroke of pneumatic actuators, 11. International Scientific Conference "Flexible Technologies" - MMA, Novi Sad: Fakultet tehničkih nauka, 20-21 Septembar, 2012
10.	Dudić S., Ignjatović I., Šešlija D.: Usage of non-destructive methods in compressed air system, 15. International Scientific Conference on Industrial Systems - IS, Novi Sad: Faculty of Technical Sciences, 14-16 Septembar, 2011, pp. 101-104, ISBN 978-86-7892-341-8

## Summary data for teacher's scientific or art and professional activity:

Quotation total :	0
Total of SCI(SSCI) list papers :	6
Current projects :	Domestic : 0 International : 0

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>	

Science, arts and professional qualifications

Name and last name:	Đurić M. Nikola		
Academic title:	Assistant Professor		
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad 01.10.1997		
Scientific or art field:	Theoretical Electrotechnics		
Academic carieer	Year	Institution	Field
Academic title election:	2010	Faculty of Technical Sciences - Novi Sad	Theoretical Electrotechnics
PhD thesis	2009	Faculty of Technical Sciences - Novi Sad	Electrical and Computer Engineering
Magister thesis	2003	Faculty of Technical Sciences - Novi Sad	Electrical and Computer Engineering
Bachelor's thesis	1997	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.	E216	Fundamentals of Electrical Engineering	( E20) Computing and Control Engineering, Undergraduate Academic Studies ( ES0) Power Software Engineering, Undergraduate Academic Studies
2.	EE300	Electromagnetics	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
3.	H104	Fundamentals of Electrical Engineering 1	( H00) Mechatronics, Undergraduate Academic Studies
4.	H108	Fundamentals of Electrical Engineering 2	( H00) Mechatronics, Undergraduate Academic Studies
5.	M112	Electrical Engineering and Electric Machines	( 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 ( S00) Traffic and Transport Engineering, Undergraduate Academic Studies ( S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies
6.	E105	Fundamentals of Electrical Engineering 1	( E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies ( MR0) Measurement and Control Engineering, Undergraduate Academic Studies
7.	E110	Fundamentals of Electrical Engineering 2	( E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies ( MR0) Measurement and Control Engineering, Undergraduate Academic Studies
8.	BMI94	Fundamentals of Electrical Engineering	( BM0) Biomedical Engineering, Undergraduate Academic Studies
9.	DE416S	Investigation of electromagnetic fields	( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
10.	DE517S	Technology of magnetic and optical data storage	( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
11.	EE543	Electro Magnetic Energy	(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies
12.	E1IEP	Investigation of electromagnetic fields	( MR0) Measurement and Control Engineering, Master Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies
13.	H799	Fieldbuses and protocols	( H00) Mechatronics, Master Academic Studies
14.	H845	Motion control	( H00) Mechatronics, Master Academic Studies ( I10) Industrial Engineering, Master Academic Studies
15.	DE416	Investigation of electromagnetic fields	( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies



## Study Programme Accreditation

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

ID	Course name	Study programme name, study type
16.	DE517 Technology of magnetic and optical data storage	( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies
Representative references (minimum 5, not more than 10)		
1.	Đurić N., Despotović M. : Application of MTR soft-decision decoding in multiple-head magnetic recording systems, Sadhana - Academy Proceedings in Engineering Science, 2009, Vol. 34, Broj 3, str. 381-392, ISSN 0256-2499	
2.	Đurić S., Nađ L., Damjanović M., Đurić N., Živanov Lj.: A novel application of planar-type meander sensors, Microelectronics International, 2011, Vol. 28, No 1, pp. 41-49, ISSN 1356-5362	
3.	Đurić N., Kavečan N.: Internet Portal of the SEMONT Information Network for the EM Field Monitoring, 4. International Conference on Advances in Future Internet - AFIN, Rim, 19-24 Avgust, 2012, pp. 55-59, ISBN 978-1-61208-211-0 (Best paper award)	
4.	Đurić N., Kavečan N., Kljajić D.: The EM Field Register of the SEMONT Broadband Monitoring Network, 10. SISY - International Symposium on Intelligent systems and Informatics, Subotica, 20-22 Septembar, 2012, pp. 27-30, ISBN 978-1-4673-4748-8	
5.	Đurić N., Šenk V.: The MAP Implementation in Logic Circuits for Soft-decision Decoding of MTR Codes, 6. European Modeling Symposium - EMS, Malta, 14-16 Novembar, 2012, pp. 201-206, ISBN 978-0-7695-4926-2/12	
6.	Đurić N., Prša M., Kasaš-Lažetić K.: Information Network for Continuous Electromagnetic Fields Monitoring, International Journal of Emerging Sciences - IJES, 2011, Vol. 1, No 4, pp. 516-525, ISSN 2222-4254	
7.	Vukobratović B., Đurić N.: Monitoring of EMF with SEMONT system, 6. International PhD Seminar on Computational electromagnetics and bioeffects of electromagnetic fields – CEMBEF, Novi Sad, 28-30 Jun, 2012, pp. 63-66, ISBN 978-86-7892-410-1	
8.	Bajović V., Đurić N., Herceg D.: Serbian Laws and Regulations as Foundation for Electromagnetic Field Monitoring Information Network, 10. International Conference on Applied Electromagnetics, Niš, 25-29 Septembar, 2011, ISBN ISBN: 978-86-6125-04	
9.	Đurić N., Prša M., Kasaš-Lažetić K., Bajović V.: Serbian Remote Monitoring System for Electromagnetic Environmental Pollution, 10. International Conference on Telecommunications in Modern Satellite, Cable and Broadcasting Services - TELSISKS, Niš, 5-8 Oktobar, 2011, pp. 701-704, ISBN 978-1-4577-2016-1	
10.	Đurić N., Šenk V., Vasić B.: MAP Decoding of MTR Codes in Multiple-Head Magnetic Recording Systems, 10. International Conference on Telecommunications in Modern Satellite, Cable and Broadcasting Services - TELSISKS, Niš, 5-8 Oktobar, 2011, pp. 164-167, ISBN 978-1-4577-2018-5	
Summary data for teacher's scientific or art and professional activity:		
Quotation total :	0	
Total of SCI(SSCI) list papers :	2	
Current projects :	Domestic :	3 International : 2

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>	

### Science, arts and professional qualifications

Name and last name:	Erdeljan M. Aleksandar		
Academic title:	Associate Professor		
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad 24.07.1989		
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	2000	Faculty of Technical Sciences - Novi Sad	Automatic Control and System Engineering
Magister thesis	1993	School of Electrical Engineering - Beograd	Automatic Control and System Engineering
Bachelor's thesis	1989	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.	E126	System Control, Modeling and Simulation	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
2.	E232	System Modeling and Simulation	( E20) Computing and Control Engineering, Undergraduate Academic Studies ( ES0) Power Software Engineering, Undergraduate Academic Studies ( M40) Technical Mechanics and Technical Design, 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.	GI303A	Distributed Systems in Geomatics	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies
4.	H213	System Modelling and Simulation 1	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies ( H00) Mechatronics, Undergraduate Academic Studies
5.	BMI124	System Modeling and Simulation	( BM0) Biomedical Engineering, Undergraduate Academic Studies
6.	E2312	Software design for SCADA systems	( E20) Computing and Control Engineering, Undergraduate Academic Studies ( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies
7.	ESI001	Software Tools in Power Engineering	( ES0) Power Software Engineering, Undergraduate Academic Studies
8.	ESI010	Basics of control in power systems	( ES0) Power Software Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
9.	ESI015	Distributed Computer Systems in Power Systems	( ES0) Power Software Engineering, Undergraduate Academic Studies
10.	SEAU02	SCADA Software	( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies
11.	SEAU09	Software design of SCADA systems	( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies ( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies
12.	SEI002	Architecture of Distributed Systems in Power Systems	( ES0) Power Software Engineering, Undergraduate Academic Studies



## Study Programme Accreditation

MASTER ACADEMIC STUDIES

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

ID	Course name	Study programme name, study type
13. AU502	Distributed 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
14. H301	System Modeling and Symulation	( H00) Mechatronics, Master Academic Studies
15. S054	Computer Modelling and Simulation	( S01) Postal Traffic and Telecommunications, Master Academic Studies
16. BMIM3D	Development of integrated biomedical systems	( BM0) Biomedical Engineering, Master Academic Studies
17. E2532	Automatic Control Systems Project Management	( E20) Computing and Control Engineering, Master Academic Studies
18. E2533	Discrete event simulation	( E20) Computing and Control Engineering, Master Academic Studies
19. E2535	Software Algorithms in Supervisory Control and Data Acquisition Systems	( E20) Computing and Control Engineering, Master Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies
20. ESI030	Distributed Software Architectures for Smart Energy Grids	( ES0) Power Software Engineering, Master Academic Studies
21. SEAM06	Integration of Distributed Control Systems	( SE0) Software Engineering and Information Technologies, Master Academic Studies
22. DAU006	Selected Chapters in Modeling and Simulation of Dynamic Systems	( E20) Computing and Control Engineering, Doctoral Academic Studies
23. DAU018	Selected Chapters in Distributed Control Systems	( E20) Computing and Control Engineering, Doctoral Academic Studies
24. ZRD25A	Selected chapters from Artificial Ingeligence	( Z01) Safety at Work, Doctoral Academic Studies

## Representative references (minimum 5, not more than 10)

1.	Lendak I., Erdeljan A., Popović D.: Algorithm for cataloguing topologies in the Common Information Model (CIM), Computers Math. Appl. 61, No. 3, 715-721 (2011). ISSN 0898-1221
2.	Vukmirović S., Erdeljan A., Čapko D., Lendak I., Nedić N.: Optimization of workflow scheduling in Utility Management System with hierarchical neural network, International Journal of Computational Intelligence Systems, 2011, Vol. 4, No 4, pp. 672-679, ISSN 1875-6883
3.	Čapko D., Erdeljan A., Švenda G., Popović M.: Dynamic Repartitioning of Large Data Model in Distribution Management Systems, Electronics and electrical engineering, 2012, No 4(120), pp. 83-88, ISSN 1392-1215
4.	Ilić S., Vukmirović S., Erdeljan A., Kulić F.: Hybrid Artificial Neural Network System for Short-Term Load Forecasting, Thermal Science, 2012, Vol. 16, No S, pp. 215-224, ISSN 0354-9836
5.	Vukmirović S., Erdeljan A., Čapko D., Lendak I.: Extension of the Common Information Model with Virtual Meter, Electronics and electrical engineering, 2011, Vol. 107, No 1, pp. 59-64, ISSN 1392-1215
6.	Čapko D., Erdeljan A., Popović M., Švenda G.: An Optimal Initial Partitioning of Large Datasets in Utility Management Systems, Journal of Advances in Electrical and Computer Engineering, 2011, Vol. 11, No 4, pp. 41-46, ISSN 1582-7445
7.	Čapko D., Erdeljan A., Vukmirović S., Lendak I.: A HYBRID GENETIC ALGORITHM FOR PARTITIONING OF DATA MODEL IN DISTRIBUTION MANAGEMENT SYSTEMS, Information technology and control, 2011, Vol. 40, No 4, pp. 316-322, ISSN 1392-124X
8.	Vukmirović S., Nedić N., Erdeljan A., Lendak I., Čapko D.: A Genetic Algorithm Approach for Utility Management System Workflow Scheduling, Information technology and control, 2010, Vol. 39, No 4, pp. 310-316, ISSN 1392-124X
9.	Vukmirović S., Erdeljan A., Lendak I., Čapko D.: A novel software architecture for Smart Metering systems, Journal of Scientific and Industrial Research (JSIR), 2010, Vol. 2010, No 12, pp. 937-941, ISSN 0022-4456
10.	Čapko D., Erdeljan A., Popović M., Švenda G.: An Optimal Relationship-Based Partitioning of Large Datasets, LNCS, Springer Verlag, 2010, str. 555-558, ISBN 978-3-642-15575-8

## Summary data for teacher's scientific or art and professional activity:

Quotation total :	1
Total of SCI(SSCI) list papers :	9
Current projects :	Domestic : 3 International : 0

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	<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>	

### 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 carier	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 references (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 Hafenebezeugen, dhf-deutsche hebe und fördertechnik, 1991. Nr. 6, s. 64-69



UNIVERSITY OF NOVI SAD

FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

**Study Programme Accreditation**

MASTER ACADEMIC STUDIES

Mechatronics

Representative references (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 für Fuzzy Logik, Augsburg, 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



	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>	

### Science, arts and professional qualifications



Name and last name:	Herakovič S. Niko		
Academic title:	Guest Professor		
Name of the institution where the teacher works full time and starting date:	University of Ljubljana - Ljubljana 01.01.2007		
Scientific or art field:	Mechatronics, Robotics and Automation and Integral Systems		
Academic carier	Year	Institution	Field
Academic title election:	2012		Mechatronics, Robotics and Automation and Integral Systems
PhD thesis	1995	University of Ljubljana - Ljubljana	Mechanical Engineering
Magister thesis	1991	University of Ljubljana - Ljubljana	Mechanical Engineering
Bachelor's thesis	1988	University of Ljubljana - Ljubljana	Mechanization and Constructional Mechanical Engineering

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

	ID	Course name	Study programme name, study type
1.	EOS19	Dismantling and recycling technologies	( E01) Power Engineering - Renewable Sources of Electrical Energy, Undergraduate Professional Studies
2.	H105	Fundamentals in Computer science	( H00) Mechatronics, Undergraduate Academic Studies
3.	H1410	Programming and application of programmable logic controllers	( H00) Mechatronics, Undergraduate Academic Studies
4.	BMI106	Rehabilitation devices and systems	( BM0) Biomedical Engineering, Undergraduate Academic Studies
5.	IM1116	Work Study and Ergonomics	( I10) Industrial Engineering, Undergraduate Academic Studies (I20) Engineering Management, Undergraduate Academic Studies
6.	IMDS56	Product traceability during the lifetime	( I12) Industrial Engineering, Specialised Academic Studies
7.	IMDS57	Strategic Planning and Designing Procedures and Systems at the End of Product Lifecycle	( I12) Industrial Engineering, Specialised Academic Studies
8.	IMDS93	Virtual Enterprises and Collaborative Systems	( I22) Engineering Management, Specialised Academic Studies
9.	H799	Fieldbuses and protocols	( H00) Mechatronics, Master Academic Studies
10.	H828	Advanced robotics	( H00) Mechatronics, Master Academic Studies
11.	I907	Automated Assembly Systems for High Accuracy	( H00) Mechatronics, Master Academic Studies ( PM0) Production Engineering, Master Academic Studies
12.	IIDS6	Selected chapters in automation	( I12) Industrial Engineering, Specialised Academic Studies
13.	IM2102	Manufacturing strategy (KAIZEN, LEAN, KANBAN, EFPS)	( I10) Industrial Engineering, Master Academic Studies ( M50) Energy Management, Master Academic Studies (I20) Engineering Management, Master Academic Studies
14.	IM2124	Production and Service Systems	( H00) Mechatronics, Master Academic Studies ( M50) Energy Management, Master Academic Studies
15.	IMDR56	Traceability of Product Lifecycle	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
16.	IMDR93	Virtual Enterprises and Collaborative Systems	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies

#### Representative references (minimum 5, not more than 10)

1.	Simic, M.a, Herakovic, N.a, Juschka, K.b, Pätzold, M.b, Flow characteristic curves for valve simulation: Using the hydraulically axial-notched longitudinal slide valves as example [Durchflusskennlinien für die ventilsimulation - Am Beispiel axialgekerbter hydraulischer Längsschieberventile], Olhidraulik und Pneumatik, Volume 56, Issue 3, March 2012, Pages 27-31, ISSN: 03412660
2.	DEBEVEC, Mihael, HERAKOVIČ Niko. Management Of Resources In Small And Medium-Sized Production Enterprises. Iranian Journal of Science and Technology. 51/79. (Article will be published in october 2010 – Enclosure 6 – Certificate of the paper received for publication)
3.	HERAKOVIČ, Niko, BEVK, Tomaž. Analysis of the material and the actuator influence on the characteristics of a pneumatic valve = Analiza vpliva materiala in aktuatorjev na lastnosti pnevmatičnega ventila. Mater. tehnol., 2010, letn. 44, št. 1, str. 37-40. [COBISS.SI-ID 11304219]

