



UNIVERSITY OF NOVI SAD

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

Study Programme Accreditation

MASTER ACADEMIC STUDIES

Civil Engineering



STUDY PROGRAMME ACCREDITATION MATERIAL:

CIVIL ENGINEERING

MASTER ACADEMIC STUDIES

Novi Sad

2012.

Prevod sa srpskog jezika:

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Study Programme Accreditation
MASTER ACADEMIC STUDIES Civil Engineering

Programme name	Civil Engineering
Independent higher education institution where the programme is being executed	University of Novi Sad
Higher education institution where the programme is being executed	Faculty of Technical Sciences
Educational-scientific/educational-art field	Technical-Technological Science
Scientific, professional or art field	Civil Engineering
Type of studies	Master Academic Studies
Study scope, expressed in ECTS	62-69
Academic degree, abbreviation	Master in Civil Engineering, M.Civ.Eng.
Study length	1
Programme implementation starting year	2009
Future course implementation starting year (for new programme)	
Number of students attending this programme	18
Planned number of students to be enrolled in this programme	128
Programme approval date (state the approval issuer)	14.11.2012 - Science Education Council 29.11.2012 - University of Novi Sad Senate
Programme language	Serbian, English
Programme accreditation year	2008
Web address containing programme information	http://www.ftn.uns.ac.rs



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Study Programme Accreditation

MASTER ACADEMIC STUDIES

Civil Engineering

Standard 00. Introduction

The study programme for the Graduate Academic Studies – Master in Civil Engineering presents a continuation of the study programme for Undergraduate Academic Studies in Civil Engineering at the Faculty of Technical Sciences, University of Novi Sad.

Precisely, this programme should enable students, within the selected study group, to additionally realize their knowledge based on understanding the basic principles in diverse fields in civil engineering; to learn supplementary professional knowledge for realizing contemporary solutions in civil engineering; to acquire abilities for knowledge integration which should be applied in every individual case; and to be introduced to the research work during the realization of this study programme.

**Study Programme Accreditation**

MASTER ACADEMIC STUDIES

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Standard 01. Programme Structure

The name of the study programme of this graduate academic studies is Civil Engineering. The academic title awarded is Master in Civil Engineering (MSc. (Civ.Eng.)). The outcome of the study process is the knowledge that enables students to use professional literature, to apply that knowledge in solving problems occurring in profession, and, in the case of students' wishes, enable them to continue the studies at specialization or doctoral studies.

The prerequisites for enrolling the study programme are the completed undergraduate studies with at least 240 ECTS and passed qualification examination.

At the graduate academic studies in Civil Engineering that last for one year, there are four study groups: Structures, Hydrotechnics, Roads, and Construction Management. Student selects one of four study groups in accordance with their previous education. Lectures at a study group are organized if there are a sufficient number of students who would like to enrol. If there are not enough candidates, lectures are not held, or the Faculty management passes a special decision on the manner of lecture organization at that study group (tutorials with students).

Within the study group "Structures", the emphasis is placed on designing and building special concrete, steel and wood structures in building construction and civil engineering construction, as well as structure repair and maintenance. Within the study group "Hydrotechnics", students are enabled to design complex hydrotechnical systems in the fields of water supply, sewerage, melioration, etc. Within the study group "Roads" students acquire knowledge in planning, designing and managing road networks and bridges. Within the study group "Construction Management" students obtain knowledge in the field of project and building management, construction management and modelling systems and processes. Within the selected study group, students have obligatory and optional courses. Optional courses are selected from the groups of proposed courses.

Teaching is performed in lecturing and practice. At lectures, with the usage of adequate didactic means, the course material is presented with necessary explanations contributing to better understanding of course content. At practice that follow the lectures, concrete tasks are solved and examples are presented for additional explanations of the course content. Practice classes also serve to obtain supplementary explanations for the material presented at lectures. Practice can be auditory, laboratory, computer and computing. Students have to have obligatory professional practice, done individually in construction organizations.

Number of students in a group is determined in dependence on the character practice classes. Students' obligations at practice can also include the elaboration of seminar papers and homework, project tasks, semester and graphic papers, where each activity by students during the teaching process is monitored and graded according to the regulations adopted at the Faculty level. The number of obtained points is presented in accordance with the unique methodology and represents students' performances.

Each course has a certain number of ECTS credits, and the entire studies are considered to be completed when the student fulfils their obligations described in the study programme and in the process obtains at least 60 ECTS credits.



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Standard 02. Programme Objectives

The aim of the study programme is the education of students for the profession of a graduate engineer, a master, in accordance to the needs of the society.

The study programme in Civil Engineering is designed in such a manner as to provide the acquisition of competencies that are socially justifiable and useful. The Faculty of Technical Sciences has defined graduate tasks and aims in educating highly competent professionals in the field of civil engineering. The aim of the study programme in Civil Engineering is completely in accordance with the graduate tasks and aims of the Faculty of Technical Sciences.

The realization of a designed study programme provides education for masters in civil engineering who have competence in European and worldwide frameworks.



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Standard 03. Programme Goals

The objective of the study programme is to achieve competencies and academic skills in the field of civil engineering. Among other items, it also includes the development of creative abilities in problem observations and the ability of critical thinking, the development of abilities for teamwork and possessing specific practical skills necessary in the profession.

The objective of the study programme is to educate experts who have enough complex knowledge in designing, repairs and building structures in building construction, civil engineering construction, hydrotechnics, road networks, as well as building management and construction management.

One of the special objectives, in accordance with the objectives in educating experts at the Faculty of Technical Sciences, is the development of consciousness with students for the need of permanent education, development of the society in general and environmental protection. The objective of the study programme is also the education of experts in the field of teamwork, as well as the development of competencies for presenting their results to the professional and wider public.

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Standard 04. Graduates` Competencies

Graduate students of the Master studies in Civil Engineering are competent to solve real and complex problems in construction practise, as well as to continue their education if wanted. The competencies include, first and foremost, the development of the ability of critical thinking, ability to analyse problems, synthesise problems, predict the behaviour of the selected solution with the clear presentation of advantages and drawbacks of the selected solution.

The qualifications determining the completion of the Master studies are obtained by students who:

?present knowledge and understanding in the field of civil engineering, which supplements the knowledge acquired at the undergraduate academic studies and presents the basis for developing critical thinking and knowledge application;

?are capable to apply knowledge in solving problems in new or unknown surroundings in wider or multidisciplinary areas within the educational and scientific field of studies;

?have the ability to integrate knowledge, solve complex problems and make conclusions based on available information containing thinking on social and ethic responsibilities linked to the application of their knowledge and opinions;

?are capable to transfer knowledge and thinking process in a clear and unambiguous manner to the professional and wider public;

?possess the ability to continue their studies in the manner selected individually.

When considering the specific abilities of students, by acquiring the Master programme, students obtain thorough knowledge and understanding of all disciplines of the selected study group, as well as the ability to solve concrete problems with the usage of scientific methods and procedures. Master in Civil Engineering is capable to write and present the results of their work in a proper manner. During studies, the emphasis is placed on an intensive usage of contemporary information and other technologies.

Graduate students at this level of studies possess competencies for monitoring and applying novelties in their practice.

Students are able to design, organize and manage production. During education, a student obtains the ability to individually plan experiments and static result processing, as well as to formulate and make appropriate conclusions.

Masters in Civil Engineering acquire knowledge as to how to economically utilize natural resources of the Republic of Serbia in accordance with the principles of sustainable development.

Special attention is attributed to the ability for teamwork and the development of professional ethics.

**Study Programme Accreditation**

MASTER ACADEMIC STUDIES

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Standard 05. Curriculum

The curriculum of the Master studies in Civil Engineering is formed in a manner to satisfy all set objectives. The structure of the study programme provides that the optional courses are presented with at least 30% ECTS credits.

At graduate academic studies – Master, students concretise problems in civil engineering based on the specific features of problems dealt with by each study group. Selecting optional courses, students satisfy their affinities having emerged during the undergraduate academic studies.

All courses are one-semester long and have an adequate number of ECTS credits, where one credit equals approximately 30 hours of students` activities.

Curriculum defines the description of each course with name, type, year and semester of studies, number of ECTS credits, teacher`s name, course outcome with expected results, knowledge and competencies, prerequisites for course attendance, course content, recommended literature, lecturing methods, knowledge evaluation and other data.

Study programme is in accordance with European standards regarding enrolment conditions, study duration, transfer to another year, diploma acquisition and manner of studies.

A part of the curriculum at Civil Engineering is a professional practice lasting for 45 hours, realized in an adequate construction organizations and public institutions.

Students complete studies by elaborating a Master thesis comprising of a theoretical and methodological preparation necessary for deepened understanding of the field in which a Master thesis is elaborated, and the elaboration itself.

Before the defence of the thesis, the candidate passes theoretical and methodological fundamentals usually in front of a committee determined for the defence. The final grade of the Master thesis is based on the grade for the passed theoretical and methodological preparation and the grade for elaborating and defending the thesis. Final thesis is defended in front of the committee comprised of at least three teachers where at least one has to be from another department or faculty.