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6				
	<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>				
Representative references (minimum 5, not more than 10)					
4.	MERWE, Jacob D. van der, MINARIK, Martin, BEROVIĆ, Marin, HERAKOVIĆ, Niko. Heat transfer in citric acid production with axial and radial flow impellers. Acta chim. slov.. [Tiskana izd.], 2010, vol. 57, no. 1, str. 150-156. <a href="http://acta.chemsoc.si/57/57-1-150.pdf">http://acta.chemsoc.si/57/57-1-150.pdf</a> . [COBISS.SI-ID 33809925]				
5.	HERAKOVIĆ, Niko, ŠIMIC, Marko, TRDIČ, Francej, SKVARČ, Jure. A machine-vision system for automated quality control of welded rings. Mach. vis. appl., 2010, 15 str., doi: 10.1007/s00138-010-0293-9. ISSN 0932-8092. [COBISS.SI-ID 11512091], [JCR], 126/245				
6.	HERAKOVIĆ, Niko. Flow-force analysis in a hydraulic sliding-spool valve. Strojarsstvo, 2007, letn. 49, št. 3, str. 117-126. [COBISS.SI-ID 10449691]				
7.	HERAKOVIĆ, Niko. Računalniški in strojni vid v robotizirani montaži = Computer and machine vision in robot-based assembly. Stroj. vestn., 2007, letn. 53, št. 12, str. 858-873. ISSN 0039-2480. [COBISS.SI-ID 10378267], [JCR, WoS], 100/107				
8.	HERAKOVIĆ, Niko, NOE, Dragica. Analiza delovanja pnevmatičnega ventila s predkrmilnim piezoventilom = Analysis of the operation of pilot-stage piezo-actuator valves. Stroj. vestn., 2006, letn. 52, št. 12, str. 835-851. [COBISS.SI-ID 9821723]				
9.	Bogoeva-Gaceva, G., Dimeski, D., Heraković, N., Effect of sonication applied during production of carbon fiber/epoxy resin composites evaluated by differential scanning calorimetry and thermo-gravimetric analysis, Macedonian Journal of Chemistry and Chemical Engineering, Volume 30, Issue 2, ISSN: 18575552, 2011, Pages 189-196				
10.	HERAKOVIĆ, Niko, DUHOVNIK, Jože, NOE, Dragica. Sila trenja v pnevmatičnem valju = Friction force in the pneumatic cylinder. Stroj. vestn., okt.-dec. 1992, let. 38, št. 10/12, str. 279-288, ilustr. [COBISS.SI-ID 62843136]				
Summary data for teacher's scientific or art and professional activity:					
Quotation total :		11			
Total of SCI(SSCI) list papers :		13			
Current projects :		Domestic :	1	International :	3

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>	

### Science, arts and professional qualifications

Name and last name:	Ivandić I. Željko		
Academic title:	Guest Professor		
Name of the institution where the teacher works full time and starting date:	-		
Scientific or art field:	Mechatronics, Robotics and Automation and Integral Systems		
Academic carier	Year	Institution	Field
Academic title election:	2012	Faculty of Technical Sciences - Novi Sad	Mechatronics, Robotics and Automation and Integral Systems
PhD thesis	2002	Faculty of Mechanical Engineering and Naval Architecture - Zagreb	Mechanical Engineering
Magister thesis	1996	Faculty of Mechanical Engineering and Naval Architecture - Zagreb	Mechanical Engineering
Bachelor's thesis	1990	Mechanical Engineering Faculty - Slavonski Brod - Slavonski Brod	Mechanical Engineering

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

	ID	Course name	Study programme name, study type
1.	H102	Fundamentals in Product Development	( H00) Mechatronics, Undergraduate Academic Studies
2.	H105	Fundamentals in Computer science	( H00) Mechatronics, Undergraduate Academic Studies
3.	H109	Fundamentals in Programming	( H00) Mechatronics, Undergraduate Academic Studies
4.	H1409	Intelligent Systems	( H00) Mechatronics, Undergraduate Academic Studies
5.	H1410	Programming and application of programmable logic controllers	( H00) Mechatronics, Undergraduate Academic Studies
6.	H1501A	Systems for Surveillance and Visualisation of Process	( H00) Mechatronics, Undergraduate Academic Studies
7.	H308	Industrial Robotics	( H00) Mechatronics, Undergraduate Academic Studies
8.	II1015	Programmable Logic Controllers (PLC)	( I10) Industrial Engineering, Undergraduate Academic Studies
9.	II1048	Artificial intelligence in engineering	( I10) Industrial Engineering, Undergraduate Academic Studies
10.	H301	System Modeling and Symulation	( H00) Mechatronics, Master Academic Studies
11.	HDOS12	Research in the area of automatic identification technology	( I12) Industrial Engineering, Specialised Academic Studies
12.	HDOS13	Motion control and application of MEMS	( I12) Industrial Engineering, Specialised Academic Studies
13.	HDOS14	Nonindustrial automation	( I12) Industrial Engineering, Specialised Academic Studies
14.	PLM09	Systems and Devices for Tracking Products Through Life Cycle	( I1U) Industrial Engineering - Product Lifecycle Management and Development, Master Academic Studies
15.	NIT06	Advanced Technologies for Manufacturing Support	( NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies
16.	H845	Motion control	( H00) Mechatronics, Master Academic Studies ( I10) Industrial Engineering, Master Academic Studies
17.	I903	Application of microelectromechanical systems	( I10) Industrial Engineering, Master Academic Studies
18.	IIDS6	Selected chapters in automation	( I12) Industrial Engineering, Specialised Academic Studies
19.	IM2516	Artificial Intelligence in Engineering	(I20) Engineering Management, Master Academic Studies
20.	IM2721	Systems for detection, alarming and warning	(I20) Engineering Management, Master Academic Studies
21.	HDOK12	Research in the area of automatic identification technologies	( H00) Mechatronics, Doctoral Academic Studies
22.	HDOK13	Motion control and the application of MEMS	( H00) Mechatronics, Doctoral Academic Studies
23.	HDOK14	Non-industrial Automation	( H00) Mechatronics, Doctoral Academic Studies
24.	HDOK-3	Selected Chapters in Automation Systems Integration	( H00) Mechatronics, Doctoral Academic Studies
25.	HDOKL3	Selected Chapters in Automation Systems Integration	( H00) Mechatronics, Doctoral Academic Studies
26.	HDOL12	Research in the area of automatic identification technologies	( H00) Mechatronics, Doctoral Academic Studies
27.	HDOL13	Motion controla and application of MEMS	( H00) Mechatronics, Doctoral Academic Studies ( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies



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## Study Programme Accreditation

MASTER ACADEMIC STUDIES

Mechatronics

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

ID	Course name	Study programme name, study type		
28.	HDOL14 Nonindustrial automation	( H00) Mechatronics, Doctoral Academic Studies ( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies		
Representative references (minimum 5, not more than 10)				
1.	Brillová, K., Ohlídal, M., Valíček, J., Hloch, S., Kozak, D., Ivandić, Z. Evaluation of abrasive waterjet produced titan surfaces topography by spectral analysis techniques (2012) Metalurgija, 51 (1), pp. 39-42.			
2.	Kozak, D., Ivandić, Z., Kontajić, P. Determination of the critical pressure for a hot-water pipe with a corrosion defect [Določitev kritičnega pritiska v vročevodni cevi s korozijsko poškodbo] (2010) Materiali in Tehnologije, 44 (6), pp. 385-390.			
3.	Balicević, P., Ivandić, Z., Kraljević, D. Temperature transitional phenomena in spherical reservoir wall (2010) Tehnicki Vjesnik, 17 (1), pp. 31-34.			
4.	Ivandić, Z., Ergić, T., Kljajin, M. Welding robots kinematic structures evaluation of based on conceptual models using the potential method (2009) Tehnicki Vjesnik, 16 (4), pp. 35-45.			
5.	Ergić, T., Ivandić, Ž. Ultra-light telescopic crane/platform mechanisms feature analysis (2009) Tehnicki Vjesnik, 16 (4), pp. 87-91.			
6.	Ivandić, Ž., Ergić, T., Kokanović, M. Conceptual model and evaluation of design characteristics in product development (2009) Strojstvo, 51 (4), pp. 281-291.			
7.	Hlaváček, P., Valíček, J., Hloch, S., Greger, M., Foldyna, J., Ivandić, Z., Sitek, L., Kušnerová, M., Zeleňák, M. Measurement of fine grain copper surface texture created by abrasive water jet cutting (2009) Strojstvo, 51 (4), pp. 273-279.			
8.	Radvanská, A., Ergić, T., Ivandić, Ž., Hloch, S., Valicek, J., Mullerova, J. Technical possibilities of noise reduction in material cutting by abrasive water-jet (2009) Strojstvo, 51 (4), pp. 347-354.			
9.	Kušnerová, M., Valíček, J., Hloch, S., Ergić, T., Ivandić, Z. Derivation and measurement of the velocity parameters of hydrodynamics oscillating system (2008) Strojstvo, 50 (6), pp. 375-379.			
10.	Dunder, M., Ivandić, Ž., Samardžić, I. Selection of arc welding parameters of micro alloyed HSLA steel (2008) Metalurgija, 47 (4), pp. 325-330.			
Summary data for teacher's scientific or art and professional activity:				
Quotation total :	14			
Total of SCI(SSCI) list papers :	13			
Current projects :	Domestic :	1	International :	1

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>	

### Science, arts and professional qualifications

Name and last name:		Jovanović M. Vukica	
Academic title:		Guest Professor	
Name of the institution where the teacher works full time and starting date:		-	
Scientific or art field:		Mechatronics, Robotics and Automation and Integral Systems	
Academic carier	Year	Institution	Field
Academic title election:	2012	Faculty of Technical Sciences - Novi Sad	Mechatronics, Robotics and Automation and Integral Systems
PhD thesis	2010	Purdue University - West Lafayette	Mechatronics, Robotics and Automation and Intelligent Systems
Magister thesis	2006	Faculty of Technical Sciences - Novi Sad	Mechatronics, Robotics and Automation and Intelligent Systems
Bachelor's thesis	2001	Faculty of Technical Sciences - Novi Sad	Production Systems, Organization and Management

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

	ID	Course name	Study programme name, study type
1.	H105	Fundamentals in Computer science	( H00) Mechatronics, Undergraduate Academic Studies
2.	H109	Fundamentals in Programming	( H00) Mechatronics, Undergraduate Academic Studies
3.	H1409	Intelligent Systems	( H00) Mechatronics, Undergraduate Academic Studies
4.	H1410	Programming and application of programmable logic controllers	( H00) Mechatronics, Undergraduate Academic Studies
5.	BMI110	Sensors and actuators in medicine	( BM0) Biomedical Engineering, Undergraduate Academic Studies
6.	II1009	Automatic identification systems	( I10) Industrial Engineering, Undergraduate Academic Studies
7.	II1010	Control of technical systems	( I10) Industrial Engineering, Undergraduate Academic Studies
8.	II1015	Programmable Logic Controllers (PLC)	( I10) Industrial Engineering, Undergraduate Academic Studies
9.	II1029	Computer integrated manufacturing	( I10) Industrial Engineering, Undergraduate Academic Studies
10.	II1045	Systems for measurement, surveillance and control	( I10) Industrial Engineering, Undergraduate Academic Studies
11.	II1048	Artificial intelligence in engineering	( I10) Industrial Engineering, Undergraduate Academic Studies
12.	IM1001	Fundamentals of industrial engineering	( I20) Engineering Management, Undergraduate Academic Studies
13.	IM1022	Fundamentals of technical systems control	( I20) Engineering Management, Undergraduate Academic Studies ( M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
14.	IM1035	Identification technologies in enterprises	( I20) Engineering Management, Undergraduate Academic Studies
15.	IM1117	Computer integrated manufacturing (CIM)	(I20) Engineering Management, Undergraduate Academic Studies
16.	IM1719	Implementation of information systems in insurance	(I20) Engineering Management, Undergraduate Academic Studies
17.	HDOK2S	Selected topics in non-industrial robotics	( I12) Industrial Engineering, Specialised Academic Studies
18.	HDOS12	Research in the area of automatic identification technology	( I12) Industrial Engineering, Specialised Academic Studies
19.	HDOS13	Motion control and application of MEMS	( I12) Industrial Engineering, Specialised Academic Studies
20.	HDOS14	Nonindustrial automation	( I12) Industrial Engineering, Specialised Academic Studies
21.	NIT08	Fundamentals of Computer Science and Informatics	( NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies
22.	H799	Fieldbuses and protocols	( H00) Mechatronics, Master Academic Studies



## Study Programme Accreditation

MASTER ACADEMIC STUDIES

Mechatronics

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

ID	Course name	Study programme name, study type
23.	I907 Automated Assembly Systems for High Accuracy	( H00) Mechatronics, Master Academic Studies ( PM0) Production Engineering, Master Academic Studies
24.	IM2516 Artificial Intelligence in Engineering	(I20) Engineering Management, Master Academic Studies
25.	IM2716 Automation systems in insurance	(I20) Engineering Management, Master Academic Studies
26.	IM2721 Systems for detection, alarming and warning	(I20) Engineering Management, Master Academic Studies
27.	HDOK12 Research in the area of automatic identification technologies	( H00) Mechatronics, Doctoral Academic Studies
28.	HDOK13 Motion control and the application of MEMS	( H00) Mechatronics, Doctoral Academic Studies
29.	HDOK14 Non-industrial Automation	( H00) Mechatronics, Doctoral Academic Studies
30.	HDOK-3 Selected Chapters in Automation Systems Integration	( H00) Mechatronics, Doctoral Academic Studies
31.	HDOKL3 Selected Chapters in Automation Systems Integration	( H00) Mechatronics, Doctoral Academic Studies
32.	HDOL12 Research in the area of automatic identification technologies	( H00) Mechatronics, Doctoral Academic Studies
33.	HDOL13 Motion control and application of MEMS	( H00) Mechatronics, Doctoral Academic Studies ( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
34.	HDOL14 Nonindustrial automation	( H00) Mechatronics, Doctoral Academic Studies ( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies

## Representative references (minimum 5, not more than 10)

1.	Ostojić G., Stankovski S., Tarjan L., Šenk I., Jovanović V.: Development and Implementation of Didactic Sets in Mechatronics and Industrial Engineering Courses, International Journal of Engineering Education, 2010, Vol. 26, No 1, pp. 2-8, ISSN 0949-149X
2.	Jovanović V., Filipović S., Ostojić G., Stankovski S., Lazarević M.: Analysis of Possible Use of Identification Technologies in Disassembly, Facta universitatis - series: Mechanical Engineering, 2009, Vol. 7, No 1, pp. 81-82, ISSN 0354-2025, UDK: 658.515
3.	Ostojić G., Lazarević M., Jovanović V., Stankovski S., Čosić I.: Design Process in the Assembly and Disassembly Systems Using RFID Technology, Journal for Fluid Power, Automation and Mechatronics – Ventil, 2006, Vol. 6, pp. 385-389, ISSN 1318-7279
4.	Stankovski S., Ostojić G., Jovanović V., Stevanov B.: Using RFID Technology in Collaborative Design, Facta universitatis - series: Mechanical Engineering, 2006, Vol. 4, No 1, pp. 75-82, ISSN 0354-2025, UDK: 681.518:65.011.56
5.	Ostojić G., Lazarević M., Jovanović V., Stankovski S., Čosić I.: RFID Tehnology Use In Assembly and Disassembly Processes, Journal for Fluid Power, Automation and Mechatronics – Ventil, 2006, Vol. 6, No 12, pp. 385-389, ISSN 1318-7279, UDK: 62-82 62-85 62-31/33 681.523
6.	Jovanovic, V., DeAgostino, T.H., Thomas, M.B., Trusty II, R.T. Educating engineering students to succeed in a global workplace, 2012, ASEE Annual Conference and Exposition, Conference Proceedings
7.	Ostojić G., Jovanović V., Stankovski S., Lazarević M.: RFID Product and Part Tracking for the Preventive Maintenance, 4. ASME International Manufacturing Science and Engineering Conference (MSEC), West Lafayette: American Society of Mechanical Engineers (ASME), 4-7 Oktobar, 2009, ISBN 978-0-7918-3859-4
8.	Jovanović V., Savić B.: Determining the Optimal Interval for the Technical Diagnostics of Bearings, 4. ASME International Manufacturing Science and Engineering Conference (MSEC), West Lafayette: American Society of Mechanical Engineers (ASME), 4-7 Oktobar, 2009, ISBN 9780791843611
9.	Jovanović V.: An Overview of Possible Integration of Green Design Principles into Mechatronic Product Development through Product Lifecycle Management, 4. ASME International Manufacturing Science and Engineering Conference (MSEC), West Lafayette: American Society of Mechanical Engineers (ASME), 4-7 Oktobar, 2009, ISBN 9780791843611
10.	Jovanović V., Ncube L.: The Curriculum as a Product: The Application of PLM to the Comprehension Collaborative Design Education Project, 7. Annual ASEE Global Colloquium in Engineering Education, Cape Town: American Society of Engineering Education (ASEE), 1 Januar, 2008