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Table 5.2 Course specification

Course:		<h2 style="margin: 0;">Concrete Construction for Engineering Structures</h2>				
Course id:	GG501					
Number of ECTS:	7					
Teacher:	Brujić S. Zoran					
Course status:	Elective					
Number of active teaching classes (weekly)						
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:		
3	2	0	0	0		
Precondition courses		None				
1. Educational goal:						
Enabling students for working on a project, for designing and maintaining concrete construction for engineering structures with diverse purposes.						
2. Educational outcomes (acquired knowledge):						
Knowledge of structural systems and their properties with the aim of optimal application in designing concrete constructions for diverse engineering structures.						
3. Course content/structure:						
Specificities in designing and constructing engineering structures. Classifications of engineering structures. Rectangular and circular reservoirs and water towers (purpose, classification, technological aspects, foundation, calculation, construction and detail modelling, workmanship). Pipes (purpose, classification, demands for functionality and durability, application in regional water supply and sewerage collectors, calculations, details and workmanship). Silos and bunkers (purpose, technological aspects, actions from warehouse materials, foundation, calculation, construction and detail modelling, workmanship). Air-conditioning towers (purpose, technological aspects, calculation, construction and detail modelling, foundation and workmanship). Power-line posts (classification, analysis, construction and foundation). Chimneys (purpose, types, analysis on wind and seismic actions, detail modelling, foundation and workmanship), Antenna and TV towers (purpose, functional demands, loads and actions, calculation, details, foundation and workmanship). Shelters (purpose, functional demands, loads and actions, calculation, details and workmanship). Supporting walls and diaphragms (purpose, types, loads and actions, calculation, details and workmanship).						
4. Teaching methods:						
Lectures, exercises, consultations, preparation and defense of the project.						
Knowledge evaluation (maximum 100 points)						
Pre-examination obligations		Mandatory	Points	Final exam	Mandatory	Points
Exercise attendance		Yes	0.00	Written part of the exam - tasks and theory	Yes	35.00
Lecture attendance		Yes	0.00	Oral part of the exam	Yes	35.00
Project		Yes	30.00			
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Grupa autora	Beton i armirani beton prema BAB 87 - 1 Priručnik		Građevinska knjiga, Beograd	2002	
2,	Grupa autora	Beton i armirani beton prema BAB 87 - 2 Prilozi		Građevinska knjiga	2002	
3,	Tomičić Ivan	Betonske konstrukcije		Školska knjiga, Zagreb	1996	
4,	Sahnovski K.V.	Armiranobetonske konstrukcije		Građevinska knjiga	1962	
5,	Franc G.	Teorija betonskih konstrukcija		Građevinska knjiga	1979	
6,	Grupa autora	EN 1990:2002 Evrokod 0 Osnove proračuna konstrukcija		Građevinski fakultet Univerziteta u Beogradu	2006	
7,	Grupa autora	EVROKOD 1 Osnove proračuna i dejstva na konstrukcije		Građevinski fakultet Univerziteta u Beogradu	1997	
8,	Grupa autora	EVROKOD 2 Proračun betonskih konstrukcija		Građevinski fakultet Univerziteta u Beogradu	1997	
9,	Grupa autora	EVROKOD 8 Projektovanje seizmički otpornih konstrukcija		Građevinski fakultet Univerziteta u Beogradu	1997	

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Table 5.2 Course specification

Course:		<h2 style="margin: 0;">Management in a Construction Company</h2>				
Course id:	GM503					
Number of ECTS:	5					
Teachers:	Malešević B. Erika, Perović I. Veselin					
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: Obtaining knowledge on contemporary manners for managing construction companies.						
2. Educational outcomes (acquired knowledge): Enabling students for managing performance alterations in a construction company.						
3. Course content/structure: Company as a dynamic system. Mission and vision of an enterprise. Basic organization models. Growth and development in an enterprise. Managing resources, finances, market and processes. Conflict management. Change management.						
4. Teaching methods: Audio and visual						
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			
Term paper		Yes	40.00			
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Novaković V.	Ekonomika i organizacija građevinarstva		Ekonomika, Beograd	1994	
2,	Adišes I.	Upravljanje promenama		Prometej, Novi Sad	1979	
3,	Wren A. D., i Woih Jr.D	Menadžment – proces, struktura i ponašanje		Privredni pregled i PS Grmeč, Beograd	1994	
4,	Drucker P. and others	Organization of the Future		Drucker Foundation, New York	1997	

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Table 5.2 Course specification

Course:		<h2 style="margin: 0;">Durability and Assessment of Concrete Structures</h2>					
Course id:	GG504						
Number of ECTS:	7						
Teachers:	Malešev M. Mirjana, Radonjanin S. Vlastimir						
Course status:	Elective						
Number of active teaching classes (weekly)							
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:			
3	1	1	0	0			
Precondition courses		None					
1. Educational goal:							
Obtaining knowledge on basic aspects of the durability of concrete structures, and methodologies and methods for assessing the real condition of concrete and prestressed structures.							
2. Educational outcomes (acquired knowledge):							
Acquired knowledge is to be used in professional courses and engineering practice. Student is competent to utilize diverse non-destructive and destructive methods for investigating, registering and classifying defects and damages, determining causes of their occurrence and for assessing real condition of concrete and prestressed structures.							
3. Course content/structure:							
Durability of concrete structures: causes, failure mechanisms and forms of damages of concrete and reinforcement (physical and chemical corrosion), properties to obtain satisfactory durability, strategy for designing building structures from the aspect of demanded durability. Destructive and non-destructive investigation methods (equipment, procedures, application possibilities). Defects of reinforced concrete and prestressed concrete structures. Classification and damage appearances of reinforced concrete and prestressed concrete structures due to structure overload, non-uniform settlement and accidental actions (fire, earthquake, explosion, etc.). Methodologies for monitoring and assessing structure conditions. Technical regulative referring to control monitoring and providing durability of concrete structures. Examples of monitoring and assessment of characteristic structures.							
4. Teaching methods:							
Within lectures, students are delivered presentations with photographs, tables, diagrams, formulas and emphasised texts – definitions to provide explanations for the content determined by the syllabus. There are also short thematic films. At laboratory practice students can observe and individually perform diverse non-destructive material investigations. At auditory practice students are presented with diverse structures where assessment has been performed in order to be better acquainted with methodologies, data processing and conclusion manners. Students have an obligation to work in a group of 5 and find a structure, make an Elaborate – a project in assessment, and defend it. All students have an obligatory professional excursion (a factory for repair materials and interesting structures under repair). The examination has an oral part. During the semester, the oral examination can be taken as two partial examinations.							
Knowledge evaluation (maximum 100 points)							
Pre-examination obligations		Mandatory	Points	Final exam	Mandatory	Points	
Complex exercises		Yes	10.00	Coloquium exam		No	20.00
Exercise attendance		Yes	5.00	Oral part of the exam		Yes	50.00
Lecture attendance		Yes	5.00				
Project		Yes	30.00				
Literature							
Ord.	Author	Title		Publisher	Year		
1,	G.S.T. Armer	Monitoring and Assessment of Structures		SPON Press, London & NY	2001		
2,	John H. Bungey, G. Millard, M.G. Grantham	Testing of Concrete in Structures		SPON Press, London	2006		
3,	Mirjana Malešev, Vlastimir Radonjanin	Praćenje, procena stanja i održavanje građevinskih objekata, Materijal sa predavanja		predmetni nastavnici	2005		

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Table 5.2 Course specification

Course:		<h2 style="margin: 0;">Hydro Mechanical Machinery</h2>			
Course id:	GH503				
Number of ECTS:	6				
Teacher:	Uzelac N. Dušan				
Course status:	Elective				
Number of active teaching classes (weekly)					
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:	
3	2	0	0	0	
Precondition courses		None			
1. Educational goal:					
Selection, work and maintenance of the machinery utilized in hydrotechnics.					
2. Educational outcomes (acquired knowledge):					
Acquiring knowledge for selecting, utilizing and maintaining hydro mechanical machinery.					
3. Course content/structure:					
Elements of hydro mechanical machinery. Pipes, tubes, pipe reinforcement, supports, support carriers, pipe compensators, vessels under pressure. Scheme for a pipe station, basic elements and devices and their distribution. Water pumps, suction pipeline, pressure pipeline. Overview of pipe stations. Technical characteristics. Calculations for water consumption, balancing consumption and production. Selection of pumps, pressure and flow regulation. Regulative related to pump stations. Pump stations for pressure increase.					
4. Teaching methods:					
Lectures – auditory practice – laboratory practice – tutorials.					
Knowledge evaluation (maximum 100 points)					
Pre-examination obligations		Mandatory	Points	Final exam	
		Mandatory	Points	Mandatory	Points
Homework		Yes	20.00	Written part of the exam - tasks and theory	
Lecture attendance		Yes	10.00	Oral part of the exam	
		Yes	10.00	Yes	35.00
Literature					
Ord.	Author	Title		Publisher	Year
1,	B. Ristić	Hidromašinska oprema		Naučna knjiga	2001

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Table 5.2 Course specification

Course:		Selected Chapters in Planning and Designing City Traffic Routes				
Course id:	GP503					
Number of ECTS:	5					
Teacher:	Radović M. Nebojša					
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: Enabling students to acquire professional knowledge and application in practice.						
2. Educational outcomes (acquired knowledge): Student is competent to utilize acquired knowledge in the field of planning and designing city traffic routes.						
3. Course content/structure: Introduction – city and traffic. City traffic systems. Programmed and designed conditions. Designed elements of traffic routes in primary traffic network. Selection and dimensioning of cross section profiles. Design elements of situation and levelling plan. Crossroads. Design principles and techniques. Elements of secondary network traffic routes: slowing traffic, parking places. Equipment in city traffic routes. Signalization. Methodology of planning and designing traffic routes in cities.						
4. Teaching methods: Lectures, practice, tutorials.						
Knowledge evaluation (maximum 100 points)						
Pre-examination obligations		Mandatory	Points	Final exam	Mandatory	Points
Exercise attendance		Yes	5.00	Coloquium exam	Yes	20.00
Graphic paper		Yes	20.00	Coloquium exam	Yes	20.00
Lecture attendance		Yes	5.00	Oral part of the exam	Yes	30.00
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Maletin M.	Planiranje i projektovanje saobraćajnica u gradovima		Orion art, Beograd	2006	

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Table 5.2 Course specification

Course:		Water Quality				
Course id:	GH504					
Number of ECTS:	5					
Teacher:	Dalmacija D. Božo					
Course status:	Elective					
Number of active teaching classes (weekly)						
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:		
2	0	1	0	0		
Precondition courses		None				
1. Educational goal: Enabling students from fundamental fields for obtaining professional knowledge and application in practice.						
2. Educational outcomes (acquired knowledge): Acquired knowledge is utilized as a basis for further improvement in professional courses.						
3. Course content/structure: Acquired knowledge is utilized as a basis for further improvement in professional courses.						
4. Teaching methods: Teaching is performed interactively in the form of lectures, auditory, laboratory and computer practice. At lectures, theoretical content is presented with characteristic examples for easier understanding of course content. In auditory practice, characteristic tasks are done and course content is presented in more details. At laboratory practice, the acquired knowledge is practically applied with the available laboratory equipment. Apart from lectures and practice, tutorials are also regular. A part of course content that constitutes a logical unit can be taken as a partial examination during the teaching process. Partial examinations are taken in written form and as tests. Examination grade is formed on the basis of: attendance at lectures and practice (auditory, laboratory and computer), success in partial examinations and written part of the examination (combined exercises and theory).						
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	30.00
Graphic paper		Yes	20.00	Practical part of the exam - tasks	Yes	40.00
Lecture attendance		Yes	5.00			
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Dalmacija B.	Kontrola kvaliteta voda u okviru upravljanju kvalitetom		PMF- Institut za hemiju, Novi Sad	2000	

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Table 5.2 Course specification

Course:		<h2 style="margin: 0;">Management in Construction</h2>				
Course id:	GM502					
Number of ECTS:	5					
Teachers:	Malešević B. Erika, Milošević P. Mijodrag, Perović I. Veselin					
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: Obtaining knowledge on contemporary methods of management in construction and construction companies.						
2. Educational outcomes (acquired knowledge): Enabling students for managing a construction company.						
3. Course content/structure: Characteristics of a contemporary construction firm. Organization and management of a contemporary construction firm. Management functions. Building process management. Resource management. Investment management. Price analysis and cost control. Construction company marketing management. Quality management – TQM. Reengineering in construction. Benchmarking application. Construction works abroad. Contract strategies and techniques.						
4. Teaching methods: Audio and visual.						
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			
Term paper		Yes	40.00			
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Novaković, V.	Menadžment savremene građevinske firme		Centar za organizaciju i razvoj menadžmenta, Beograd	1999	
2,	Novaković, V.	Menadžment u savremenom građevinarstvu		«Izgradnja», Beograd	2003	
3,	Ivković, B., Popović, Ž.	Upravljanje projektima u građevinarstvu		Nauka, Beograd	1994	

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Table 5.2 Course specification

Course:		<h2 style="margin: 0;">Seismic Analysis of Structures</h2>				
Course id:	GG502					
Number of ECTS:	7					
Teacher:	Lađinović Ž. Đorđe					
Course status:	Elective					
Number of active teaching classes (weekly)						
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:		
3	2	0	0	0		
Precondition courses		None				
1. Educational goal:						
Obtaining knowledge necessary for aseismic design of construction structures.						
2. Educational outcomes (acquired knowledge):						
Enabling students to calculate the influences in a structure due to earthquake action and to design seismically resistant structures in construction practice.						
3. Course content/structure:						
General on earthquakes: reasons of origin and types of earthquakes, seismic waves, characteristics of earthquake soil movement, earthquake registration, intensity of seismic action and seismic scales. Analysis of structure behaviour in earthquake action: constrained damped model vibrations due to dynamic foundation movement, response spectre methods, modal analysis. Designing seismically resistant structures: basic objectives and demands for seismic protection, design methodology, measures for decreasing seismic risk. Designing according to contemporary regulative: design requirements and criteria for buildings, bridges, support structures and other engineering facilities.						
4. Teaching methods:						
Lectures, numerical and graphic practice, tutorials. Practice is performed in groups using the programme that completely following the course content. Prerequisite for taking the examination are positively graded individual papers and the demanded success at partial examination or a defended seminar paper.						
Knowledge evaluation (maximum 100 points)						
Pre-examination obligations		Mandatory	Points	Final exam	Mandatory	Points
Graphic paper		Yes	30.00	Written part of the exam - tasks and theory	Yes	40.00
Term paper		Yes	30.00			
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Brčić V.	Dinamika konstrukcija		Građevinska knjiga, Beograd	1981	
2,	Aničić D., Fajfar P., Petrović B., Savitz-Nosan A., Tomažević	Zemljotresno inženjerstvo – visokogradnja		Građevinska knjiga, Beograd	1990	
3,	Petrović B.	Odabrana poglavlja iz zemljotresnog građevinarstva		Građevinska knjiga, Beograd	1989	

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Table 5.2 Course specification

Course:		Framework Directives E3 (WDF)				
Course id:	GH505					
Number of ECTS:	4					
Teachers:	Kolaković R. Srđan, Milutin N. Darko					
Course status:	Elective					
Number of active teaching classes (weekly)						
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:		
2	0	0	0	0		
Precondition courses		None				
1. Educational goal: Enabling students from fundamental fields to obtain professional knowledge and application in practice.						
2. Educational outcomes (acquired knowledge): Acquired knowledge is directly applicable in engineering practice.						
3. Course content/structure: Introduction to the Water Framework Directive which is a key document for environmental protection. Introduction to the group of directives to which the Water Framework Directive is referring in the field of water protection (14 directives).						
4. Teaching methods: Teaching is performed interactively in the form of lectures. A part of the course content making a logical unit can be taken during the teaching process in partial examination.						
Knowledge evaluation (maximum 100 points)						
Pre-examination obligations		Mandatory	Points	Final exam	Mandatory	Points
Exercise attendance		Yes	5.00	Theoretical part of the exam	Yes	70.00
Lecture attendance		Yes	5.00			
Term paper		Yes	20.00			
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Biljana Ljujić, Ljiljana Sunac	Direktive EU o vodama		Udruženje za tehnologiju vode i sanitarno inženjerstvo	2005	

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Table 5.2 Course specification

Course:		Traffic Network Management				
Course id:	GP501					
Number of ECTS:	6					
Teacher:	Radović M. Nebojša					
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						
1. Educational goal: Enabling students to obtain professional knowledge and application in practice.						
2. Educational outcomes (acquired knowledge): Students are competent to utilize the obtained knowledge in professional work.						
3. Course content/structure: Introduction, tasks and objectives of the system for road management, basic hypotheses. Short recapitulation of the content from the course "Structure Management with the Application of Information Systems" (7th semester). System structure, functions, analysis levels. Data used: traffic network, vehicles, road work, traffic load, ambient conditions, economic indexes, etc. Information systems as a basis of a management system – database on roads, bridges and traffic, methods and devices for data acquisition. Defining the traffic network condition with a special emphasis on damages and their development. Forecast models for predicting pavement alteration conditions. Maintenance and effects, alternative maintenance strategies. World Bank model HDM-4 for developing and managing traffic networks.						
4. Teaching methods: Lectures, auditory and computer practice.						
Knowledge evaluation (maximum 100 points)						
Pre-examination obligations		Mandatory	Points	Final exam	Mandatory	Points
Computer exercise defence		Yes	20.00	Coloquium exam	Yes	20.00
Computer exercise attendance		Yes	5.00	Coloquium exam	Yes	20.00
Lecture attendance		Yes	5.00	Oral part of the exam	Yes	30.00
Literature						
Ord.	Author	Title		Publisher	Year	
1,	World Bank/PIARC	The Highway Development and Management Model HDM 4, - Manual		World Bank/PIARC	2002	
2,	Uzelac Đ.	Baze podataka o putevima, mostovima i saobraćaju u okviru integrisanog informacionog sistema o putnoj mreži"		Savez građevinskih inženjera i tehničara Jugoslavije, Beogra	1998	
3,	Radojković Z.	Sistemi upravljanja kolovozima		Građevinska knjiga	1998	
4,	Uzelac Đ.	Materijali sa predavanja i vežbi, pretežno u PDF formatu			2007	