## Summary data for teacher's scientific or art and professional activity:

Quotation total :	9		
Total of SCI(SSCI) list papers :	1		
Current projects :	Domestic :	1	International : 2

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>	

### Science, arts and professional qualifications

Name and last name:	Juhas T. Anamarija		
Academic title:	Assistant Professor		
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad 01.11.1990		
Scientific or art field:	Theoretical Electrotechnics		
Academic career	Year	Institution	Field
Academic title election:	2010	Faculty of Technical Sciences - Novi Sad	Theoretical Electrotechnics
PhD thesis	2009	Faculty of Technical Sciences - Novi Sad	Electrical and Computer Engineering
Magister thesis	1994	School of Electrical Engineering - Beograd	Electrical and Computer Engineering
Bachelor's thesis	1990	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. EE300	Electromagnetics	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
2. EOS01	Fundamental electrical engineering	( E01) Power Engineering - Renewable Sources of Electrical Energy, Undergraduate Professional Studies
3. I087	Electrical Engineering in Industrial Engineering	( G10) Geodesy and Geomatics, Undergraduate Academic Studies
4. M112	Electrical Engineering and Electric Machines	( 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 ( S00) Traffic and Transport Engineering, Undergraduate Academic Studies ( S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies
5. Z107	Electrical Engineering, Environment and Protection	( Z01) Safety at Work, Undergraduate Academic Studies (Z20) Environmental Engineering, Undergraduate Academic Studies
6. II1007	Fundamental electrical engineering	( I10) Industrial Engineering, Undergraduate Academic Studies ( ZC0) Clean Energy Technologies, Undergraduate Academic Studies
7. URZP12	Introduction to electrical engineering	( ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies
8. DE208S	Selected Chapters on Electromagnetic Compatibility	( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
9. DE408S	Selected chapters inl electromagnetics	( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
10. EE543	Electro Magnetic Energy	(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies
11. H799	Fieldbuses and protocols	( H00) Mechatronics, Master Academic Studies
12. DE208	Selected Chapters on Electromagnetic Compatibility	( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies
13. DE408	Selected Chapters in Electromagnetics	( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies

#### Representative references (minimum 5, not more than 10)

1.	A. Juhas, L. A. Novak, "Comments on "Class-E, Class-C, and Class-F power amplifier based upon a finite number of harmonics", IEEE Transactions of Microwave Theory and Techniques, vol. 57, no. 6, pp. 1623-1625, June 2009. ISSN 0018-9480.
2.	A. Juhas, L. A. Novak, S. Kostić, "Signals with Flattened Extrema in Balance Power Analysis of HFHPTA: Theory and Applications", IEEE Transactions on Broadcasting, vol. 47, no. 1, pp.38-45, 2001. ISSN 0018-9316
3.	S. Kostić, L. A. Novak, A. Juhas, "Increasing Efficiency and Output Power of HFHPTA by Injection of Two Harmonics", IEEE Transactions on Broadcasting, vol. 47, no. 1, pp.32-37, 2001. ISSN 0018-9316



## Study Programme Accreditation

MASTER ACADEMIC STUDIES

Mechatronics

### Representative references (minimum 5, not more than 10)

4.	D. Herceg, A. Juhas, M. Milutinov, "A design of a four square coil system for a biomagnetic experiment," Facta universitatis - series: Electronics and Energetics, 2009, Vol. 22, No 3, pp. 285-292. ISSN 0353-3670
5.	L. A. Novak, A. Juhas, "O broju maksimuma u dvočlanim složenoperiodičnim funkcijama: krive katastrofa", Elektrotehnika, br. 1-2, pp. E7-E10, 1994.
6.	A. Juhas, M. Milutinov, M. Prša, "Magnetic field of multi-line power system", Scientific bulletin of the "Politehnica" University of Timisoara, Proceedings of the 7th Int. Power Systems Conf., Timisoara, Romania, 22-23 Nov. 2007, Tom 52, pp. 319-328. ISSN 1582-7194.
7.	M. Milutinov, A. Juhas, M. Prša, "Electric and magnetic field in vicinity of overhead multi-line power system", Acta Electrotehnica, Proceedings of the 2nd Int.I Conf. on Modern Power Systems MPS 2008, Cluj-Napoca, Romania, 12-14 Nov.r 2008, pp. 313-316. ISSN 1841-3323.
8.	A. Juhas, M. Milutinov, N. Pekarić-Nadž, "Iskustva u primeni nacionalnih pravilnika o nejonizujućim zračenjima", Telekomunikacije, No 7, pp. 70-77, 2011. ISSN 1820-7782
9.	A. Juhas, M. Milutinov, D. Herceg, M. Prša, N. Pekarić-Nadž, "Uređaj za generisanje homogenog magnetskog polja kontrolisanog intenziteta za potrebe biomagnetskih ekspreimenata", Tehničko rešenje, decembar 2010.
10.	A. Juhas, N. Pekarić-Nadž, D. Herceg, " Estimation of Human Exposure to Combined RF EM Field of Multiple Antennas," Proceedings of International PhD Seminar on computational electromagnetics and optimization in electrical engineering – CEMOEE 2010, Sofia, Bulgaria, 10-13 Sep., 2010, pp. 27-31, ISBN 978-954-438-856-0

### 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





	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>	

### Science, arts and professional qualifications

Name and last name:	Kamberović L. Bato		
Academic title:	Full Professor		
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad 15.03.1979		
Scientific or art field:	Quality, Effectiveness and Logistics		
Academic career	Year	Institution	Field
Academic title election:	2007	Faculty of Technical Sciences - Novi Sad	Quality, Effectiveness and Logistics
PhD thesis	1996	Faculty of Technical Sciences - Novi Sad	Engineering Management
Magister thesis	1985	Faculty of Technical Sciences - Novi Sad	Engineering Management
Bachelor's thesis	1978	Faculty of Technical Sciences - Novi Sad	Engineering Management

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

	ID	Course name	Study programme name, study type
1.	II1014	Product measurement and control techniques	( I10) Industrial Engineering, Undergraduate Academic Studies
2.	II1036	Methods and techniques of quality improvement	( I10) Industrial Engineering, Undergraduate Academic Studies
3.	II1050	TRIBOLOGY AND LUBRICATION	( I10) Industrial Engineering, Undergraduate Academic Studies
4.	IM1020	Quality Management System	( I10) Industrial Engineering, Undergraduate Academic Studies ( I20) Engineering Management, Undergraduate Academic Studies
5.	IM1606	Designing, Auditing and Analyses of Quality Management System	( I10) Industrial Engineering, Undergraduate Academic Studies (I20) Engineering Management, Undergraduate Academic Studies
6.	IM1612	Methods and techniques of quality system improvements	(I20) Engineering Management, Undergraduate Academic Studies
7.	IM1613	Product measurement and control techniques	(I20) Engineering Management, Undergraduate Academic Studies
8.	IM1616	Quality planning	(I20) Engineering Management, Undergraduate Academic Studies
9.	IM1617	Quality Management System in Service Provision	(I20) Engineering Management, Undergraduate Academic Studies
10.	IM1619	Quality and Procurement	(I20) Engineering Management, Undergraduate Academic Studies
11.	I503	Models of Excellence in Quality Management Systems	( I10) Industrial Engineering, Master Academic Studies
12.	I504	Integrated Management Systems	( I10) Industrial Engineering, Master Academic Studies
13.	IMDS95	Trends in Customer Relationship Management	( I12) Industrial Engineering, Specialised Academic Studies ( I22) Engineering Management, Specialised Academic Studies
14.	I309	Quality Management System	( LIM) Logistic Engineering and Management, Master Academic Studies
15.	LIM18	Life Cycle Costs and Supply	( LIM) Logistic Engineering and Management, Master Academic Studies
16.	LIM21	Total Quality Management and Logistics	( LIM) Logistic Engineering and Management, Master Academic Studies
17.	I843	Maintenance effectiveness	( H00) Mechatronics, Master Academic Studies ( I10) Industrial Engineering, Master Academic Studies
18.	I912	Process approach and quality	( I10) Industrial Engineering, Master Academic Studies
19.	IIDS12	Quality and organizational performance	( I12) Industrial Engineering, Specialised Academic Studies ( I22) Engineering Management, Specialised Academic Studies
20.	IIDS30	Trends in the environmental management systems	( I12) Industrial Engineering, Specialised Academic Studies ( I22) Engineering Management, Specialised Academic Studies

UNIVERSITY OF NOVI SAD		FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
			
Study Programme Accreditation			
MASTER ACADEMIC STUDIES		Mechatronics	
List of courses being held by the teacher in the accredited study programmes			
ID	Course name	Study programme name, study type	
21.	IIDS7 Selected topics in quality engineering and logistics	( I12) Industrial Engineering, Specialised Academic Studies	
22.	IM2613 Models of Excellence in Quality Management Systems	(I20) Engineering Management, Master Academic Studies	
23.	IM2614 Integrated Management Systems	(I20) Engineering Management, Master Academic Studies	
24.	IM2616 Product and service quality improvement - lean six sigma	(I20) Engineering Management, Master Academic Studies	
25.	IM2623 Total Quality Management	(I20) Engineering Management, Master Academic Studies	
26.	IMDS74 Selected Topics in Quality Management and Logistics	( I22) Engineering Management, Specialised Academic Studies	
27.	IMDS76 Selected topics in industrial marketing and media engineering	( I22) Engineering Management, Specialised Academic Studies	
28.	IMDR94 Trends in the environmental management systems	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies	
29.	IMDR95 Trends in Customer Relationship Management	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies	
30.	IMDR74 Selected Topics in Quality Management and Logistics	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies	
31.	IMDR76 Selected topics in industrial marketing and media engineering	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies	
32.	IMDR79 Selected topics in quality engineering and logistics	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies	
33.	IMDR83 Quality and organisational performance	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies	
34.	ZRD212 Integrating occupational health and safety requirements into management systems	( Z01) Safety at Work, Doctoral Academic Studies	
Representative references (minimum 5, not more than 10)			
1.	Delić M., Radlovački V., Kamberović B., Vulcanović S., Hadžistević M., Tasić N.: ESTIMATES OF QUALITY MANAGEMENT SYSTEMS IN SERBIA , Metalurgia international, 2013, No 4, ISSN 1582-2214		
2.	Jovanović R., Radlovački V., Pečujlija M., Kamberović B., Delić M., Grujić J.: Assessment of blood donors' satisfaction and measures to be taken to improve quality in transfusion service establishments, Medicinski glasnik (BiH), 2012, Vol. 9, No 2, pp. 231-237		
3.	Radlovački V., Pečujlija M., Kamberović B., Jovanović R., Delić M., Beker I.: SATISFACTION OF HIGH SCHOOL STUDENTS WITH THE APPLICABILITY OF THEIR KNOWLEDGE, TTEM. Tehnics technologies education management, 2012, Vol. 7, No 2, pp. 777-785, ISSN 1840-1503		
4.	Radlovački V., Beker I., Majstorović V., Pečujlija M., Stanivuković D., Kamberović B.: Quality Managers' Estimates of Quality Management Principles Application in Certified Organisations in Transitional Conditions - Is Serbia Close to TQM, Strojniški vestnik - Journal of Mechanical Engineering, 2011, Vol. 57, No 11, pp. 851-861, ISSN 0039-2480		
5.	B. Kamberović: MODEL INTEGRALNOG SISTEMA ZA UPRAVLJANJE KVALITETOM, Univerzitet u Novom Sadu, Institut za industrijske sisteme i IIS - Istraživački i tehnološki centar, Novi Sad, 199 strana, 1998.		
6.	Kamberović B., Kecejević S.: ISO 9000 I ODRŽAVANJE , Novi Sad, Fakultet tehničkih nauka - Institut za industrijske sisteme		
7.	Kamberović B., Radaković N.: QFD METODA , Novi Sad, Fakultet tehničkih nauka - Institut za industrijske sisteme		
8.	Kamberović B., Radlovački V.: SISTEM UPRAVLJANJA KVALITETOM - ZAHTEVI u knjizi: Dr Vojislav Vulcanović, Dragutin Stanivuković, Bato Kamberović, R. Maksimović, Nikola Radaković, V. Radovački, M. Šilobad: SISTEM KVALITETA ISO 9001:2000, Novi Sad, Fakultet tehničkih nauka - Institut za industrijske sisteme i IIS-Istraživački i tehnološki centar, 2007, str. 39-50, ISBN 978-86-907041-3-2, UDK: 005.336.3 006.83		
9.	Vojislav V., Kamberović B.: KONTROLNE KARTE u knjizi: Dr Vojislav Vulcanović, Dragutin Stanivuković, Bato Kamberović, R. Maksimović, Nikola Radaković, V. Radovački, M. Šilobad: METODE I TEHNIKE UNAPREĐENJA PROCESA RADA - STATISTIČKE * INŽENJERSKE * MENADŽERSKE, Novi Sad, Fakultet tehničkih nauka - Institut za industrijske sisteme i IIS-Istraživački i tehnološki centar, 2003, str. 60-120, UDK: 658.5		
10.	Marić B., Kamberović B., Radlovački V., Delić M., Zubanov V.: Observing the dependence between dynamic indicators of investment profitability - Relative net present value and internal rate of return, African Journal of Business Management, 2011, Vol. 5, No 26, pp. 331-337, ISSN 1993-8233		
Summary data for teacher's scientific or art and professional activity:			
Quotation total :	0		
Total of SCI(SSCI) list papers :	6		
Current projects :	Domestic :	0	International : 0

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>	

### 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 career	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 references (minimum 5, not more than 10)

1.	Klinar I., Ličen H., Stefanović A., Bošnjaković S.: Influence of special additives for fuel on efektivness of engine, 38. International Petroleum Conference, Proceedings, A7-1-13, Bratislava, 1997.
2.	Klinar I.: Motori SUS, osnovni udžbenik, Fakultet tehničkih nauka-Novı Sad, 2005. UDK621.43(075.8), ISBN86-85211-47-6
3.	Klinar I.: Oprema motora SUS, osnovni udžbenik, Fakultet tehničkih nauka-Novı Sad, 1993. UDK621.43(075.8)
4.	Klinar I.: Sistemi napajanja gorivom motora SUS, pomoćni udžbenik (skripta), FTN-Institut za mehanizaciju, 1991. UDK621.43(075.8)
5.	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.
6.	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
7.	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.
8.	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.
9.	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
10.	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

#### 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

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>	

### Science, arts and professional qualifications



Name and last name:	Kozak V. Dražen		
Academic title:	Guest Professor		
Name of the institution where the teacher works full time and starting date:	-		
Scientific or art field:	Mechatronics, Robotics and Automation and Integral Systems		
Academic carier	Year	Institution	Field
Academic title election:	2012		Mechatronics, Robotics and Automation and Integral Systems
PhD thesis	2001	Faculty of Mechanical Engineering and Naval Architecture - Zagreb	Mechanical Engineering
Magister thesis	1995	Faculty of Mechanical Engineering and Naval Architecture - Zagreb	Mechanical Engineering
Bachelor's thesis	1991	Mechanical Engineering Faculty - Slavonski Brod - Slavonski Brod	Mechanical Engineering

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

	ID	Course name	Study programme name, study type
1.	H102	Fundamentals in Product Development	( H00) Mechatronics, Undergraduate Academic Studies
2.	H105	Fundamentals in Computer science	( H00) Mechatronics, Undergraduate Academic Studies
3.	H109	Fundamentals in Programming	( H00) Mechatronics, Undergraduate Academic Studies
4.	H1410	Programming and application of programmable logic controllers	( H00) Mechatronics, Undergraduate Academic Studies
5.	H1501A	Systems for Surveillance and Visualisation of Process	( H00) Mechatronics, Undergraduate Academic Studies
6.	H308	Industrial Robotics	( H00) Mechatronics, Undergraduate Academic Studies
7.	BMI106	Rehabilitation devices and systems	( BM0) Biomedical Engineering, Undergraduate Academic Studies
8.	H301	System Modeling and Symulation	( H00) Mechatronics, Master Academic Studies
9.	HDOS12	Research in the area of automatic identification technology	( I12) Industrial Engineering, Specialised Academic Studies
10.	HDOS13	Motion control and application of MEMS	( I12) Industrial Engineering, Specialised Academic Studies
11.	HDOS14	Nonindustrial automation	( I12) Industrial Engineering, Specialised Academic Studies
12.	NIT06	Advanced Technologies for Manufacturing Support	( NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies
13.	NIT08	Fundamentals of Computer Science and Informatics	( NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies
14.	H828	Advanced robotics	( H00) Mechatronics, Master Academic Studies
15.	IIDS6	Selected chapters in automation	( I12) Industrial Engineering, Specialised Academic Studies
16.	IM2516	Artificial Intelligence in Engineering	(I20) Engineering Management, Master Academic Studies
17.	IM2721	Systems for detection, alarming and warning	(I20) Engineering Management, Master Academic Studies
18.	HDOK12	Research in the area of automatic identification technologies	( H00) Mechatronics, Doctoral Academic Studies
19.	HDOK13	Motion control and the application of MEMS	( H00) Mechatronics, Doctoral Academic Studies
20.	HDOK14	Non-industrial Automation	( H00) Mechatronics, Doctoral Academic Studies
21.	HDOK-3	Selected Chapters in Automation Systems Integration	( H00) Mechatronics, Doctoral Academic Studies
22.	HDOKL3	Selected Chapters in Automation Systems Integration	( H00) Mechatronics, Doctoral Academic Studies
23.	HDOL12	Research in the area of automatic identification technologies	( H00) Mechatronics, Doctoral Academic Studies
24.	HDOL13	Motion controla and application of MEMS	( H00) Mechatronics, Doctoral Academic Studies ( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
25.	HDOL14	Nonindustrial automation	( H00) Mechatronics, Doctoral Academic Studies ( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies

#### Representative references (minimum 5, not more than 10)

1.	Kozak, D., Gubeljak, N., Konjatić, P., Sertić, J. Yield load solutions of heterogeneous welded joints (2009) International Journal of Pressure Vessels and Piping, 86 (12), pp. 807-812.
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		UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6					
		<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>					
Representative references (minimum 5, not more than 10)							
2.	Hloch, S., Valiček, J., Kozak, D., Tozan, H., Chattopadhyaya, S., Adamčík, P. Analysis of acoustic emission emerging during hydroabrasive cutting and options for indirect quality control (2012) International Journal of Advanced Manufacturing Technology, pp. 1-14.						
3.	Valiček, J., Hloch, S., Kozak, D. Surface geometric parameters proposal for the advanced control of abrasive waterjet technology (2009) International Journal of Advanced Manufacturing Technology, 41 (3-4), pp. 323-328.						
4.	Kladaric, I., Kozak, D., Krumes, D. The effect of aging parameters on properties of maraging steel (2009) Materials and Manufacturing Processes, 24 (7-8), pp. 747-749.						
5.	Valiček, J., Čep, R., Rokosz, K., Łukianowicz, C., Kozak, D., Zeleňák, M., Košťal, P., Hloch, S., Harničárová, M., Hlaváček, P., Haluzíková, B. New way to take control of a structural grain size in the formation of nanomaterials by extrusion (2012) Materialwissenschaft und Werkstofftechnik, 43 (5), pp. 405-411.						
6.	Brillová, K., Ohlídal, M., Valiček, J., Kozak, D., Hloch, S., Zeleňák, M., Harničárová, M., Hlaváček, P. Spectral analysis of metallic surfaces topography generated by abrasive waterjet (2012) Tehnicki Vjesnik, 19 (1), pp. 1-9.						
7.	Neslušán, M., Mrkvica, I., Čep, R., Kozak, D., Konderla, R. Deformations after heat treatment and their influence on cutting process (2011) Tehnicki Vjesnik, 18 (4), pp. 601-608.						
8.	Younise, B., Rakin, M., Medjo, B., Gubeljak, N., Kozak, D., Sedmak, A. Numerical analysis of constraint effect on ductile tearing in strength mismatched welded CCT specimens using micromechanical approach (2011) Tehnicki Vjesnik, 18 (3), pp. 333-340.						
9.	Vojvodić, D., Kozak, D., Sertić, J., Mehulić, K., Celebic, A., Komar, D. Influence of depth alignment of E-glass fiber reinforcements on dental base polymer flexural strength (2011) Materialpruefung/Materials Testing, 53 (9), pp. 528-535.						
10.	Kozak, D., Ivandić, Z., Kontajić, P. Determination of the critical pressure for a hot-water pipe with a corrosion defect (2010) Materiali in Tehnologije, 44 (6), pp. 385-390.						
Summary data for teacher's scientific or art and professional activity:							
Quotation total :				39			
Total of SCI(SSCI) list papers :				36			
Current projects :				Domestic :	1	International :	1

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	<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>	

### Science, arts and professional qualifications

Name and last name:		Lalić P. Bojan	
Academic title:		Assistant Professor	
Name of the institution where the teacher works full time and starting date:		Faculty of Technical Sciences - Novi Sad 17.06.2002	
Scientific or art field:		Production Systems, Organization and Management	
Academic carier	Year	Institution	Field
Academic title election:	2011		Production Systems, Organization and Management
PhD thesis	2011	Faculty of Technical Sciences - Novi Sad	Engineering Management
Magister thesis	2004	Faculty of Technical Sciences - Novi Sad	Engineering Management
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.	EOS39	Projektni menadžment	( E01) Power Engineering - Renewable Sources of Electrical Energy, Undergraduate Professional Studies
2.	II1017	Production System Design	( I10) Industrial Engineering, Undergraduate Academic Studies
3.	II1019	Project Management	( I10) Industrial Engineering, Undergraduate Academic Studies
4.	IM1019	Commercial Processes	( I20) Engineering Management, Undergraduate Academic Studies
5.	IM1026	E-Business	( I20) Engineering Management, Undergraduate Academic Studies
6.	IM1027	Production systems	( I20) Engineering Management, Undergraduate Academic Studies ( MR0) Measurement and Control Engineering, Undergraduate Academic Studies
7.	IM1046	Structural and Development Projects	( I20) Engineering Management, Undergraduate Academic Studies
8.	IM1104	Strategic Management	(I20) Engineering Management, Undergraduate Academic Studies
9.	IM1106	Business Process Simulation	( I10) Industrial Engineering, Undergraduate Academic Studies (I20) Engineering Management, Undergraduate Academic Studies
10.	IM1319	Platforms and systems for knowledge transfer	(I20) Engineering Management, Undergraduate Academic Studies
11.	IM2123	Operations management	( M50) Energy Management, Master Academic Studies (Z20) Environmental Engineering, Undergraduate Academic Studies
12.	IS001	Effective management	( I20) Engineering Management, Specialised Professional Studies ( IB0) Engineering Management - MBA, Specialised Professional Studies
13.	MBA304	Business Strategies	( IB0) Engineering Management - MBA, Specialised Professional Studies
14.	MBA413	Knowledge Systems and Project Management	( I20) Engineering Management, Specialised Professional Studies ( IB0) Engineering Management - MBA, Specialised Professional Studies
15.	MBA601	Applied use of IT and Internet in business	( I20) Engineering Management, Specialised Professional Studies ( IB0) Engineering Management - MBA, Specialised Professional Studies
16.	PLM05	Management of PLM Projects	( I1U) Industrial Engineering - Product Lifecycle Management and Development, Master Academic Studies



## Study Programme Accreditation

MASTER ACADEMIC STUDIES

Mechatronics

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

ID	Course name	Study programme name, study type
17.	SZP003 Selected Chapters in Applied Management	( I20) Engineering Management, Specialised Professional Studies ( IB0) Engineering Management - MBA, Specialised Professional Studies
18.	RPR005 Project Cycle Management	( RPR) Regional Development Planning and Management, Master Academic Studies
19.	IM2101 Intelligent Enterprising and Effective Management	( M50) Energy Management, Master Academic Studies (I20) Engineering Management, Master Academic Studies
20.	IM2123 Operations management	( M50) Energy Management, Master Academic Studies (Z20) Environmental Engineering, Undergraduate Academic Studies
21.	IM2124 Production and Service Systems	( H00) Mechatronics, Master Academic Studies ( M50) Energy Management, Master Academic Studies
22.	IM2307 Strategic Project Management	( M50) Energy Management, Master Academic Studies (I20) Engineering Management, Master Academic Studies (Z20) Environmental Engineering, Master Academic Studies
23.	IM2314 Program and Portfolio management	(I20) Engineering Management, Master Academic Studies
24.	IM2316 Theory of Constraints	( I10) Industrial Engineering, Master Academic Studies (I20) Engineering Management, Master Academic Studies
25.	IM2319 Project evaluation	( OM1) Mathematics in Engineering, Master Academic Studies (I20) Engineering Management, Master Academic Studies
26.	IM2922 eHRM	(I20) Engineering Management, Master Academic Studies
27.	IMDS71 Selected topics of project management	( I22) Engineering Management, Specialised Academic Studies
28.	S11594 E-Business	( S01) Postal Traffic and Telecommunications, Master Academic Studies
29.	UP002 Applied Project Cycle Management	( I20) Engineering Management, Specialised Professional Studies ( IB0) Engineering Management - MBA, Specialised Professional Studies
30.	IMDR71 Selected topics of project management	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
31.	ZRD27A Operations management in the security and occupational safety	( Z01) Safety at Work, Doctoral Academic Studies

## Representative references (minimum 5, not more than 10)

1.	Lalić, B., Ćosić I., Anišić, Z.: SIMULATION BASED DESIGN AND RECONFIGURATION OF PRODUCTION SYSTEMS, International journal of Simulation Modelling, IJSIMM, issn 1726-4529, Volume 4, Number 4, pp. 173-183, Vienna, Austria, December 2005.
2.	R. Maksimovic, B.Lalić; Flexibility and Complexity of Effective Enterprises, Strojniski Vesnik, 2008.
3.	Lalić D., Marjanović U., Lalić B.: The influence of social networks on communication satisfaction within the organizations. In: M.M. Cruz-Cunha, P. Goncalves, N. Lopes, E.M. Miranda and G.D. Putnik, ed. Handbook of Research on Business Social Networking: Organizational, Managerial, and Technological Dimensions., New York, Business Science Reference (IGI Global), 2011, str. 545-566, ISBN 978-1-61350-168-9
4.	Lalić B., Marjanović U.: Organizational Readiness/Preparedness. In: M.M. Cruz-Cunha and J. Varajao, ed. E-business issues, challenges and opportunities for SMEs: driving competitiveness., New York, Business Science Reference (IGI Global), 2011, str. 101-116, ISBN 978-1-61692-880-3
5.	Simeunović N., Ćosić I., Radaković N., Lalić B.: The General Work Procedure Model for the Service Product, Beč, DAAAM International Scientific Book, 2009, str. 281-288, ISBN 987-3-901509-71-1, UDK: ISSN 1726-9687
6.	Lalić B., Palčić I.: Analytical Hierarchy Process as a Tool for Selecting and Evaluating Projects, International journal of Simulation Modelling-IJSIMM, 2009, Vol. 8, No 1, pp. 16-26, ISSN 1726-4529
7.	Lalić B., Ćosić I., Anišić Z.: SIMULATION BASED DESIGN AND RECONFIGURATION OF PRODUCTION SYSTEMS , International journal of Simulation Modelling-IJSIMM, 2005, Vol. 4, No 4, pp. 173-183, ISSN 1726-4529
8.	Jovanovic M., Moreno Perez J., Lalić B., Todorovic V., Jovanović M.: Use of cost analysis, estimation and risk management in making project management decisions in construction, Projektna mreza Slovenije - Project Management Review, 2010, Vol. 8, No 3, pp. 4-9, ISSN 1580-0229
9.	Lalić B., Ćosić I., Poli M.: Project Strategy Matching Project Structure to Project Type to Achieve Better Success, International Journal of Industrial Engineering and Management - IJIEM, 2010, Vol. 1, No 1, pp. 29-40, ISSN 2217-2661



UNIVERSITY OF NOVI SAD

FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6



## Study Programme Accreditation

MASTER ACADEMIC STUDIES

Mechatronics

Representative references (minimum 5, not more than 10)

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|-----|--|
| 10. | Poli M., Mithiborwala H., Maksimović R., Lalić B.: PROJECT STRATEGY: SELECTING THE BEST PROJECT STRUCTURE, 9. PICMET Conference, Portland: Portland International Center for Management of Engineering and Technology, 2-6 August, 2009, pp. 1276-1281, ISBN 978-1-890843-20/5 |
|-----|--|

Summary data for teacher's scientific or art and professional activity:

Quotation total :	4			
Total of SCI(SSCI) list papers :	2			
Current projects :	Domestic :	2	International :	2



	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>	

### Science, arts and professional qualifications

Name and last name:	Lazarević M. Milovan		
Academic title:	Assistant Professor		
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad 11.11.2000		
Scientific or art field:	Production Systems, Organization and Management		
Academic carier	Year	Institution	Field
Academic title election:	2010	Faculty of Technical Sciences - Novi Sad	Production Systems, Organization and Management
PhD thesis	2009	Faculty of Technical Sciences - Novi Sad	Engineering Management
Magister thesis	2006	Faculty of Technical Sciences - Novi Sad	Production Systems, Organization and Management
Bachelor's thesis	2000	Faculty of Technical Sciences - Novi Sad	Production Systems, Organization and Management

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

	ID	Course name	Study programme name, study type
1.	EOS19	Dismantling and recycling technologies	( E01) Power Engineering - Renewable Sources of Electrical Energy, Undergraduate Professional Studies
2.	M316	Production Systems	( G10) Geodesy and Geomatics, Undergraduate Academic Studies ( M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
3.	II1012	Assembly Technologies	( I10) Industrial Engineering, Undergraduate Academic Studies
4.	II1017	Production System Design	( I10) Industrial Engineering, Undergraduate Academic Studies
5.	II1037	Disassembly and recycling technologies	( I10) Industrial Engineering, Undergraduate Academic Studies
6.	II1053	Production Systems	( F00) Graphic Engineering and Design, Undergraduate Academic Studies ( P00) Production Engineering, Undergraduate Academic Studies
7.	IM1027	Production systems	( I20) Engineering Management, Undergraduate Academic Studies ( MR0) Measurement and Control Engineering, Undergraduate Academic Studies
8.	IM1114	Energy Flows in the Enterprise	(I20) Engineering Management, Undergraduate Academic Studies
9.	IM1119	Product management at end of life	(I20) Engineering Management, Undergraduate Academic Studies
10.	EI504	Management of Small and Medium Enterprises	( MR0) Measurement and Control Engineering, Master Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies
11.	IMDR0S	Selected chapters in enterprise's design, organization and control	( I12) Industrial Engineering, Specialised Academic Studies ( I22) Engineering Management, Specialised Academic Studies
12.	IMDS56	Product traceability during the lifetime	( I12) Industrial Engineering, Specialised Academic Studies
13.	IMDS57	Strategic Planning and Designing Procedures and Systems at the End of Product Lifecycle	( I12) Industrial Engineering, Specialised Academic Studies
14.	IMDS93	Virtual Enterprises and Collaborative Systems	( I22) Engineering Management, Specialised Academic Studies
15.	MBA411	Business intelligence concepts	( I20) Engineering Management, Specialised Professional Studies ( IB0) Engineering Management - MBA, Specialised Professional Studies
16.	PLM02	Product Development and Management in PLM	( I10) Industrial Engineering, Master Academic Studies ( I1U) Industrial Engineering - Product Lifecycle Management and Development, Master Academic Studies