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Table 5.2 Course specification

Course:		Bridge Management				
Course id:	GP502					
Number of ECTS:	4					
Teachers:	Malešev M. Mirjana, Radonjanin S. Vlastimir, Uzelac D. Đorđe					
Course status:	Elective					
Number of active teaching classes (weekly)						
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:		
2	1	0	0	0		
Precondition courses						
1. Educational goal: Enabling students to obtain professional knowledge and application in practice.						
2. Educational outcomes (acquired knowledge): Acquired knowledge on bridge management and bridge maintenance (monitoring, planning, programme elaboration, project definitions, project management).						
3. Course content/structure: Introduction, topic and objectives of the bridge management system, basic hypotheses. System structure, functions, analysis levels. Analysis on the bridge management process and data used. Information systems as a basis for a management system – databases on bridges, methods and devices for data acquisition. Defining the bridge conditions with the emphasis on damages and their development; forecast models for predicting the condition changes. Maintenance works and their effects, alternative maintenance strategies.						
4. Teaching methods: Lectures, practice, tutorials.						
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	Oral part of the exam	Yes	70.00
Term paper		Yes	20.00			
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Đ.Uzelac, V. Radonjanin, M.Malešev	Materijal sa predavanja			2007	
2,	Uzelac Đ.	Baze podataka o putevima, mostovima i saobraćaju u okviru integrisanog informacionog sistema o putnoj mreži		Savez građevinskih inženjera i tehničara Jugoslavije, Beogra	1998	
3,	Milan Gojković	Stari kameni mostovi, anatomija, patologija, zaštita, sanacija, konzervacija		Naučna knjiga, Beograd	1989	

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Table 5.2 Course specification

Course:		Landfill desing and municipal waste treatmant systems				
Course id:	GH508					
Number of ECTS:	5					
Teachers:	Kosec L. Borut, Ubavin M. Dejan, Vujić V. Goran					
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: Training students in fundamental areas for the acquisition of professional knowledge and practical application.						
2. Educational outcomes (acquired knowledge): The knowledge acquired is used as the basis for further development in specialized subjects.						
3. Course content/structure: Specifics of waste management in developing countries and the situation of waste management in the world. The choice of location for the landfill, the mathematical models of evaluation factors for the selection of a landfill site. Design of the bottom cell landfill operations at the landfill closure landfill. Collection and treatment otpadih water. Biochemical processes of formation of landfill gas collection and treatment of landfill gas, construction of gas combustion deonijskog. Advanced systems for waste treatment, composting, anaerobic digestion, combustion of waste. MFA as a tool for determining the flow of raw materials from waste.						
4. Teaching methods: Classes are performed in the form of interactive lectures, auditory and computer exercises. Lectures present the theoretical part of the material accompanied by characteristic examples for easy understanding of the study material. Auditory exercises consist of characteristic tasks and detailed study of study material. In addition to lectures and exercises consultations are regularly performed. Part of the material, which makes a logical unit, can be taken during the teaching process through tests. Each test can be taken into account and through written test. Exam score is based on: the presence of the lectures and exercises (auditory and computer), the success of tests and written exam (combined tasks and theory).						
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			
Test		Yes	10.00			
Test		Yes	10.00			
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Goran Vujić, Dejan Ubavin, Nemanja Stanisavljević, Bojan Batinić	Upravljanje otpadom u zemljama u razvoju		Fakultet tehničkih nauka	2012	

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Table 5.2 Course specification

Course:		<h2 style="margin: 0;">System Theory and System Analysis</h2>				
Course id:	GM501					
Number of ECTS:	5					
Teachers:	Dražić J. Jasmina, Trivunić R. Milan					
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:						
Enabling students for a system approach and application of the system theory on the process of structure building. Obtaining knowledge in the operation research methods and structure building process modelling methods.						
2. Educational outcomes (acquired knowledge):						
Enabling students for systematic analysis and defining the building process structure within the elaboration of the projects in technology and building organization and the realization of the same. Enabling students for analysis and basic modelling of construction processes.						
3. Course content/structure:						
Historical development of the system theory and its essence. The role of system theory in science and practice. System theory as an acknowledgement method. System classification. System analysis and synthesis. System organization and disorganization. System behaviour. System entropy. Problems, means and methods of operation researches. Process modelling in construction. Linear and non-linear programming. Multi-criteria optimization. Fundamentals in decision making theory (decision making elements and criteria).						
4. Teaching methods:						
Teaching is performed in lectures in the form of presentations of individual method units and auditory practice where certain types of problems related to certain method units are solved. At practice students solve problems with the help of an assistant. The examination encircles the entire course content from the semester, and it is taken in the written form (exercises and theory). Written part of the examination can be taken as two partial examinations during the teaching process. Final grade is formed on the basis of lecture and practice attendance, practice work, partial examinations and the examination.						
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
Graphic paper		Yes	20.00	Coloquium exam	No	35.00
Lecture attendance		Yes	5.00	Coloquium exam	No	35.00
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Petrović B.	SISTEMSKI PRILAZ I SISTEMSKI POSTUPCI U TEHNICI		Fakultet tehničkih nauka, Institut za industrijske sisteme,	1995	
2,	Zelenović D.	OSNOVE TEORIJE INDUSTRIJSKIH SISTEMA		Fakultet tehničkih nauka, Institut za industrijske sisteme	1989	
3,	Flašar A., Vuković S., Brana P.	Proučavanje tehnoloških procesa u građevinarstvu		FTN IIG, Posebno izdanje 8	1985	
4,	Novaković V.	Kvantitativni metodi u građevinskom menadžmentu		Izgradnja, Beograd	2002	
5,	Praščević Ž.	Operaciona istraživanja u građevinarstvu – determinističke metode		GF Beograd	1992	
6,	Opricović S.	Višekriterijumska optimizacija		Naučna knjiga, Beograd	1986	
7,	Trivunić M.	Materijali sa predavanja			2007	

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Table 5.2 Course specification

Course:		<h2 style="margin: 0;">Management of International Projects</h2>				
Course id:	GM510					
Number of ECTS:	5					
Teacher:	Cekić D. Zoran					
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:						
To understand in the context of projects and project-driven enterprises in construction: procurement, project financing and project management procedures important for successful bidding and management of international construction projects						
2. Educational outcomes (acquired knowledge):						
After taking this module the student should be able to understand: Procurement routes, tendering procedures, and traditional and non-traditional contract forms applied at international projects. Market structure and sources of competitive advantages at international tenders important for successful bidding strategy. Project management processes and procedures applied at international projects. Elements of corporate strategy in international construction: project portfolio, organizational structures and diversification strategies at different international markets.						
3. Course content/structure:						
International construction companies and its business environment. International market of construction products and services. Competitive advantages at international market. International bidding strategy. International tendering and procurement procedures. Financing of international projects. Public-private partnerships and concessions. FIDIC standard contract forms. Strategy of international project. International project organisational structure. Virtual project team. International project management procedures. Human resources management and communication. Whole life cycle costing and value. Negotiation and international arbitration.						
4. Teaching methods:						
Hibrid model of teaching: lectures and lecture-demonstrations, with extensive class discussions about important topics, are combined with project and problem based learning. Other teaching and learning methods applied during the course are debates, panel discussions, and simulations of international project, as well as role play with different stakeholders roles. Students are preparing a case study where they have to critically appraise the procurement/contract type, organisational structure and project management processes of an international construction project. They have to suggest appropriate strategies, tools, techniques, procurement routes, project management processes and practices for managing and optimising projects in project-based construction organisations in different international markets. Submitted and reviewed case study papers are a requirements for taking the exam. Assessment is based on attendance of lectures, reviews of case studies, and results of final written te						
Knowledge evaluation (maximum 100 points)						
Pre-examination obligations		Mandatory	Points	Final exam	Mandatory	Points
Exercise attendance		Yes	5.00	Theoretical part of the exam	Yes	30.00
Lecture attendance		Yes	5.00			
Term paper		Yes	60.00			
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Zoran Cekić	Internacionalno građevinarstvo		Građevinska knjiga	2006	
2,	Branislav Ivković, Željko Popović	Upravljanje projektima u građevinarstvu		Građevinska knjiga	2006	
3,	Cleland, David I.; Ireland, Lewis R.	Project Management: Strategic Design and Implementation		McGraw-Hill	2002	
4,	Association for Project Management	APM Book of Knowledge, 6th edition		Association for Project Management	2012	
5,	Project Management institute	PMI Book of Knowledge, 4th edition		Project Management institute	2008	
6,	Mawhinney, M.	International construction		Blackwell Science	2001	

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Table 5.2 Course specification