UNIVERSITAS STUDIORUM NEOPLANTENSIS		UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6		ФАКУЛТЕТ ТЕХНИЧКИХ НАУКА НОВИ САД	
Study Programme Accreditation				Mechatronics	
MASTER ACADEMIC STUDIES					
List of courses being held by the teacher in the accredited study programmes					
ID	Course name	Study programme name, study type			
17.	PLM06	Technologies for Disposal at the Products End-Of-Life	( I1U) Industrial Engineering - Product Lifecycle Management and Development, Master Academic Studies		
18.	I907	Automated Assembly Systems for High Accuracy	( H00) Mechatronics, Master Academic Studies ( PM0) Production Engineering, Master Academic Studies		
19.	IIDR5S	Advanced Engineering Technologies	( I12) Industrial Engineering, Specialised Academic Studies ( I22) Engineering Management, Specialised Academic Studies ( M50) Energy Management, Master Academic Studies		
20.	IIDS10	Effective technological and production structures	( I12) Industrial Engineering, Specialised Academic Studies ( I22) Engineering Management, Specialised Academic Studies		
21.	IM2102	Manufacturing strategy (KAIZEN, LEAN, KANBAN, EFPS)	( I10) Industrial Engineering, Master Academic Studies ( M50) Energy Management, Master Academic Studies (I20) Engineering Management, Master Academic Studies		
22.	IM2120	Virtual Enterprises	(I20) Engineering Management, Master Academic Studies		
23.	IM2124	Production and Service Systems	( H00) Mechatronics, Master Academic Studies ( M50) Energy Management, Master Academic Studies		
24.	PLM02	Applied Product Development	( I20) Engineering Management, Specialised Professional Studies		
25.	IMDR0	Science of Industrial Engineering and Management	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies		
26.	IMDR56	Traceability of Product Lifecycle	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies		
27.	IMDR57	Strategic Planning and Designing Procedures and Systems at the End of Product Lifecycle	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies		
28.	IMDR93	Virtual Enterprises and Collaborative Systems	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies		
29.	IMDR85	Effective technological and production structures	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies		
Representative references (minimum 5, not more than 10)					
1.	Vukelić Đ., Ostojić G., Stankovski S., Lazarević M., Tadić B., Hodolić J., Simeunović N.: Machining fixture assembly/disassembly in RFID environment, <i>Assembly Automation</i> , 2011, Vol. 31, No 1, pp. 62-68, ISSN 0144-5154				
2.	Stankovski S., Ostojić G., Tarjan L., Škrinjar D., Lazarević M. : IML Robot Grasping Process Improvement (Article in press, Date of acceptance 14. March 2010), <i>Iranian Journal of Science &amp; Technology, Transactions B</i> , 2011, ISSN 1028-6284				
3.	Ostojić G., Lazarević M., Stankovski S., Čosić I. : RFID Technology Application in Disassembly Systems , <i>Strojnski vestnik = Journal of Mechanical Engineering</i> , 2008, Vol. 54, Broj 11, str. 759-767, ISSN 0039- 2480, UDK: 658.5				
4.	Stankovski S., Lazarević M., Ostojić G., Čosić I., Purić R. : RFID Technology in Product/Part Tracking During the Whole Life Cycle , <i>Assembly Automation</i> , 2009, Vol. 29, Broj 4, str. 364-370, ISSN 0144-5154				
5.	Lazarević M., Ostojić G., Čosić I., Stankovski S., Vukelić Đ., Zečević I.: Product lifecycle management (PLM) methodology for product tracking based on radio-frequency identification (RFID) technology, <i>Scientific Research and Essays</i> , 2011, Vol. 6, No 22, pp. 4776-4787, ISSN 1992-2248				
6.	Ostojić G., Stankovski S., Vukelić Đ., Lazarević M., Hodolić J., Tadić B., Odić S.: Implementation of automatic identification technology in a process of fixture assembly/disassembly, <i>Strojniški vestnik - Journal of Mechanical Engineering</i> , 2011, Vol. 57, No 11, pp. 819-825, ISSN 0039-2480				
7.	Lazarević M., Ostojić G., Stankovski S., Čosić I.: Postupak upravljanja proizvodom u celokupnom životnom veku korišćenjem RFID taga, Broj priznatog patenta: 51796, datum priznavanja 24.10.2011. godine., 2011				
8.	Vukelić Đ., Tadić B., Hodolić J., Budak I., Lazarević M.: Development an expert system for machining fixture design, 10. International Conference on Accomplishments in Electrical and Mechanical Engineering and Information Technology - DEMI, Banja Luka: Faculty of Mechanical Engineering, 26-28 Maj, 2011, pp. 303-308, ISBN 978-99938-39-36-1				
9.	Lazarević, M., Čosić, I., Anišić, Z.: RFID Technologies In Product Disassembly Process, 5TH DAAAM International Conference on Advanced Technologies for Developing Countries, Rijeka, Croatia: University of Rijeka, 28-30 June, 2006				
10.	Suzić N., Lazarević M., Sremčev N.: Design for Product Variety, 6. Simpozijum o konstruisanju, oblikovanju i dizajnu – KOD, Palić: Fakultet tehničkih nauka, 29-30 Septembar, 2010, pp. 219-222, ISBN 978-86-7892-278-7				
Summary data for teacher's scientific or art and professional activity:					
Quotation total :		11			
Total of SCI(SSCI) list papers :		6			
Current projects :		Domestic :	4	International :	3

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>	

### Science, arts and professional qualifications

Name and last name:		Maksimović M. Rado	
Academic title:		Full Professor	
Name of the institution where the teacher works full time and starting date:		Faculty of Technical Sciences - Novi Sad 12.06.1979	
Scientific or art field:		Production Systems, Organization and Management	
Academic carier	Year	Institution	Field
Academic title election:	2008	University of Novi Sad - Novi Sad	Production Systems, Organization and Management
PhD thesis	1998	Faculty of Technical Sciences - Novi Sad	Engineering Management
Magister thesis	1989	Faculty of Technical Sciences - Novi Sad	Engineering Management
Bachelor's thesis	1978	Faculty of Technical Sciences - Novi Sad	Engineering Management
List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	Z421	Operacioni menadžment(uneti naziv na engleskom)	(Z20) Environmental Engineering, Undergraduate Academic Studies
2.	BM118C	Medical management	( BM0) Biomedical Engineering, Undergraduate Academic Studies
3.	IM1021	Developmental Processes in Company	( I20) Engineering Management, Undergraduate Academic Studies
4.	IM1031	Enterprise's organization	( I10) Industrial Engineering, Undergraduate Academic Studies ( I20) Engineering Management, Undergraduate Academic Studies
5.	IM1113	Improvement of products and processes	(I20) Engineering Management, Undergraduate Academic Studies
6.	IMDR0S	Selected chapters in enterprise's design, organization and control	( I12) Industrial Engineering, Specialised Academic Studies ( I22) Engineering Management, Specialised Academic Studies
7.	IMDS60	Enterprise Complexity and Flexibility	( I12) Industrial Engineering, Specialised Academic Studies ( I22) Engineering Management, Specialised Academic Studies
8.	IMDS63	Intelligent Organisation	( I12) Industrial Engineering, Specialised Academic Studies ( I22) Engineering Management, Specialised Academic Studies
9.	IMDS65	Entrepreneurship and Organizational Development	( I22) Engineering Management, Specialised Academic Studies
10.	I901	Manufacturing performance measurement	( I10) Industrial Engineering, Master Academic Studies
11.	I907	Automated Assembly Systems for High Accuracy	( H00) Mechatronics, Master Academic Studies ( PM0) Production Engineering, Master Academic Studies
12.	IIDS10	Effective technological and production structures	( I12) Industrial Engineering, Specialised Academic Studies ( I22) Engineering Management, Specialised Academic Studies
13.	IIDS19	Organizational structures	( I12) Industrial Engineering, Specialised Academic Studies ( I22) Engineering Management, Specialised Academic Studies
14.	IIDS5	Selected chapters in enterprise's design, organization and control	( I12) Industrial Engineering, Specialised Academic Studies
15.	IIDS9	Effective Production and Service Systems	( I12) Industrial Engineering, Specialised Academic Studies ( I22) Engineering Management, Specialised Academic Studies
16.	IM2102	Manufacturing strategy (KAIZEN, LEAN, KANBAN, EFPS)	( I10) Industrial Engineering, Master Academic Studies ( M50) Energy Management, Master Academic Studies (I20) Engineering Management, Master Academic Studies
17.	IM2103	New technologies in engineering and management	( I10) Industrial Engineering, Master Academic Studies (I20) Engineering Management, Master Academic Studies



## Study Programme Accreditation

MASTER ACADEMIC STUDIES

Mechatronics

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

ID	Course name	Study programme name, study type
18.	IM2113 Design of enterprise's organization	( I10) Industrial Engineering, Master Academic Studies (I20) Engineering Management, Master Academic Studies
19.	IM2114 Enterprise's performances	(I20) Engineering Management, Master Academic Studies
20.	IM2119 Layout and location of the enterprise	(I20) Engineering Management, Master Academic Studies
21.	IM2321 Management of project oriented enterprises	(I20) Engineering Management, Master Academic Studies
22.	IMDS69 Selected chapters in enterprise's design, organization and control	( I22) Engineering Management, Specialised Academic Studies
23.	IMDR0 Science of Industrial Engineering and Management	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
24.	IMDR12 Organizational structures	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
25.	IMDR31 Effective Production and Service Systems	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
26.	IMDR60 Enterprise Complexity and Flexibility	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
27.	IMDR63 Intelligent Organisation	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
28.	IMDR65 Entrepreneurship and Organizational Development	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
29.	IMDR5 Selected chapters in enterprise's design, organization and control	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
30.	IMDR69 Selected chapters of enterprise's management and control	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
31.	IMDR85 Effective technological and production structures	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
32.	ZRD27A Operations management in the security and occupational safety	( Z01) Safety at Work, Doctoral Academic Studies

### Representative references (minimum 5, not more than 10)

1.	Njegomir V., Maksimović R.: The overview of some basic issues in insurance market - the case of Serbian insurance risk transfer market, Transformations in Business & Economics (TIBE), 2012, Vol. 11, No 2, pp. 51-69, ISSN 1648-4460
2.	Marković V., Maksimović R.: A contribution to continual software service improvement based on the six-step service improvement method, INTERNATIONAL JOURNAL OF SOFTWARE ENGINEERING AND KNOWLEDGE ENGINEERING, 2012, Vol. 22, No 4, pp. 549-569, ISSN 0218-1940
3.	Zelenović, D., Ćosić, I., Maksimović, R.: IISE - APPROACH IN DEVELOPMENT OF EFFECTIVE MANUFACTURING SYSTEMS - COMPANIES, U: Suresh, N.C, Kay, M.J.: GROUP TECHNOLOGY & CELLULAR MANAGEMENT - A state of-The-Art Synthesis of Research & Practice, New York: Cluwer Pres, Buffalo - New York, 1998, ISBN 0-7923-8080-0. pp. 517- 536.
4.	Maksimović, R, Lalić, B: Flexibility and Complexity of Effective Enterprises, Strojniški vestnik - Journal of mechanical engineering, 2008, Vol. 54, No. 11, pp. 768- 782, UDK: 658.51, ISSN 0039-2480
5.	Maksimović, R., Stankovski, S., Ostojić, G., Petrović, S, Ratković, Ž.: Complexity and Flexibility of Production Structures, Journal of Scientific and Industrial Research, 2009, 101-105, ISSN 0022-4456
6.	Borocki J., Ćosić I., Lalić B., Maksimović R.: Analysis of Company Development Factors in Manufacturing and Service Company: a Strategic Approach, Strojniski vestnik = Journal of Mechanical Engineering, 2011, Vol. 57, No 1, pp. 55-68, ISSN 0039-2480, UDK: DOI:10.5545/sv-jme.2010.030
7.	Marović, B., Njegomir, V., Maksimović, R.: The implications of the financial crisis to the insurance industry - Global and regional perspective, Economic research, 2010, Vol. 23, No. 2, 127-141, ISSN 1331-677X.
8.	Obadović M., Maksimović R., Obadović M.: The estimate of the market risk by the application of historical simulation method in the period of growth of stock exchange indices on Belgrade stock exchange, Economic research, 2010, Vol. 23, No 3, pp. 82-95, ISSN 1331-677X, UDK: UDK 330.322:336.76
9.	Djuric, Ž., Maksimović, R., Adamović, Ž.: Key performance indicators in a joint-stock company, AFRICAN JOURNAL OF BUSINESS MANAGEMENT, 4 (6): 890-902, 2010
10.	Radišić, O., Radišić, M., Maksimović, R. et al. 2012. Industrial Cogeneration Appliance--An Example of a Drilling Rig. J Can Pet Technol 51 (6): 487-492. SPE-157689-PA. <a href="http://dx.doi.org/10.2118/157689-PA">http://dx.doi.org/10.2118/157689-PA</a> .

### Summary data for teacher's scientific or art and professional activity:

Quotation total :	8		
Total of SCI(SSCI) list papers :	11		
Current projects :	Domestic :	2	International : 1

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>	

### 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 career	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 energy 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



## Study Programme Accreditation

MASTER ACADEMIC STUDIES

Mechatronics

## 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 references (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 ( <i>Cucurbita pepo</i> L.) in a medium scale batch dryer with different modes of air circulation., <i>Zeitschrift für Arznei- und Gewürzpflanzen</i> , 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, <i>Renewable energy</i> , 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, <i>Computer and Electronics in Agriculture</i> , 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, <i>Waste Management</i> , 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, <i>Fuel</i> , 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 <i>Hypericum perforatum</i> L. <i>Zeitschrift für Arznei- und Gewürzpflanzen</i> , 12(3): 124-128.
7.	Martinov M., Veselinov B., Bojić S., Đatkov Đ.: Investigation of maize cobs crushing – preparation for use as a fuel, <i>Thermal Science - International Scientific Journal</i> , 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 <i>Czech Journal of Food Sciences</i> 27(3): 171-177.
9.	Oztekin, S, Martinov, M. 2007. <i>Medicinal and Aromatic Crops, Harvesting, Drying and Processing</i> , 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

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>	

### Science, arts and professional qualifications

Name and last name:	Ostojić M. Gordana		
Academic title:	Assistant Professor		
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad 06.03.2000		
Scientific or art field:	Mechatronics, Robotics and Automation and Integral Systems		
<b>Academic carier</b>	<b>Year</b>	<b>Institution</b>	<b>Field</b>
Academic title election:	2008	Faculty of Technical Sciences - Novi Sad	Mechatronics, Robotics and Automation and Integral Systems
PhD thesis	2008	Faculty of Technical Sciences - Novi Sad	Mechatronics, Robotics and Automation and Intelligent Systems
Magister thesis	2003	Faculty of Technical Sciences - Novi Sad	Mechatronics, Robotics and Automation and Intelligent Systems
Bachelor's thesis	1999	Faculty of Technical Sciences - Novi Sad	Quality, Effectiveness and Logistics

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

	ID	Course name	Study programme name, study type
1.	H105	Fundamentals in Computer science	( H00) Mechatronics, Undergraduate Academic Studies
2.	H109	Fundamentals in Programming	( H00) Mechatronics, Undergraduate Academic Studies
3.	H1403	Automation of work processes	( H00) Mechatronics, Undergraduate Academic Studies
4.	H1501A	Systems for Surveilance and Visualisation of Process	( H00) Mechatronics, Undergraduate Academic Studies
5.	H1504	Computer Integration of Production Systems	( H00) Mechatronics, Undergraduate Academic Studies
6.	H310	Components of technological systems	( H00) Mechatronics, Undergraduate Academic Studies
7.	BM116B	Acquisition, analysis and monitoring of medical data	( BM0) Biomedical Engineering, Undergraduate Academic Studies
8.	BM116C	Motion control	( BM0) Biomedical Engineering, Undergraduate Academic Studies
9.	BM119C	Automatic identification in bioengineering	( BM0) Biomedical Engineering, Undergraduate Academic Studies
10.	BMI106	Rehabilitation devices and systems	( BM0) Biomedical Engineering, Undergraduate Academic Studies
11.	II1009	Automatic identification systems	( I10) Industrial Engineering, Undergraduate Academic Studies
12.	II1010	Control of technical systems	( I10) Industrial Engineering, Undergraduate Academic Studies
13.	II1015	Programmable Logic Controllers (PLC)	( I10) Industrial Engineering, Undergraduate Academic Studies
14.	II1029	Computer integrated manufacturing	( I10) Industrial Engineering, Undergraduate Academic Studies
15.	II1045	Systems for measurement, surveillance and control	( I10) Industrial Engineering, Undergraduate Academic Studies
16.	II1048	Artificial intelligence in engineering	( I10) Industrial Engineering, Undergraduate Academic Studies
17.	IM1022	Fundamentals of technical systems control	( I20) Engineering Management, Undergraduate Academic Studies ( M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
18.	IM1035	Identification technologies in enterprises	( I20) Engineering Management, Undergraduate Academic Studies
19.	IM1117	Computer integrated manufacturing (CIM)	(I20) Engineering Management, Undergraduate Academic Studies
20.	H1503	Non Industrial Robotics and Automation in Buildings	( H00) Mechatronics, Master Academic Studies ( I10) Industrial Engineering, Master Academic Studies
21.	HDOS12	Research in the area of automatic identification technology	( I12) Industrial Engineering, Specialised Academic Studies
22.	HDOS13	Motion control and application of MEMS	( I12) Industrial Engineering, Specialised Academic Studies
23.	HDOS14	Nonindustrial automation	( I12) Industrial Engineering, Specialised Academic Studies



## Study Programme Accreditation

MASTER ACADEMIC STUDIES

Mechatronics

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

ID	Course name	Study programme name, study type
24. IMDR0S	Selected chapters in enterprise's design, organization and control	( I12) Industrial Engineering, Specialised Academic Studies ( I22) Engineering Management, Specialised Academic Studies
25. PLM09	Systems and Devices for Tracking Products Through Life Cycle	( I1U) Industrial Engineering - Product Lifecycle Management and Development, Master Academic Studies
26. NIT06	Advanced Technologies for Manufacturing Support	( NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies
27. H845	Motion control	( H00) Mechatronics, Master Academic Studies ( I10) Industrial Engineering, Master Academic Studies
28. I903	Application of microelectromechanical systems	( I10) Industrial Engineering, Master Academic Studies
29. I907	Automated Assembly Systems for High Accuracy	( H00) Mechatronics, Master Academic Studies ( PM0) Production Engineering, Master Academic Studies
30. IIDS6	Selected chapters in automation	( I12) Industrial Engineering, Specialised Academic Studies
31. IM2716	Automation systems in insurance	(I20) Engineering Management, Master Academic Studies
32. HDOK12	Research in the area of automatic identification technologies	( H00) Mechatronics, Doctoral Academic Studies
33. HDOK13	Motion control and the application of MEMS	( H00) Mechatronics, Doctoral Academic Studies
34. HDOK14	Non-industrial Automation	( H00) Mechatronics, Doctoral Academic Studies
35. HDOK-3	Selected Chapters in Automation Systems Integration	( H00) Mechatronics, Doctoral Academic Studies
36. HDOKL3	Selected Chapters in Automation Systems Integration	( H00) Mechatronics, Doctoral Academic Studies
37. HDOL12	Research in the area of automatic identification technologies	( H00) Mechatronics, Doctoral Academic Studies
38. HDOL13	Motion control and application of MEMS	( H00) Mechatronics, Doctoral Academic Studies ( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
39. HDOL14	Nonindustrial automation	( H00) Mechatronics, Doctoral Academic Studies ( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
40. IMDR0	Science of Industrial Engineering and Management	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
41. IMDR80	Selected chapters in automation	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies

### Representative references (minimum 5, not more than 10)

1.	Stankovski S., Tarjan L., Škrinjar D., Ostojić G., Šenk I.: Using a Didactic Manipulator in Mechatronics and Industrial Engineering Courses, IEEE Transactions on Education, 2010, Vol. 53, No 4, pp. 572-579, ISSN 0018-9359
2.	Gajić G., Stankovski S., Ostojić G., Tešić Z., Miladinović Lj.: Method of evaluating the impact of ERP implementation critical success factors – a case study in oil and gas industries (DOI:10.1080/17517575.2012.690105), Enterprise Information Systems, 2012, ISSN 1751-7575
3.	Stankovski S., Ostojić G., Šenk I., Rakić-Skoković M., Trivunović S., Kučević D.: Dairy cow monitoring by RFID, Scientia Agricola, 2012, Vol. 69, No 1, pp. 75-80, ISSN 0103-9016
4.	Janković J., Petrović N., Miladinović Lj., Popkonstantinović B., Stoimenov M., Petrović D., Ostojić G., Stankovski S.: Computer Simulation of Fast Hydraulic Actuators, Iranian Journal of Science and Technology - Transactions of Mechanical Engineering, Vol. 36, No. M1, pp. 95-106, ISSN 2228-6187.
5.	Stankovski S., Ostojić G., Tarjan L., Škrinjar D., Lazarević M.: IML Robot Grasping Process Improvement, Iranian Journal of Science and Technology - Transactions of Mechanical Engineering, Vol. 35, No. M1, pp. 61-71, ISSN 2228-6187.
6.	Popović B., Popović N., Mijić D., Stankovski S., Ostojić G.: Remote Control of Laboratory Equipment for Basic Electronics Courses: A LabVIEW-based Implementation DOI: 10.1002/cae.20531, Computer Applications in Engineering Education, 2011, ISSN 1061-3773
7.	Vukelić Đ., Ostojić G., Stankovski S., Lazarević M., Tadić B., Hodolić J., Simeunović N.: Machining fixture assembly/disassembly in RFID environment, Assembly Automation, 2011, Vol. 31, No 1, pp. 62-68, ISSN 0144-5154
8.	Ostojić, G., Stankovski, S.: Sistemi i uređaji za praćenje proizvoda tokom životnog ciklusa, Fakultet tehničkih nauka, 2012
9.	Ostojić, G., Stankovski, S., Tarjan, L., Šenk, I., Jovanović, V., DEVELOPMENT AND IMPLEMENTATION OF DIDACTIC SETS IN MECHATRONICS AND INDUSTRIAL ENGINEERING COURSES, International Journal of Engineering Education; 2010, Vol. 26, No. 1, pp. 2-8, ISSN 0949-149X





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FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6



## Study Programme Accreditation

MASTER ACADEMIC STUDIES

Mechatronics

Representative references (minimum 5, not more than 10)

10. Popkonstantinović B., Miladinović Lj., Stoimenov M., Petrović D., Ostojić G., Stankovski S.: DESIGN, MODELLING AND MOTION SIMULATION OF THE REMONTOIRE MECHANISM, Transactions of FAMENA, 2011, Vol. 35, No 2, pp. 79-93, ISSN 1333-1124.

Summary data for teacher's scientific or art and professional activity:

Quotation total :	25			
Total of SCI(SSCI) list papers :	17			
Current projects :	Domestic :	3	International :	2

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>	

### Science, arts and professional qualifications

Name and last name:	Petrović S. Vladimir		
Academic title:	Assistant Professor		
Name of the institution where the teacher works full time and starting date:	-		
Scientific or art field:	Telecommunications and Signal Processing		
Academic career	Year	Institution	Field
Academic title election:	2009	Faculty of Technical Sciences - Novi Sad	Telecommunications and Signal Processing
PhD thesis	2001	University of Manchester - Padej	Telecommunications and Signal Processing
Bachelor's thesis	-		Telecommunications and Signal Processing
Magister thesis	-		Telecommunications and Signal Processing

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

ID	Course name	Study programme name, study type
1. EK300	Digital Modulations	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
2. EK412	Shape Recognition	( BM0) Biomedical Engineering, Undergraduate Academic Studies
3. BMI121	Image processing and Computer Vision in Medical Imaging	( BM0) Biomedical Engineering, Undergraduate Academic Studies
4. EK463	Pattern Recognition	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
5. EK464	Communication Systems Design	( S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
6. EK520	Medical Image Processing	(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies
7. EK521	Information and Communication Theory	( S01) Postal Traffic and Telecommunications, Master Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies
8. H1420	Fundamentals in Mechanical Vision	( H00) Mechatronics, Master Academic Studies
9. DE311	Selected Chapters in Pattern Recognition	( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies

#### Representative references (minimum 5, not more than 10)

1.	Petrović V., Babalola K., Cootes T., Twining C., Taylor C.: Computing Accurate Correspondences across Groups of Images, IEEE Transactions on Pattern Analysis and Machine Intelligence, 2010, Vol. 32, No 11, pp. 1994-2005, ISSN 0162-8828
2.	Petrović V., Cootes T.: Objectively Adaptive Image Fusion, INFORM FUSION, 2007, Vol. 8, No 2, pp. 168-176, ISSN 1566-2535
3.	Petrović V.: Subjective tests for image fusion evaluation and objective metric validation, INFORM FUSION, 2007, Vol. 8, No 2, pp. 208-216, ISSN 1566-2535
4.	Petrović V., Xydeas C.: Sensor noise effects on signal-level image fusion performance, IEEE Transactions on Image Processing, 2004, Vol. 13, No 2, pp. 228-237, ISSN 1057-7149
5.	Petrović V., Xydeas C.: Sensor noise effects on signal-level image fusion performance, INFORM FUSION, 2003, Vol. 4, pp. 167-183, ISSN 1566-2535
6.	Petrović V., Xydeas C.: Objective Evaluation of Signal-level Image Fusion Performance, OPT ENG, 2005, Vol. 44, No 8, ISSN 0091-3286
7.	V Petrović, T Cootes, C Twining, C Taylor, "Simultaneous Registration, Segmentation and Modelling of Structure in Groups of Images", International Symposium on Biomedical Imaging: From Nano to Macro, ISBI2007, pp.1-4; Print ISBN: 1-4244-0672-2; DOI: 10.1109/ISBI.2007.356773 Arlington,USA, 12-15 April 2007
8.	V Petrović, T Cootes, A Mills, C Taylor, „Simultaneous Segmentation of Groups of Medical Images”, Medical Image Understanding and Analysis, MIUA2007, pp. 1-5; ISBN 1 901725 33 2; editors: Reyer Zwiggelaar, Frédéric Labrosse; University of Wales, Aberystwyth,GB;17-18.07. 2007
9.	V Petrović, T Cootes, R Pavlović, "Dynamic Image Fusion Performance Evaluation", Proceedings of 10th International Conference on Information Fusion 2007, pp.1-7; Print ISBN: 978-0-662-45804-3; DOI: 10.1109/ICIF.2007.4408120; Quebec, 9-12 July 2007
10.	V Petrović, T Cootes, C Twining, A Mills, C Taylor, „Automated Analysis of Deformable Structure in Groups of Images”, 18th British Machine Vision ConferenceBMVC2007, organised by the British Machine Vision Association;; Conference Chairs: Abhir Bhalerao and Nasir Rajpoot; Warwick, GB September 10-13, 2007

#### Summary data for teacher's scientific or art and professional activity:



UNIVERSITY OF NOVI SAD

FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6



## Study Programme Accreditation

MASTER ACADEMIC STUDIES

Mechatronics

Quotation total :	1359		
Total of SCI(SSCI) list papers :	7		
Current projects :	Domestic :	2	International : 1

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>	

### Science, arts and professional qualifications

Name and last name:		Stankovski V. Stevan	
Academic title:		Full Professor	
Name of the institution where the teacher works full time and starting date:		Faculty of Technical Sciences - Novi Sad 23.03.1987	
Scientific or art field:		Mechatronics, Robotics and Automation and Integral Systems	
Academic carier	Year	Institution	Field
Academic title election:	2005	Faculty of Technical Sciences - Novi Sad	Mechatronics, Robotics and Automation and Integral Systems
PhD thesis	1994	School of Electrical Engineering - Beograd	Electrical and Computer Engineering
Magister thesis	1991	School of Electrical Engineering - Beograd	Electrical and Computer Engineering
Bachelor's thesis	1987	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.	H105	Fundamentals in Computer science	( H00) Mechatronics, Undergraduate Academic Studies
2.	H109	Fundamentals in Programming	( H00) Mechatronics, Undergraduate Academic Studies
3.	H1403	Automation of work processes	( H00) Mechatronics, Undergraduate Academic Studies
4.	H1409	Intelligent Systems	( H00) Mechatronics, Undergraduate Academic Studies
5.	H1410	Programming and application of programmable logic controllers	( H00) Mechatronics, Undergraduate Academic Studies
6.	H1501A	Systems for Surveilance and Visualisation of Process	( H00) Mechatronics, Undergraduate Academic Studies
7.	H310	Components of technological systems	( H00) Mechatronics, Undergraduate Academic Studies
8.	H311	Application of Sensors and Actuators	( H00) Mechatronics, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
9.	BM116C	Motion control	( BM0) Biomedical Engineering, Undergraduate Academic Studies
10.	BMI106	Rehabilitation devices and systems	( BM0) Biomedical Engineering, Undergraduate Academic Studies
11.	BMI110	Sensors and actuators in medicine	( BM0) Biomedical Engineering, Undergraduate Academic Studies
12.	II1009	Automatic identification systems	( I10) Industrial Engineering, Undergraduate Academic Studies
13.	II1010	Control of technical systems	( I10) Industrial Engineering, Undergraduate Academic Studies
14.	II1011	Automation of work processes 1	( I10) Industrial Engineering, Undergraduate Academic Studies
15.	II1015	Programmable Logic Controllers (PLC)	( I10) Industrial Engineering, Undergraduate Academic Studies
16.	II1038	Automation of work processes 2	( I10) Industrial Engineering, Undergraduate Academic Studies
17.	II1042	Automation of Continual Processes	( I10) Industrial Engineering, Undergraduate Academic Studies
18.	II1045	Systems for measurement, surveillance and control	( I10) Industrial Engineering, Undergraduate Academic Studies
19.	II1048	Artificial intelligence in engineering	( I10) Industrial Engineering, Undergraduate Academic Studies
20.	IM1022	Fundamentals of technical systems control	( I20) Engineering Management, Undergraduate Academic Studies ( M20) Mechanization and Construction Engineering, Undergraduate Academic Studies
21.	IM1035	Identification technologies in enterprises	( I20) Engineering Management, Undergraduate Academic Studies
22.	IM1719	Implementation of information systems in insurance	(I20) Engineering Management, Undergraduate Academic Studies
23.	H505	Implementation of automated systems	( H00) Mechatronics, Master Academic Studies ( I10) Industrial Engineering, Master Academic Studies