Course:		Tunnels				
Course id:	GP504					
Number of ECTS:	5					
Teachers:	Đogo B. Mitar, Vasić V. Milinko					
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: Enabling students for obtaining professional knowledge and application in practice.						
2. Educational outcomes (acquired knowledge): Acquired knowledge is used in engineering practice.						
3. Course content/structure: General on tunnels. Primary pressure in the terrain and pressure condition in the tunnel zone. Geotechnical classification of rock masses and the categorization of the excavation for tunnels. Basic construction and technical elements for designing tunnels and other underground structures. Characteristics of the tunnel route (axis and levelling), cross section profile elements (free profile, light profile, tunnel formworks for railroad and road tunnels). Calculations for underground structures (engineering and geology model, geotechnical model, calculation model). Calculations and dimensioning of primary and secondary coating for underground structures. Traditional and contemporary tunnel building methods. Tunnel building technology. Influence of underground excavations on the environment. Measuring in the phase of building and exploitation of underground structures. Basic procedures of geotechnical terrain melioration (injecting, drainage, anchoring). Protection of underground structures from water and moisture.						
4. Teaching methods: Lectures and auditory practice.						
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
Graphic paper		Yes	20.00	Oral part of the exam	Yes	40.00
Lecture attendance		Yes	5.00			
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Vasić M.	Geotehničko klasifikovanje stenskih masa za podzemne objekte		FTN	2007	
2,	Jovanović P.	Izrada podzemnih prostorija velikog profila		GK Beograd	1984	
3,	Popović B.	Tuneli		GK Beograd	1990	

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Table 5.2 Course specification

Course:		Concrete Bridges			
Course id:	GG505				
Number of ECTS:	5				
Teachers:	Brujić S. Zoran, Folić J. Radomir				
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: Enabling students for the work in designing, constructing and maintaining concrete culverts and bridges.					
2. Educational outcomes (acquired knowledge): Knowledge on the system of designing culverts and bridges and their properties in order to be optimally applied in the design, building, maintenance and management.					
3. Course content/structure: Principles of bridge design. Selection of a route and position of a bridge. Base shape and bridge levelling. Classifications and divisions of bridges (pedestrian, road, railway, for mixes traffic, viaduct, aqueduct). Traffic loads and actions on bridges. Shapes and elements of pavement structure and cross sections of certain bridge types. Span structures and their properties, upper and lower parts and bridge elements. Plate and pipe culverts (loads, calculations and details). Plate bridges (loads, calculations and details). Calculation and design for beam road and railway bridges (simple beams, cantilever supports, continual supports, grid and frame structures, truss supports). Calculation and design of arch bridges (pavement structure, arches, hanging trusses, piers, rods). Suspension bridges and cable bridges (pavement structure, cable systems and chain systems, pylons, rods, anchorage blocks). Pedestrian bridges, viaducts and aqueducts. Bridge bearings (concrete, steel, neoprene). Outer and inner bridge piers (pier shape, foundations, calculations, workmanship). Traditional and contemporary procedures in building beam and arch bridges (application of frameworks and formworks, application of precast elements, trusses, structure transportation, cantilever building procedures, etc.). Integral bridges. Maintenance and management of bridges and culverts.					
4. Teaching methods: Lectures. Auditory, numerical/computing and computer practice. Tutorials. Tests. Partial examinations. Defence of numerical/computing practice and/or seminar paper.					
Knowledge evaluation (maximum 100 points)					
Pre-examination obligations		Mandatory	Points	Final exam	
Project		Yes	30.00	Theoretical part of the exam	Mandatory
				Practical part of the exam - tasks	Points
				Yes	35.00
Literature					
Ord.	Author	Title		Publisher	Year
1,	Trojanović M.	Betonski mostovi I		Građevinska knjiga, Beograd	1965
2,	Trojanović M.	Betonski mostovi II		Građevinska knjiga, Beograd	1965
3,	Trojanović M.	Betonski mostovi III		Građevinska knjiga, Beograd	1972
4,	Tonković Kruno	Mostovi		Školska knjiga, Zagreb	1971
5,	Radić Jure	Mostovi		Školska knjiga, Zagreb	2002
6,	Folić Radomir	Betonske konstrukcije II - Skripta		Fakultet tehničkih nauka, Novi Sad	2005
7,	Grupa autora	EN 1990:2002 Evrokod 0 Osnove proračuna konstrukcija		Građevinski fakultet Univerziteta u Beogradu	2006
8,	Grupa autora	EVROKOD 2 Proračun betonskih konstrukcija Deo 2: Betonski mostovi		Građevinski fakultet Univerziteta u Beogradu	1997
9,	Grupa autora	EVROKOD 1 Osnove proračuna i dejstva na konstrukcije		Građevinski fakultet Univerziteta u Beogradu	1997
10,	Grupa autora	EVROKOD 8 Projektovanje seizmički otpornih konstrukcija Deo 2 : Mostovi		Građevinski fakultet Univerziteta u Beogradu	1998

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Table 5.2 Course specification

Course:		Metal Bridges				
Course id:	GG503					
Number of ECTS:	5					
Teacher:	Kisin S. Srđan					
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: Obtaining knowledge in the field of steel bridge construction.						
2. Educational outcomes (acquired knowledge): Enabling students to analyse, calculate, dimension and constructively model metal bridges.						
3. Course content/structure: Disposition and constructive modelling of bridges. Railroad bridges – elements of disposition and free profiles. Road bridges – basic design elements. Bridge load. Calculations and constructive modelling of longitudinal and transverse girders and stiffeners. Pavement types and their calculations. Compressed and orthotropic pavement slabs. Contemporary bridge systems – complex, compressed and piped. Temporary assembled steel and aluminium bridges. Installation roofs. Bridge miscellaneous – anchors, dilatations, railings, lightning.						
4. Teaching methods: Lectures. Auditory and graphic practice. Tutorials.						
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	40.00
Graphic paper		Yes	20.00	Coloquium exam	Yes	10.00
Lecture attendance		Yes	5.00	Oral part of the exam	Yes	20.00
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Stipanić B., Buđevac D.	Čelični mostovi		Građevinska knjiga, Beograd	1989	

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Table 5.2 Course specification

Course:		Hydrotechnical Structures				
Course id:	GH402					
Number of ECTS:	6					
Teacher:	Đurić V. Duško					
Course status:	Elective					
Number of active teaching classes (weekly)						
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:		
3	2	0	0	0		
Precondition courses		None				
1. Educational goal: Enabling students from fundamental fields to acquire professional knowledge and application in practice.						
2. Educational outcomes (acquired knowledge): Acquired knowledge is directly applied in practice, as well as in understanding and upgrading knowledge in other professional courses.						
3. Course content/structure: Programme includes classification and properties of hydrotechnical structures, action of water onto structures, building and failure of structures. Special attention is attributed to the analysis of foundation (hydrological, hydraulic, geological and the like) for designing loads in such structures, building materials, seismic influences, static and dynamic influences. One chapter also includes the design of such structures, and combining elements are specially analysed (dam body, overflow, foundation outflow, pumping station, culvert, pipelines, etc), as well as possible consequences on the failure of such structures. The conditions and problems in building hydrotechnical structures will also be analysed.						
4. Teaching methods: Teaching is performed interactively in the form of lectures, auditory and computer practice. At lectures, theoretical content is presented with characteristic examples for easier understanding of course content. In auditory practice, characteristic tasks are done and course content is presented in more details. Apart from lectures and practice, tutorials are also regular. A part of course content that constitutes a logical unit can be taken as a partial examination during the teaching process. Partial examinations are taken in written form and as tests. Examination grade is formed on the basis of: attendance at lectures and practice (auditory and computer), success in partial examinations and written part of the examination (combined exercises and theory).						
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	30.00
Graphic paper		Yes	20.00	Practical part of the exam - tasks	Yes	40.00
Lecture attendance		Yes	5.00			
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Petrović P.	Hidrotehničke konstrukcije		Građevinski fakultet, Beograd	1997	

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Table 5.2 Course specification

Course:		Hydraulics 2				
Course id:	GH501					
Number of ECTS:	6					
Teacher:	Stipić S. Matija					
Course status:	Elective					
Number of active teaching classes (weekly)						
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:		
3	1	1	0	0		
Precondition courses		None				
1. Educational goal: Enabling students from fundamental fields to obtain professional knowledge and application in practice.						
2. Educational outcomes (acquired knowledge): Acquired knowledge is used as a basis for further improvement in professional courses.						
3. Course content/structure: Flow beneath structures, grid. Hydraulic instability of porous environment. Inconstant flow towards an isolated well. Specific action and radius of action of a well. Influence of boundaries and conditions at boundaries on the effects of water pumping. Data processing for experimental and exploitation pumping. Problems in design and exploitation of wells. Situations and processing conditioning less feasible wells. Selection of properties for filter covers and filter openings. Lowering the level of underground water for construction processes (construction well). Problems in construction in underground water.						
4. Teaching methods: Teaching is performed interactively in the form of lectures, auditory, laboratory and computer practice. At lectures, theoretical content is presented with characteristic examples for easier understanding of course content. In auditory practice, characteristic tasks are done and course content is presented in more details. Apart from lectures and practice, tutorials are also regular. A part of course content that constitutes a logical unit can be taken as a partial examination during the teaching process. Partial examinations are taken in written form and as tests. Examination grade is formed on the basis of: attendance at lectures and practice (auditory and computer), success in partial examinations and written part of the examination (combined exercises and theory).						
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	30.00
Graphic paper		Yes	20.00	Practical part of the exam - tasks	Yes	40.00
Lecture attendance		Yes	5.00			
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Vuković M., Soro A.	Dinamika podzemnih voda		Institut za vodoprivredu "Jaroslav Černi", Beograd	1984	
2,	Vuković M., Soro A.	Filtracione deformacije i stabilnost tla		Institut za vodoprivredu "Jaroslav Černi", Beograd	1986	

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Table 5.2 Course specification

Course:		<h2 style="margin: 0;">Industrial Methods in Construction</h2>				
Course id:	GG520					
Number of ECTS:	5					
Teachers:	Dražić J. Jasmina, Trivunić R. Milan					
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:						
Obtaining knowledge on the application of industrial methods in construction.						
2. Educational outcomes (acquired knowledge):						
Enabling students to elaborate studies on the possibilities of applying industrial methods in civil engineering, as well as designing the process of building assembly structures (buildings, halls, bridges). Acquired knowledge can directly be applied in the engineering practice.						
3. Course content/structure:						
Fundamentals in building industrialization (factors, building methods and conditions for the introduction and the application of industrialization). Precast methods and quality control in industrial production. Methods and technologies for assembling halls, buildings and bridges. Designing the process for preparing assembly structures (organization and planning). Managing the assembly work flow.						
4. Teaching methods:						
Teaching is performed in lectures in the form of presentations of individual method units and graphic papers that students do individually during classes in consultation with the assistant, based on the obtained information (lectures, literature, consultations and general guidance at the beginning of practice classes). Completed and positively graded papers are evaluated (given certain number of points). The examination encircles the entire course content from the semester, and it is taken in the written form (exercises and theory). Final grade is formed on the basis of lecture and practice attendance, graphic paper grades and written examination.						
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	50.00
Graphic paper		Yes	20.00			
Graphic paper		Yes	20.00			
Lecture attendance		Yes	5.00			
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Trivunić M., Dražić J.	Montaža betonskih konstrukcija zgrada		FTN Novi Sad i AGM knjiga	2005	
2,	Krastavčević M.	Primena montažnog građenja - javni i industrijski objekti od betona		Izgradnja, Beograd	1996	
3,	Grupa autora	Montažni građevinski objekti		Ekonomika, Beograd	1983	
4,	Grupa autora	Građevinski kalendar		Savez građevinskih inženjera i tehničara Jugoslavija	1979	
5,	Grupa autora	Građevinski kalendar		Savez građevinskih inženjera i tehničara Jugoslavija	1980	

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Table 5.2 Course specification

Course:		Building Management				
Course id:	GG519					
Number of ECTS:	5					
Teacher:	Ćirović S. Goran					
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:						
Enabling students to manage projects in civil engineering.						
2. Educational outcomes (acquired knowledge):						
Ability to manage time and resources, manage supplying and communications, manage quality, manage risk, as well as monitoring, analysing and evaluating project realization. Acquired knowledge is directly applied in engineering practice.						
3. Course content/structure:						
Notion of a project (system, elements and connections in a project, aims, connections to the surroundings). Activities during project realization (investors, designers, constructors, consultants, etc.). Project planning (investments): process (project) modelling, resources and costs planning, variation solutions for the plan and the selection of an optimal one. Managing time and resources, managing supplying and communications for the demands of the project, managing project quality, managing project risks. Monitoring, analysing and evaluation of project realization.						
4. Teaching methods:						
Teaching is performed in lectures in the form of presentations of individual methodical units and computer practice done individually by students with the consultations with the teaching assistants. At practice classes, based on the obtained information (in lectures, literature, consultation and general instructions at the beginning of practice classes), students solve the set tasks in a computer laboratory. Completed and positively graded computer practice present a prerequisite for taking the examination. Examination covers the entire course content presented during the semester, and it is taken in written form (tasks and theory). Written part of the examination can also be taken in 2 modules during the teaching process. Examination grade comprises lecture and practice attendance, computer practice, written and oral part of the examination.						
Knowledge evaluation (maximum 100 points)						
Pre-examination obligations		Mandatory	Points	Final exam	Mandatory	Points
Computer exercise attendance		Yes	25.00	Written part of the exam - tasks and theory	Yes	70.00
Lecture attendance		Yes	5.00			
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Ivković B., Popović Ž.	Upravljanje projektima u građevinarstvu		Građevinska knjiga	2005	
2,	Novaković V.	Menadžment savremene građevinske firme		Centar za organizaciju, razvoj i menadžment	1999	
3,	Flašar A., Vuković S., Brana P.	Proučavanje tehnoloških procesa u građevinarstvu		FTN IIG, Posebno izdanje 8	1985	
4,	Trivunić M.	Materijali sa predavanja			2007	
5,	Winch G.	Managing Construction Projects		Blackwell Publishing	2002	
6,	Kurij K., Krstić G., Stamatović M.	Projekt menadžment u građevinskoj praksi		SG ITS, Beograd	1999	

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Table 5.2 Course specification

Course:		Construction Business and Regulative				
Course id:	GG521					
Number of ECTS:	4					
Teachers:	Malešev M. Mirjana, Malešević B. Erika					
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: Obtaining knowledge on legal regulative dealing with the building process.						
2. Educational outcomes (acquired knowledge): Enabling students to manage the building process in accordance with legal regulative.						
3. Course content/structure: Genesis on the development of legal regulative in construction. Laws and other legal regulations related to civil engineering. Law on planning and building. Plan documentation. Site documentation. Legal sub-acts. Law on standardization. Law on safety and health protection. Law on public procurement. Contract documentation. FIDIC regulations.						
4. Teaching methods: Audio and visual.						
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	30.00
Lecture attendance		Yes	5.00			
Term paper		Yes	60.00			
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Ivković,B.,Popović,Ž.	Upravljanje projektima u građevinarstvu		Nauka,Beograd	1994	
2,	Krstić.G.	Zakonska regulativa u graditeljstvu		Izgradnja,Beograd	2004	
3,	Mandić,K., Franger,A.	Sistem standarda za građevinski menadžment ,tenderska i ugovorna dokumentacija		Građevinska knjiga, Beograd	2006	
4,	-	Zakon o planiranju i izgradnji		Sl RSbr.47/2003, str.1-19	2003	
5,	-	Zakon o javnim nabavkama		Sl.RS.,br.39/2003 , str.3-21	2003	
6,	-	FIDIC propisi		FIDIC	1994	

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Table 5.2 Course specification

Course:		Professional Practice				
Course id:	GG506					
Number of ECTS:	3					
Teachers:						
Course status:	Elective					
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: Acquiring practical knowledge and experience in the design and construction enterprises.						
2. Educational outcomes (acquired knowledge): Enabling students for practical knowledge application, obtained at the studies of civil engineering, in the design and construction companies.						
3. Course content/structure: Architectural design in the conditions of everyday design practice. Civil engineering in the conditions of everyday design practice. The elaboration of design and technical documentation. Preparation for building. Engineering and consulting – practical aspects. Organization of building. Technology of building. Conditions at the building site. Commercial aspects of building. Management – practical aspects. Marketing – practical examples.						
4. Teaching methods: Interactive work with students in order to continually monitor their knowledge level. Analysis on the problems included in the syllabus and comparison to practical solutions.						
Knowledge evaluation (maximum 100 points)						
Pre-examination obligations		Mandatory	Points	Final exam	Mandatory	Points
Project defence		Yes	50.00	Oral part of the exam	Yes	50.00
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Razni autori	Priručnici, knjige i udžbenici		Različiti izdavači	2000	



Table 5.2 Course specification

Course:	Study-Research Work on the Master Thesis Theoretical Framework					
Course id:	SIM01					
Number of ECTS:	15					
Teachers:						
Course status:	Elective					
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:						
2. Educational outcomes (acquired knowledge):						
3. Course content/structure:						
4. Teaching methods:						
Knowledge evaluation (maximum 100 points)						
Pre-examination obligations		Mandatory	Points	Final exam	Mandatory	Points
Literature						
Ord.	Author	Title		Publisher	Year	

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Table 5.2 Course specification