## Study Programme Accreditation

MASTER ACADEMIC STUDIES

Mechatronics

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

ID	Course name	Study programme name, study type
24.	HDOS12 Research in the area of automatic identification technology	( I12) Industrial Engineering, Specialised Academic Studies
25.	HDOS13 Motion control and application of MEMS	( I12) Industrial Engineering, Specialised Academic Studies
26.	HDOS14 Nonindustrial automation	( I12) Industrial Engineering, Specialised Academic Studies
27.	IMDR0S Selected chapters in enterprise's design, organization and control	( I12) Industrial Engineering, Specialised Academic Studies ( I22) Engineering Management, Specialised Academic Studies
28.	MBA414 Integrated Business Processes	( I20) Engineering Management, Specialised Professional Studies ( I80) Engineering Management - MBA, Specialised Professional Studies
29.	PLM09 Systems and Devices for Tracking Products Through Life Cycle	( I1U) Industrial Engineering - Product Lifecycle Management and Development, Master Academic Studies
30.	NIT02 Factory Automation	( NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies
31.	NIT06 Advanced Technologies for Manufacturing Support	( NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies
32.	NIT08 Fundamentals of Computer Science and Informatics	( NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies
33.	GS006 Intelligent Buildings	( G10) Energy Efficiency in Buildings, Specialised Academic Studies
34.	H799 Fieldbuses and protocols	( H00) Mechatronics, Master Academic Studies
35.	H828 Advanced robotics	( H00) Mechatronics, Master Academic Studies
36.	H845 Motion control	( H00) Mechatronics, Master Academic Studies ( I10) Industrial Engineering, Master Academic Studies
37.	I903 Application of microelectromechanical systems	( I10) Industrial Engineering, Master Academic Studies
38.	IIDS6 Selected chapters in automation	( I12) Industrial Engineering, Specialised Academic Studies
39.	IM2516 Artificial Intelligence in Engineering	( I20) Engineering Management, Master Academic Studies
40.	IM2716 Automation systems in insurance	( I20) Engineering Management, Master Academic Studies
41.	IM2721 Systems for detection, alarming and warning	( I20) Engineering Management, Master Academic Studies
42.	GD018 Automation and Robotics in Construction	( G00) Civil Engineering, Doctoral Academic Studies ( OM1) Mathematics in Engineering, Doctoral Academic Studies
43.	HDOK12 Research in the area of automatic identification technologies	( H00) Mechatronics, Doctoral Academic Studies
44.	HDOK13 Motion control and the application of MEMS	( H00) Mechatronics, Doctoral Academic Studies
45.	HDOK14 Non-industrial Automation	( H00) Mechatronics, Doctoral Academic Studies
46.	HDOK-3 Selected Chapters in Automation Systems Integration	( H00) Mechatronics, Doctoral Academic Studies
47.	HDOKL3 Selected Chapters in Automation Systems Integration	( H00) Mechatronics, Doctoral Academic Studies
48.	HDOL12 Research in the area of automatic identification technologies	( H00) Mechatronics, Doctoral Academic Studies
49.	HDOL13 Motion control and application of MEMS	( H00) Mechatronics, Doctoral Academic Studies ( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
50.	HDOL14 Nonindustrial automation	( H00) Mechatronics, Doctoral Academic Studies ( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
51.	IMDR0 Science of Industrial Engineering and Management	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
52.	IMDR80 Selected chapters in automation	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
Representative references (minimum 5, not more than 10)		
1.	Stankovski S., Tarjan L., Škrinjar D., Ostojić G., Šenk I.: Using a Didactic Manipulator in Mechatronics and Industrial Engineering Courses, IEEE Transactions on Education, 2010, Vol. 53, No 4, pp. 572-579, ISSN 0018-9359	

		UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6			
		<b>Study Programme Accreditation</b>			
		MASTER ACADEMIC STUDIES		Mechatronics	
Representative references (minimum 5, not more than 10)					
2.	Gajić G., Stankovski S., Ostojić G., Tešić Z., Miladinović Lj.: Method of evaluating the impact of ERP implementation critical success factors – a case study in oil and gas industries (DOI:10.1080/17517575.2012.690105), Enterprise Information Systems, 2012, ISSN 1751-7575				
3.	Stankovski S., Ostojić G., Šenk I., Rakić-Skoković M., Trivunović S., Kučević D.: Dairy cow monitoring by RFID, Scientia Agricola, 2012, Vol. 69, No 1, pp. 75-80, ISSN 0103-9016				
4.	Stankovski, S., Ostojić, G., Raković, M., Trajan, L., Šenk, I., Nikolić, M.: Zbirka rešenih zadataka iz: Programiranje i primena programabilno logičkih kontrolera, Fakulte tehničkih nauka, 2009				
5.	Stankovski, S., Rakić-Skoković, M., Šešlija, D., Ostojić, G.: Primena RFID tehnologije u automatizaciji				
6.	Stankovski S., Lazarević M., Ostojić G., Čosić I., Purić R.: RFID Technology in Product/Part Tracking During the Whole Life Cycle , Assembly Automation, 2009, Vol. 29, No 4, pp. 364-370, ISSN 0144-5154				
7.	Ostojić G., Lazarević M., Stankovski S., Čosić I.: RFID Technology Application in Disassembly Systems , Strojnski vestnik = Journal of Mechanical Engineering, 2008, Vol. 54, No 11, pp. 759-767, ISSN 0039-2480, UDK: 658.5				
8.	Popović B., Popović N., Mijić D., Stankovski S., Ostojić G.: Remote Control of Laboratory Equipment for Basic Electronics Courses: A LabVIEW-based Implementation DOI: 10.1002/cae.20531, Computer Applications in Engineering Education, 2011, ISSN 1061-3773				
9.	Stankovski S., Ostojić G., Tarjan L., Škrinjar D., Lazarević M.: IML Robot Grasping Process Improvement, Iranian Journal of Science & Technology, 2011, Vol.35, No M1, pp. 197-207, Transactions B ISSN: 1028-6284				
10.	Janković J., Petrović N., Miladinović Lj., Popkonstantinović B., Stoimenov M., Petrović D., Ostojić G., Stankovski S.: Computer Simulation of Fast Hydraulic Actuators, Iranian Journal of Science & Technology, Transactions B, 2012, Vol. 36, No M1, pp. 95-106, ISSN: 1028-6284				
Summary data for teacher's scientific or art and professional activity:					
Quotation total :		25			
Total of SCI(SSCI) list papers :		20			
Current projects :		Domestic :	3	International :	4

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>	

### Science, arts and professional qualifications

Name and last name:	Šešlija D. Dragan		
Academic title:	Full Professor		
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad 15.06.1985		
Scientific or art field:	Mechatronics, Robotics and Automation and Integral Systems		
Academic carier	Year	Institution	Field
Academic title election:	2007	Faculty of Technical Sciences - Novi Sad	Mechatronics, Robotics and Automation and Integral Systems
PhD thesis	1997	Faculty of Technical Sciences - Novi Sad	Mechatronics, Robotics and Automation and Intelligent Systems
Magister thesis	1989	Faculty of Technical Sciences - Novi Sad	Mechatronics, Robotics and Automation and Intelligent Systems
Bachelor's thesis	1981	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.	H1401	Material Handling Technologies	( H00) Mechatronics, Undergraduate Academic Studies
2.	H1403	Automation of work processes	( H00) Mechatronics, Undergraduate Academic Studies
3.	H1504	Computer Integration of Production Systems	( H00) Mechatronics, Undergraduate Academic Studies
4.	H310	Components of technological systems	( H00) Mechatronics, Undergraduate Academic Studies
5.	II102	The basic theory of industrial systems	( SII) Software and Information Technologies (Indija), Undergraduate Professional Studies
6.	II1000	Fundamentals of industrial engineering and management	( I10) Industrial Engineering, Undergraduate Academic Studies
7.	II1011	Automation of work processes 1	( I10) Industrial Engineering, Undergraduate Academic Studies
8.	II1013	Material Handling Technologies	( I10) Industrial Engineering, Undergraduate Academic Studies
9.	II1029	Computer integrated manufacturing	( I10) Industrial Engineering, Undergraduate Academic Studies
10.	II1038	Automation of work processes 2	( I10) Industrial Engineering, Undergraduate Academic Studies
11.	II1042	Automation of Continual Processes	( I10) Industrial Engineering, Undergraduate Academic Studies
12.	IM1001	Fundamentals of industrial engineering	( I20) Engineering Management, Undergraduate Academic Studies
13.	IM1117	Computer integrated manufacturing (CIM)	(I20) Engineering Management, Undergraduate Academic Studies
14.	H505	Implementation of automated systems	( H00) Mechatronics, Master Academic Studies ( I10) Industrial Engineering, Master Academic Studies
15.	HDOK4 S	Selected chapters from automation of work processes	( I12) Industrial Engineering, Specialised Academic Studies
16.	I829	Automation of packaging processes	( I10) Industrial Engineering, Master Academic Studies
17.	I830	Energy efficiency of compressed air systems	( I10) Industrial Engineering, Master Academic Studies
18.	IMDR0S	Selected chapters in enterprise's design, organization and control	( I12) Industrial Engineering, Specialised Academic Studies ( I22) Engineering Management, Specialised Academic Studies
19.	PLM04	Sustainable Production and LCA	( I1U) Industrial Engineering - Product Lifecycle Management and Development, Master Academic Studies
20.	LIM34	Material Handling	( LIM) Logistic Engineering and Management, Master Academic Studies
21.	NIT02	Factory Automation	( NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies
22.	NIT05	Advanced Technology for Material Handling	( NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies
23.	BMIM4C	Fluid filtration and separation	( BM0) Biomedical Engineering, Master Academic Studies
24.	I911	Sustainable production	( I10) Industrial Engineering, Master Academic Studies



## Study Programme Accreditation

MASTER ACADEMIC STUDIES

Mechatronics

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

ID	Course name	Study programme name, study type
25. IIDS27	Selected chapters of the energy efficiency of automated systems	( I12) Industrial Engineering, Specialised Academic Studies
26. IIDS6	Selected chapters in automation	( I12) Industrial Engineering, Specialised Academic Studies
27. IM2103	New technologies in engineering and management	( I10) Industrial Engineering, Master Academic Studies (I20) Engineering Management, Master Academic Studies
28. HDOK-4	Selected Chapters in Production Process Automation	( H00) Mechatronics, Doctoral Academic Studies ( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
29. HDOKL4	Selected chapters from automation of work processes	( H00) Mechatronics, Doctoral Academic Studies
30. IMDR0	Science of Industrial Engineering and Management	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
31. IMDR86	Selected chapters from energy efficiency of compressed air systems	( H00) Mechatronics, Doctoral Academic Studies ( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
32. IMDR80	Selected chapters in automation	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies

### Representative references (minimum 5, not more than 10)

1.	Ignjatović I., Komenda T., Šešlija D., Malisa V.: Optimisation of compressed air and electricity consumption in a complex robotic cell, Robotics and Computer-integrated Manufacturing, 2012, ISSN 0736-5845
2.	Dudić S., Ignjatović I., Šešlija D., Blagojević V., Miodrag S.: Leakage quantification of compressed air using ultrasound and infrared thermography, MEASUREMENT, 2012, Vol. 45, No 7, pp. 1689-1694, ISSN 0263-2241
3.	Ignjatović I., Šešlija D., Tarjan L., Dudić S.: Wireless sensor system for monitoring of compressed air filters, Journal of Scientific and Industrial Research (JSIR), 2012, Vol. 71, No 5, pp. 334-340, ISSN 0022-4456
4.	Dudić S., Ignjatović I., Šešlija D., Blagojević V., Stojiljković M.: Leakage quantification of compressed air on pipes using thermovision, Thermal Science, 2012, Vol. 16, No 2, pp. 621-631, ISSN 0354-9836
5.	Čajetinac S., Šešlija D., Aleksandrov S., Todorović M.: PLC Controller used for PWM Control and for Identification of Frequency Characteristics of a Pneumatic Actuator, Electronics and electrical engineering, 2012, Vol. 123, No 7, pp. 21-26, ISSN 1392-1215
6.	Blagojević V., Šešlija D., Stojiljković M., Dudić S.: Efficient control of servo pneumatic actuator system utilizing by-pass valve and digital sliding mode, Sadhana - Academy Proceedings in Engineering Science, 2012, ISSN 0256-2499
7.	Blagojević V., Šešlija D., Miodrag S.: Cost effectiveness of restoring energy in execution part of pneumatic system, Journal of Scientific and Industrial Research, 2011, Vol. 70, pp. 170-176, ISSN 0022-4456
8.	Šešlija D., Ignjatović I., Dudić S., Lagod B.: Potential energy savings in compressed air systems in Serbia, African Journal of Business Management, 2011, Vol. 5, No 14, pp. 5637-5645, ISSN 1993-8233
9.	Šešlija D., Ignjatović I., Dudić S.: Increasing the Energy Efficiency in Compressed Air Systems, Rijeka, InTech, 2012, str. 151-174, ISBN 978-953-51-0800-9
10.	Stankovski S., Šešlija D., Rakić-Skoković M., Ostojić G.: Primena RFID tehnologije u automatizaciji, Novi Sad, Centar za automatizaciju i mehatroniku, 2009, ISBN 978-86-907827-3-4

### Summary data for teacher's scientific or art and professional activity:

Quotation total :	10
Total of SCI(SSCI) list papers :	10
Current projects :	Domestic : 0 International : 3



	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>	

Science, arts and professional qualifications

Name and last name:	Šormaz N. Dušan		
Academic title:	Guest Professor		
Name of the institution where the teacher works full time and starting date:	-		
Scientific or art field:	Production Systems, Organization and Management		
Academic carier	Year	Institution	Field
Academic title election:	2009		Production Systems, Organization and Management
Magister thesis	1995	University of Southern California - Nepoznato	Computer Science
PhD thesis	1994	University of Southern California - Nepoznato	Engineering Management
Magister thesis	1985	Faculty of Technical Sciences - Novi Sad	Engineering Management
Bachelor's thesis	1979	Faculty of Technical Sciences - Novi Sad	Plastic Deformation Technology

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

	ID	Course name	Study programme name, study type
1.	H1403	Automation of work processes	( H00) Mechatronics, Undergraduate Academic Studies
2.	H1504	Computer Integration of Production Systems	( H00) Mechatronics, Undergraduate Academic Studies
3.	H310	Components of technological systems	( H00) Mechatronics, Undergraduate Academic Studies
4.	II102	The basic theory of industrial systems	( SII) Software and Information Technologies (Indija), Undergraduate Professional Studies
5.	II1000	Fundamentals of industrial engineering and management	( I10) Industrial Engineering, Undergraduate Academic Studies
6.	II1013	Material Handling Technologies	( I10) Industrial Engineering, Undergraduate Academic Studies
7.	IM1719	Implementation of information systems in insurance	(I20) Engineering Management, Undergraduate Academic Studies
8.	EE546	Entrepreneurship in Electrical Engineering	(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies
9.	H505	Implementation of automated systems	( H00) Mechatronics, Master Academic Studies ( I10) Industrial Engineering, Master Academic Studies
10.	I829	Automation of packaging processes	( I10) Industrial Engineering, Master Academic Studies
11.	I830	Energy efficiency of compressed air systems	( I10) Industrial Engineering, Master Academic Studies
12.	IMDS56	Product traceability during the lifetime	( I12) Industrial Engineering, Specialised Academic Studies
13.	IMDS57	Strategic Planning and Designing Procedures and Systems at the End of Product Lifecycle	( I12) Industrial Engineering, Specialised Academic Studies
14.	IMDS62	Integration of business processes of companies	( I22) Engineering Management, Specialised Academic Studies
15.	IMDS93	Virtual Enterprises and Collaborative Systems	( I22) Engineering Management, Specialised Academic Studies
16.	LIM34	Material Handling	( LIM) Logistic Engineering and Management, Master Academic Studies
17.	NIT02	Factory Automation	( NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies
18.	NIT05	Advanced Technology for Material Handling	( NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies
19.	NIT08	Fundamentals of Computer Science and Informatics	( NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies
20.	I911	Sustainable production	( I10) Industrial Engineering, Master Academic Studies
21.	IIDS10	Effective technological and production structures	( I12) Industrial Engineering, Specialised Academic Studies ( I22) Engineering Management, Specialised Academic Studies
22.	IIDS9	Effective Production and Service Systems	( I12) Industrial Engineering, Specialised Academic Studies ( I22) Engineering Management, Specialised Academic Studies
23.	IM2315	Product and Process Improvement Projects	(I20) Engineering Management, Master Academic Studies
24.	IMDR31	Effective Production and Service Systems	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies



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

ID	Course name	Study programme name, study type
25. IMDR56	Traceability of Product Lifecycle	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
26. IMDR62	Enterprise Business Process Integration	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
27. IMDR93	Virtual Enterprises and Collaborative Systems	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
28. IMDR85	Effective technological and production structures	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies

Representative references (minimum 5, not more than 10)