Course:		<h2 style="margin: 0;">Master Thesis – Elaboration and Defence</h2>			
Course id:	GG5ZR				
Number of ECTS:	10				
Teachers:					
Course status:	Elective				
Number of active teaching classes (weekly)					
Lectures:	Practical classes:	Other teaching types:	Study research work:	Other classes:	
0	0	0	0	10	
Precondition courses		None			
<p>1. Educational goal:</p> <p>Obtaining knowledge on the manner, structure and form of writing a report after the performed analyses and other activities within the set topic of the Master thesis. On elaborating the Master thesis, students obtain the experience for writing papers in which it is necessary to describe problems, used methods and procedures, and obtained results. Furthermore, the objective of the elaboration and defence of the Master thesis is to develop the ability of the students to prepare the results of their individual work in the form appropriate for public presentation, as well as to answer any suggestions or questions related to the set topic.</p>					
<p>2. Educational outcomes (acquired knowledge):</p> <p>Enabling students for systematic approach in solving set problems, performing analyses, applying the acquired knowledge and accepting knowledge from other fields in order to find a solution to the given problem. By individually researching and solving tasks in the field of the set topic, students obtain knowledge on the complexity and wideness of the problems in the field of their profession. By elaborating a Master thesis students acquire certain experience that can be applied in practice while solving problems in the field of their profession. By preparing results for a public defence, by the public defence and answering the questions and suggestions by the committee, students obtain necessary experience on the manner to present the results of an individual or collective work in practice.</p>					
<p>3. Course content/structure:</p> <p>It is formed individually in accordance with the demands and fields enclosed in the set topic of the Master thesis. A student in an agreement with the supervisor elaborates the Master thesis in the written form in accordance with the set procedure at the Faculty of Technical Sciences. A student prepares and defends the Master thesis publicly in agreement with the supervisor and in accordance to the set regulations and procedures.</p>					
<p>4. Teaching methods:</p> <p>During the elaboration of the Master thesis, a student consults the supervisor, and if needed, other professors dealing with the field that is a topic of the Master thesis. A student completes the Master thesis and on receiving the agreement from the committee for evaluation and defence, delivers bounded copies to the committee. The defence of the Master thesis is public, and a student is obliged to orally answer any questions or suggestions after the presentation.</p>					
Knowledge evaluation (maximum 100 points)					
Pre-examination obligations		Mandatory	Points	Final exam	
Writing the master thesis		No	50.00	Oral part of the exam	No
					50.00

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Table 5.2 Course specification

Course:		Assembled Concrete Structures				
Course id:	GG510					
Number of ECTS:	4					
Teacher:	Brujić S. Zoran					
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:						
Enabling students to design and construct assembled concrete structures (ACS) – buildings, halls, engineering structures and bridges.						
2. Educational outcomes (acquired knowledge):						
Knowledge on the properties of assembled elements and their joints and connections for optimal application in calculating, modelling and analysing ACS structures of diverse purpose.						
3. Course content/structure:						
Specificities in the assembled building of concrete structures. Advantages and drawbacks of the assembled building. Principles of designing ACS: selection of cross section, material and structural system, composing and decomposing structures, precast monolith construction, influence of rheological concrete characteristics. Element design and optimization. Joints and connections, principles of load transfer, types of joints and connections, protection of joints, dilatation expansion joints. Assembly structures for industrial halls: elements, actions, design (roof structure, main girders, longitudinal and cantilever frameworks). Skeleton and panel structures of multi-storey buildings: constructing the structural system, elements, actions, withstanding and transferring loads, aseismic designing. Joints and connections of skeleton structures. Joints and connections of panel structures. Thin-shell and polyhedral roofs. Integrity of assembled concrete structures. Analysis on ACS with non-stiffened points. Engineering structures (tanks, supporting walls, canals) and bridges.						
4. Teaching methods:						
Lectures. Auditory, numerical/computing, and computer practice. Tutorials. Defence of numerical/computing practice and seminar paper.						
Knowledge evaluation (maximum 100 points)						
Pre-examination obligations		Mandatory	Points	Final exam	Mandatory	Points
Exercise attendance		Yes	0.00	Oral part of the exam	Yes	50.00
Lecture attendance		Yes	0.00			
Project		Yes	30.00			
Term paper		Yes	20.00			
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Grupa autora	Montažni građevinski objekti		Ekonomika, Beograd	1983	
2,	Grupa autora	Priručnik za primenu Pravilnika za beton i armirani beton BAB87, Tom 1 i Tom 2		Građevinski fakultet Beograd	2002	
3,	FIB	Structural Connections for Precast Concrete Buildings, Federation International du Beton		FIB Bulletin No. 43	2008	
4,	Stupre	Precast Concrete Connection Details		Society for Studies on the Use of Precast Concrete, Beton Verlag, Netherlands	1981	
5,	Brujić Z.	Materijal sa predavanja i vežbanja			2010	

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Table 5.2 Course specification

Course:		<h2 style="margin: 0;">Seismic Analysis of Engineering Structures</h2>				
Course id:	GG530					
Number of ECTS:	4					
Teacher:	Lađinović Ž. Đorđe					
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:						
Obtaining knowledge necessary for aseismic design of engineering structures.						
2. Educational outcomes (acquired knowledge):						
Enabling students to calculate the influences in a structure due to earthquake action and to design seismically resistant structures in construction practice.						
3. Course content/structure:						
General on earthquakes: reasons of origin and types of earthquakes, seismic waves, characteristics of earthquake soil movement, earthquake registration, intensity of seismic action and seismic scales. Analysis of structure behaviour in earthquake action: constrained damped model vibrations due to dynamic foundation movement, response spectre methods, modal analysis. Designing of seismically resistant engineering structures: basic objectives and demands for seismic protection, design methodology, measures for decreasing seismic risk. Designing according to contemporary regulative: design requirements and criteria for bridges, support structures and other engineering facilities.						
4. Teaching methods:						
Lectures, numerical and graphic practice, tutorials. Practice is performed in groups using the programme that completely following the course content. Prerequisite for taking the examination are positively graded individual papers and the demanded success at partial examination or a defended seminar paper.						
Knowledge evaluation (maximum 100 points)						
Pre-examination obligations		Mandatory	Points	Final exam	Mandatory	Points
Graphic paper		Yes	30.00	Written part of the exam - tasks and theory	Yes	40.00
Term paper		Yes	30.00			
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Brčić V.	Dinamika konstrukcija		Građevinska knjiga, Beograd	1981	
2,	Aničić D., Fajfar P., Petrović B., Savitz-Nosan A., Tomaževi	Zemljotresno inženjerstvo – visokogradnja		Građevinska knjiga, Beograd	1990	
3,	Petrović B.	Odabrana poglavlja iz zemljotresnog građevinarstva		Građevinska knjiga, Beograd	1989	

Table 5.2 Course specification

Course:	Mathematical Statistics				
Course id:	GH404				
Number of ECTS:	4				
Teacher:	Gilezan K. Silvia				
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					
1. Educational goal:					
Enabling students for abstract thinking and acquiring fundamental knowledge in the field of probability and mathematical statistics. Course objective is to develop a special manner of students' thinking in studying mass phenomena in the field of construction – hydraulics. Course character is applicative, hence the significance is placed on the knowledge that can explain the quantitative approach to problems in the field of study. Furthermore, students are becoming capable of using a statistics programme. The aim is to enable students to know how to select adequate statistic methods, elaborate a statistic analysis and explain its essence. This knowledge is the foundation for better understanding of professional literature and successful improvement in the studies.					
2. Educational outcomes (acquired knowledge):					
Acquired knowledge should be used by students in further education and in professional courses to make and solve mathematical models using the knowledge from this course by adopting theoretical knowledge in the field of probability and mathematical statistics presented in this course, as well as skills for calculating and interpreting final statistic indicators.					
3. Course content/structure:					
Theoretical course: Probability: Probability axioms. Conditional probability. Bayes' theorem. Random variable of discrete and continual type. Random vector of discrete and continual type and common distribution. Conditional distributions. Transformation of random variables. Mathematical expectations. Variation and standard deviation. Moments. Co-variation, correlation coefficient. Conditional expectations. Laws on large numbers. Central border theorems. Correlation and regression; linear regression. Sample distribution, mean value and dispersion. Statistics: basic notions. Population, sample. Statistics. Descriptive statistic analysis (basic notions, data acquisition, table and graphic data presentation, data analysis by descriptive statistic methods, programme support for static analysis). Evaluation of unknown parameters (Dot evaluations: moment methods and maximal reliability method. Interval evaluation.). Parameter and non-parameter hypothesis and tests. Practice classes: At practice, student do adequate examples from the theoretical classes to practice the presented course content, so that practice help the understanding of the presented content.					
4. Teaching methods:					
Lectures. Numerical calculation and computer practice. Tutorials. Lectures are performed in a combined manner. At lectures, students are presented with the theoretical part of the course content followed by characteristic examples for easier understanding. At practice, that follow the lectures, students do characteristic exercises and widen the course content from the lectures. At computer practice, using the statistic programme, students do the processing of the obtained results. Apart from lectures and practice, there are regular tutorials. A part of the content that makes a logical unit can be taken during the teaching process in the form of 2 modules (first module: Probability, second module: Statistics).					
Knowledge evaluation (maximum 100 points)					
Pre-examination obligations		Mandatory	Points	Final exam	
		Mandatory	Points	Mandatory	Points
Complex exercises		Yes	15.00	Final exam - part one	
Exercise attendance		Yes	3.00	Final exam - part two	
Lecture attendance		Yes	2.00	Written part of the exam - tasks and theory	
Test		Yes	10.00		
Test		Yes	10.00		
Test		Yes	10.00		
Literature					
Ord.	Author	Title		Publisher	Year
1,	M. Stojaković	Matematička statistika		FTN (Edicija tehničke nauke – udžbenici), Novi Sad	2000
2,	M. Novković, B.Rodić, I.Kovačević	Zbirka rešenih zadataka iz verovatnoće i statistike		FTN (Edicija tehničke nauke-udžbenici), Novi Sad	2004
3,	V.Jevremović, J.Mališić	Statističke metode u meteorologiji i inženjerstvu		Savezni hidrometeorološki zavod, Beograd	2002
4,	I.Kovačević, M. Novković	Verovatnoća i matematička statistika, - skripta		FTN, Novi Sad	1999
5,	S.Gilezan, Lj.Nedović, ...	Zbirka rešenih zadataka iz Statistike		FTN(Centar za matematiku i statistiku), Novi Sad	2004