1.	Sormaz DN, Arumugam J, Ganduri C, 2007, Integration of rule-based process selection with virtual machining for distributed manufacturing planning, Process Planning and Scheduling for Distributed Manufacturing, 61-90
2.	Šormaz DN, Arumugam J, Harihara RS, Patel C, Neerukonda N, 2010, Integration of product design, process planning, scheduling, and FMS control using XML data representation, Robotics and Computer-Integrated Manufacturing 26 (6), 583-595
3.	Šormaz DN, Rajaraman SN, 2008, Problem space search algorithm for manufacturing cell formation with alternative process plans, International Journal of Production Research 46 (2), 345-369
4.	Sormaz DN, Arumugam J, Rajaraman S, 2004, Integrative process plan model and representation for intelligent distributed manufacturing planning, International Journal of Production Research, Vol. 42, No. 17, p. 3397 - 3417.
5.	Koonce D, Judd R, Sormaz D, Masel DT, 2003, A hierarchical cost estimation tool, Computers in Industry 50 (3), 293-302
6.	Sormaz DN, Khoshnevis B, 2003, Generation of alternative process plans in integrated manufacturing systems, Journal of Intelligent Manufacturing 14 (6), 509-526
7.	Šormaz DN, Tennety C, 2010, Recognition of interacting volumetric features using 2D hints, Assembly Automation 30 (2), 131-141
8.	Sormaz DN, Pisipati DV, Borse PA, 2006, Virtual manufacturing of milling operations with multiple tool paths, International journal of manufacturing technology and management 9 (3), 237-264
9.	Sormaz DN, Khoshnevis B, 2000, Modeling of manufacturing feature interactions for automated process planning, Journal of manufacturing systems, 19 (1), 28-45
10.	Nešić S, Li H, Huang J, Sormaz D, 2009, An open source mechanistic model for CO <sub>2</sub> /H <sub>2</sub> S Corrosion of carbon steel, CORROSION 2009, March 22 - 26, 2009 , Atlanta, GA

Summary data for teacher's scientific or art and professional activity:

Quotation total :	126
Total of SCI(SSCI) list papers :	10
Current projects :	Domestic : 0 International : 0

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>	

### 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 carier	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 references (minimum 5, not more than 10)

1.	J. Vladić, P. Malešev, R. Šostakov, N. Brkljač: Dynamic Analysis of the Load Lifting Mechanisms, Strojnski 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

		UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6			
		<b>Study Programme Accreditation</b>			
		MASTER ACADEMIC STUDIES		Mechatronics	
Representative references (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. Vladoic, D. Uzelac, N. Brkljac: Berechnung der Anlaufdauer eines Antriebssystems mit hydrodynamischer Kupplung aufgrund des vereinigtes M-n Diagrams, XIV International Conference on Material Handling and Warehousing, Belgrade, 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

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>	



### 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 career	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 energy 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 references (minimum 5, not more than 10)

		UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6				
<b>Study Programme Accreditation</b>						
MASTER ACADEMIC STUDIES			Mechatronics			
Representative references (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

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>	

### 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 references (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
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		UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6			
		<b>Study Programme Accreditation</b>			
		MASTER ACADEMIC STUDIES		Mechatronics	
Representative references (minimum 5, not more than 10)					
2.	Vladić J., Malešev P., Šostakov R., Brkljač N.: Dynamic Analysis of the Load Lifting Mechanisms, <i>Strojnski vestnik = Journal of Mechanical Engineering</i> , 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



	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>	

### 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 carier	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



## Study Programme Accreditation

MASTER ACADEMIC STUDIES

Mechatronics

## 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 references (minimum 5, not more than 10)

1.	Budak I., Vukelić Đ., Bračun D., Hodolić 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., Hodolić 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., Hodolić 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., Hodolić 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., Hodolić 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., Hodolić 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., Hodolić 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

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>	

### Science, arts and professional qualifications

Name and last name:	Vukmirović M. Srđan		
Academic title:	Assistant Professor		
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad 20.11.2000		
Scientific or art field:	Automatic Control and System Engineering		
Academic carieer	Year	Institution	Field
Academic title election:	2012	Faculty of Technical Sciences - Novi Sad	Automatic Control and System Engineering
PhD thesis	2011	Faculty of Technical Sciences - Novi Sad	Automatic Control and System Engineering
Magister thesis	2004	Faculty of Technical Sciences - Novi Sad	Automatic Control and System Engineering
Bachelor's thesis	2000	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.	E126	System Control, Modeling and Simulation	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
2.	E232	System Modeling and Simulation	( E20) Computing and Control Engineering, Undergraduate Academic Studies ( ES0) Power Software Engineering, Undergraduate Academic Studies ( M40) Technical Mechanics and Technical Design, 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.	GI303A	Distributed Systems in Geomatics	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies
4.	H213	System Modelling and Simulation 1	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies ( H00) Mechatronics, Undergraduate Academic Studies
5.	E2312	Software design for SCADA systems	( E20) Computing and Control Engineering, Undergraduate Academic Studies ( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies
6.	ESI004	Cloud Computing in power systems	( ES0) Power Software Engineering, Undergraduate Academic Studies
7.	ESI008	Development of Cloud application in power systems	( ES0) Power Software Engineering, Undergraduate Academic Studies
8.	SEAU02	SCADA Software	( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies
9.	AU502	Distributed 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
10.	H301	System Modeling and Symulation	( H00) Mechatronics, Master Academic Studies
11.	E2533	Discrete event simulation	( E20) Computing and Control Engineering, Master Academic Studies
12.	E2535	Software Algorithms in Supervisory Control and Data Acquisition Systems	( E20) Computing and Control Engineering, Master Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies
13.	ESI027	Advanced cloud computing in power systems	( ES0) Power Software Engineering, Master Academic Studies



## Study Programme Accreditation

MASTER ACADEMIC STUDIES

Mechatronics

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

ID	Course name	Study programme name, study type
14. ESI032	Smart grid applications in Cloud	( ESO) Power Software Engineering, Master Academic Studies
15. ESI038	Service oriented architectures in Smart Grid	( ESO) Power Software Engineering, Master Academic Studies
16. DAU006	Selected Chapters in Modeling and Simulation of Dynamic Systems	( E20) Computing and Control Engineering, Doctoral Academic Studies
17. DAU018	Selected Chapters in Distributed Control Systems	( E20) Computing and Control Engineering, Doctoral Academic Studies
18. ZRD25A	Selected chapters from Artificial Ingeligence	( Z01) Safety at Work, Doctoral Academic Studies

## Representative references (minimum 5, not more than 10)

1.	Kljajic, Miroslav; Gvozdenac, Dusan; Vukmirovic, Srdjan Use of Neural Networks for modeling and predicting boiler's operating performance ENERGY 2012 45 (1):304-311
2.	Vukmirović S., Erdeljan A., Čapko D., Lendak I., Nedić N.: Optimization of workflow scheduling in Utility Management System with hierarchical neural network, International Journal of Computational Intelligence Systems, 2011, Vol. 4, No 4, pp. 672-679, ISSN 1875-6883
3.	S.Vukmirovic, A. Erdeljan, D. Capko, I. Lendak, N. Nedic, Optimization of workflow scheduling in Utility Management System with hierarchical neural network, International Journal of Computational Intelligence Systems, ISBN 1875-6891, pp. 672 - 679
4.	S.Vukmirovic, A. Erdeljan, D. Capko, I. Lendak, Extension of the Common Information Model with Virtual Meter, Electronics and electrical engineering ISSN: 1392-1215, pp. 59 - 64
5.	D. Capko, A. Erdeljan, S.Vukmirovic, I. Lendak, A HYBRID GENETIC ALGORITHM FOR PARTITIONING OF DATA MODEL IN DISTRIBUTION MANAGEMENT SYSTEMS, Information technology and control ISSN: 1392-124X, pp. 316 - 322
6.	S.Vukmirovic, A. Erdeljan, D. Capko, I. Lendak, N. Nedic, A Genetic Algorithm Approach for Utility Management System Workflow Scheduling, Information technology and control ISSN: 1392-124X, pp. 310 - 316
7.	Ilić S., Vukmirović S., Erdeljan A., Kulić F.: Hybrid Artificial Neural Network System for Short-Term Load Forecasting, Thermal Science, 2012, Vol. 16, No S, pp. 215-224, ISSN 0354-9836
8.	Vukmirović S., Erdeljan A., Lendak I., Čapko D.: A novel software architecture for Smart Metering systems, Journal of Scientific and Industrial Research (JSIR), 2010, Vol. 2010, No 12, pp. 937-941, ISSN 0022-4456
9.	Vukmirović S., Vujić G., Vujić B., Jovičić N., Jovičić G., Babić M.: Experimental and Artificial Neural Network approach for forecasting of traffic air pollution in urban areas: the case study of Subotica, Thermal Science - International Scientific Journal, 2010, Vol. 14, pp. 79-87, ISSN 0354-9836
10.	Vukmirović G., Vukmirović S., Vujić G., Stanisavljević N., Ubavin D., Batinić B.: Using ANN model to determine future waste characteristics in order to achieve specific waste management targets -case study of Serbia, Journal of Scientific and Industrial Research (JSIR), 2011, Vol. 70, No 07, pp. 513-518, ISSN 0022-4456

## Summary data for teacher's scientific or art and professional activity:

Quotation total :	0		
Total of SCI(SSCI) list papers :	12		
Current projects :	Domestic :	2	International : 0

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>	

### 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 carier	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 references (minimum 5, not more than 10)

1.	Zuber N., Bajric R., Karic S.: Experimental vibration investigation of an industrial beater wheel mill, TTEM. Technics technologies 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., Barićak 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 intelligence 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., Klačnja Miličević 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



## Study Programme Accreditation

MASTER ACADEMIC STUDIES

Mechatronics

Representative references (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, Vrnjackska 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

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	<b>Study Programme Accreditation</b> MASTER ACADEMIC STUDIES <span style="float: right;">Mechatronics</span>	



### Science, arts and professional qualifications

Name and last name:	Živanov B. Miloš		
Academic title:	Full Professor		
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad 01.04.1994		
Scientific or art field:	Electronics		
Academic carier	Year	Institution	Field
Academic title election:	2004	Faculty of Technical Sciences - Novi Sad	Electronics
PhD thesis	1992	School of Electrical Engineering - Beograd	Electronics
Magister thesis	1978	School of Electrical Engineering - Beograd	Electronics
Bachelor's thesis	1973	School of Electrical Engineering - Beograd	Physics

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

	ID	Course name	Study programme name, study type
1.	EM414	Optoelectronics	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
2.	EM301A	Analog Microelectronic Circuits	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
3.	EM430A	Control and process electronics	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
4.	EM444B	Applied electronics	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
5.	DE201S	Selected Chapters in Optoelectronics and Photonics	( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
6.	DE503S	Industrial Electronics	( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
7.	E1SO01	Modern technologies in electrical engineering	( E00) Power, Electronic and Telecommunication Engineering, Specialised Professional Studies
8.	H1402	Digital Controlling Electronics	( H00) Mechatronics, Master Academic Studies
9.	SI013	Applied electronics in industry	( E00) Power, Electronic and Telecommunication Engineering, Specialised Professional Studies
10.	SI035	Electronic Systems in Oil Industry	( E00) Power, Electronic and Telecommunication Engineering, Specialised Professional Studies
11.	BMIM1A	Applications of lasers in medicine	( BM0) Biomedical Engineering, Master Academic Studies
12.	DE117S	Selected chapters from optoelectronics sensors systems	( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
13.	DE315S	Optoelectronics sensors systems-advanced course	( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
14.	DE418S	Design of complex optoelectronics systems	( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies
15.	EM435A	Electronic Systems in Oil Industry	(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies
16.	EM437A	The application of electronic systems in clean and renewable energy	(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies
17.	EM439A	Electronics in veichles	(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies
18.	EM521	Applied optoelectronics	(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies
19.	EM523	Applied electronics in industry	(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies
20.	DE201	Selected Chapters in Optoelectronics and Photonics	( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies
21.	DE503	Industrial Electronics	( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies ( M40) Technical Mechanics, Doctoral Academic Studies
22.	DE117	Selected chapters from optoelectronics sensors systems	( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies

Representative references (minimum 5, not more than 10)

		UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6					
		<b>Study Programme Accreditation</b>					
		MASTER ACADEMIC STUDIES		Mechatronics			
Representative references (minimum 5, not more than 10)							
1.	Šašić B., Živanov M., Lazić M.: Desing of Multiphase Boost Converter for Hybrid Fuel Cell/Battery Power Sources, Beč, Jatin Nathwani and Artie Ng (Ed.), 2010, str. 1-51, ISBN 978-953-307-401-6						
2.	Manojlović L., Živanov M.: White-Light Interferometric Sensor for Rough Surface Height Distribution Measurement, IEEE Sensors Journal, 2010, Vol. 10, No 6, pp. 1125-1132, ISSN 10.1109/JSEN.2007.90						
3.	Slankamenac M., Lukić-Petrović S., Živanov M., Čajko K.: Electrical switching behavior of bulk $Cu_x(AsSe_{1.410.2})_{100-x}$ glasses: Composition dependence and topological effects, SOLID STATE COMMUN, 2012, Vol. 152, No 13, pp. 1160-1163, ISSN 0038-1098						
4.	Sekulić D., Satarić M., Živanov M.: Symbolic Computation of Some New Nonlinear Partial Differential Equations of Nanobiosciences Using Modified Extended Tanh-function Method, Applied Mathematics and Computation, 2011, Vol. 218, No 7, pp. 3499-3506, ISSN 0096-3003						
5.	Stupar D., Bajić J., Manojlović L., Slankamenac M., Joža A., Živanov M.: A Wearable Low-Cost System for Human Joint Movements Monitoring Based on Fiber-Optic Curvature Sensor, IEEE Sensors Journal, 2012, ISSN 10.1109/JSEN.2007.90						
6.	Manojlović L., Živanov M.: Spectrally Resolved White-Light Interferometric Sensor for Absolute Position Measurement Based on Hilbert Transform, IEEE Sensors Journal, 2012, Vol. 12, No 6, pp. 2199-2204, ISSN 10.1109/JSEN.2007.90						
7.	Bajić J., Stupar D., Manojlović L., Slankamenac M., Živanov M.: A simple, low-cost, high-sensitivity fiber-optic tilt sensor, Sensors and Actuators A: Physical, 2012, Vol. 185, pp. 33-38, ISSN 0924-4247						
8.	Manojlović L., Živanov M., Slankamenac M., Bajić J., Stupar D.: High-speed and high-sensitivity displacement measurement with phase-locked low-coherence interferometry, APPL OPTICS, 2012, Vol. 51, pp. 4333-4342, ISSN 0003-6935						
9.	M.B. Živanov, "Elektronika - elektronske komponente i kola - analiza i projektovanje", 2001. Univerzitet u Novom Sadu, Fakultet tehničkih nauka, No. 129, Novi Sad, str. 651. 2001.						
10.	G.Mančić, S.Martinović, M.Živanov, "Karotažna merenja - osnovni fizički principi", 2002.						
Summary data for teacher's scientific or art and professional activity:							
Quotation total :				32			
Total of SCI(SSCI) list papers :				23			
Current projects :				Domestic :	2	International :	2





UNIVERSITY OF NOVI SAD

FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6



## Study Programme Accreditation

MASTER ACADEMIC STUDIES

Mechatronics

### Standard 10. Organizational and Material Resources

To perform a study programme, the adequate human, spatial, technical and technological, library and other resources suitable to the study programme features and predicted students` number are to be provided. Lectures at this study programme is realized in two shifts, so the required enough space according to rules of accreditation..

There is also an adequate equipment of all courses with the appropriate textbook literature, devices and supplementary equipment available on time and in a sufficient number for normal performance of the teaching process. Likewise, the Faculty of Technical Sciences has its own library, with well equipped and for this study programme adequate library funds. The adequate information technology is also available for performing the study programme.

**Study Programme Accreditation**

MASTER ACADEMIC STUDIES

Mechatronics

**Standard 11. Quality Control**

The quality control of the study programme is performed regularly and systematically through self-evaluation and external quality control.

The quality control process comprises the continual monitoring of the quality of lecturing and the quality of resources necessary for the successful efficiency of undergraduate studies. Quality control bodies are the following: Board for Quality and Self-Evaluation, Committee for Quality and Committee for Undergraduate Studies Quality with undergraduate studies study programme executives-in-charge.

The study programme quality is evaluated on the basis of lecturers' competence, students' participation and involvement in scientific and research projects, resource wealth (contemporariness of equipment, contemporariness of available literature in libraries and bases), and the number of scientific publications realized during studies.

During the quality control of a study programme, the active role of students and their evaluation of the programme quality are also provided.

Quality monitoring is performed by a Committee consisting of Heads of Departments involved in study programme realization and one student from each academic year.



**Study Programme Accreditation**  
MASTER ACADEMIC STUDIES Mechatronics

Standard 12. Distance Education

Distance learning is not provided for.