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Table 5.2 Course specification

Course:		Waterways and Ports				
Course id:	S0I51V					
Number of ECTS:	5					
Teacher:	Bačkalić M. Todor					
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:						
Acquiring knowledge about natural and artificial waterways, hydro-technical facilities and navigation requirements, technical and technological characteristics of ports.						
2. Educational outcomes (acquired knowledge):						
Application of acquired knowledge of technical and technological characteristics of waterways and ports when solving the problem of defining logistics chains and supply chains. Knowledge of waterways and ports defines the place and role of water traffic in the base composed of knowledge gained from other cases that deal with modes of transport.						
3. Course content/structure:						
The basic exploitation qualities of waterways. The basics of river sediment and morphology. Regulation of rivers for navigation: determination of the natural characteristics of the regime and the necessary volume of regulation, regulation of the river bed, river channeling. Navigable channels. Influence of the speed of navigation on the canal bank. Ship locks. Maintenance of inland waterways. Fundamentals of waterways and ports at sea. Information systems and management of traffic on navigable waterways. Port Terminals: General cargo terminal, container terminal, multi-purpose terminal, Ro-Ro terminal, bulk terminal cargo, liquid cargo terminal, the terminal for container-floating barges. Processing and servicing of transport vessel assets in ports: operation technology of transport vessels in the ports, the structure of commodity operations and coordination with operation of port assets and common forms of transportation, distribution of vessels in landing places. Port planning and development: phase of port development, port management development, principles of planning, traffic forecasts, detailed planning and zoning, investment planning. Models of port planning system - an analytical and experimental model. Analytical models of port system with Markovski discrete and continuous time chains. Models for the composition processing of towboats and barges in the clasp of anchorage-operative banks. The analytical models for determining the medium relative time for vessels waiting at anchorage. Experimental model - a port simulation model.						
4. Teaching methods:						
Lectures: oral presentations and computer presentations. Auditory exercises: oral presentations and computer presentations. Laboratory exercise: introduction to the instruments for measurement of real systems, fieldwork and visits to institutions and companies dealing with the subject matter.						
Knowledge evaluation (maximum 100 points)						
Pre-examination obligations		Mandatory	Points	Final exam	Mandatory	Points
Exercise attendance		Yes	5.00	Final exam - part one	Yes	35.00
Lecture attendance		Yes	5.00	Final exam - part two	Yes	35.00
Term paper		Yes	20.00			
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Muškatirović Dragutin	Unutrašnji plovni putevi i pristaništa		Saobraćajni fakultet Univerziteta u Beogradu	1992	
2,	Radmilović Zoran	Planiranje i razvoj luka i pristaništa		Saobraćajni fakultet Univerziteta u Beogradu	1994	
3,	Jovanović Miodrag	Regulacija reka - Rečna hidraulika i morfologija		Građevinski fakultet Univerziteta u Beogradu	2002	

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Table 5.2 Course specification

Course:		<h2 style="margin: 0;">Special Prestressed and Composite Concrete Structures</h2>				
Course id:	GG511					
Number of ECTS:	4					
Teacher:	Brujić S. Zoran					
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:						
Enabling students for the work on designing, constructing and maintaining special prestressed and composite concrete structures in building construction.						
2. Educational outcomes (acquired knowledge):						
Knowledge on the specificities of prestressed and composite concrete structures for their optimal design and building.						
3. Course content/structure:						
Specificities and forms of partial prestressed elements and structures. Degree of prestressing. Specificities in calculating and dimensioning cross sections and elements according to limit bearing capacity and limit usability conditions. Specificities and forms of prestressed concrete structures with cables without joints and with exterior cables. Supplementary elements in the system for prestressing and poststressing. Specificities and forms of composite concrete of diverse mechanical and rheological characteristics. Shearing stresses at contact element surface. Specificities in calculating and dimensioning cross sections and elements according to limit bearing capacity and limit usability conditions. Designing line and surface elements and structures by applying: partial prestressing, prestressing with cables without joints and exterior cables, compositing of reinforced concrete and/or prestressed concrete elements. Application for halls, buildings, bridges and engineering structures.						
4. Teaching methods:						
Lectures. Auditory, numerical/calculation and computer practice. Tutorials. Tests. Partial examinations. Defence of numerical/calculation practice and/or seminar paper.						
Knowledge evaluation (maximum 100 points)						
Pre-examination obligations		Mandatory	Points	Final exam	Mandatory	Points
Exercise attendance		Yes	0.00	Written part of the exam - tasks and theory	Yes	50.00
Lecture attendance		Yes	0.00			
Project		Yes	30.00			
Term paper		Yes	20.00			
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Jevtić D.	Prednapregnuti beton		Građevinska knjiga, Beograd	1980	
2,	Folić R., Popović B.	Parcijalne prethodno napregnute konstrukcije 1 deo		Građevinski kalendar, Beograd	1996	
3,	Folić R., Popović B.	Parcijalno prethodno napregnute konstrukcije 2 deo		Građevinski kalendar, Beograd	1997	
4,	Folić R., Tatomirović M.	Spregnute betonske konstrukcije 1 deo		Građevinski kalendar, Beograd	1999	
5,	Folić R., Tatomirović M.	Spregnute betonske konstrukcije deo 2		Građevinski kalendar, Beograd	2000	
6,	Grupa autora	EVROKOD 2 Proračun betonskih konstrukcija		Građevinski fakultet Univerziteta u Beogradu	1997	

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Table 5.2 Course specification

Course:		<h2 style="margin: 0;">Selected Chapters in Construction Economy</h2>				
Course id:	GM504					
Number of ECTS:	4					
Teachers:	Malešević B. Erika, Perović I. Veselin					
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:						
Obtaining knowledge on basic principles in the business of a construction company.						
2. Educational outcomes (acquired knowledge):						
Enabling students for further following on the course content in professional courses in the fields of management, organization and building technology.						
3. Course content/structure:						
Organization of construction companies. Means and capacities in a construction company. Manners of business financing. Cost and price analysis. Resource usage optimization. Determining a business success.						
4. Teaching methods:						
Audio and visual.						
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			
Term paper		Yes	40.00			
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Malešević, E.	Ekonomika građevinarstva i osnovi menadžmenta		UN,GF, Subotica	1999	
2,	Marinić,I.	Ekonomske analize u građevinarstvu		UN, FTN, Stylos, Novi Sad	1998	
3,	Nikolić,M.,Malenović,N.,Pokrajčić,D., Paunović.,B.	Ekonomika preduzeća		EF,Beograd	2002	

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Table 5.2 Course specification

Course:						
Course id:		GG531				
Number of ECTS:		4				
Teachers:		Brujić S. Zoran, Folić J. Radomir				
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:						
Enabling students for the work on designing, constructing and maintaining masonry structures with diverse purpose.						
2. Educational outcomes (acquired knowledge):						
The knowledge on the materials and elements for building and their properties in order to be optimally applied in calculating, modelling and analysing structures to design masonry structures of diverse purpose.						
3. Course content/structure:						
Overview and development of masonry structures and technical regulative. Materials for masonry structures: elements for building, mortar, concrete, reinforced and prestressed steel. Application of soil, stone, brick and blocks in building masonry structures. Types of masonry structural elements: bearing and nonbearing (partition) walls, walls with or without reinforced concrete belt course., reinforced and unreinforced walls, prestressed walls, posts, etc. Physical, mechanical and rheological characteristics of unreinforced walls. Conceptual design of masonry structures. Structural systems of masonry buildings. Calculation of masonry structures for the influence of vertical and horizontal load. Seismic analysis and aseismic design of masonry structures. Calculating walls and posts according to permitted stresses and limit bearing capacity. Facade walls on buildings. Foundation walls in buildings. Details of masonry structural elements and their construction. Construction and quality control for works and materials for building. Masonry structures of arches, vaults and domes. Application in religious structures. Application in engineering practice, culverts and bridges.						
4. Teaching methods:						
Lectures. Computer practice. Tutorials. Examination is taken as a written test with the questions concerning relevant course content. During the teaching process, students orally defend 1 seminar paper with a topic in the field of masonry structures. Seminar paper is presented in written form containing app. 20 text pages with drawings and figures.						
Knowledge evaluation (maximum 100 points)						
Pre-examination obligations		Mandatory	Points	Final exam	Mandatory	Points
Exercise attendance		Yes	10.00	Written part of the exam - tasks and theory	Yes	40.00
Term paper		Yes	20.00	Oral part of the exam	Yes	30.00
Literature						
Ord.	Author	Title		Publisher	Year	
1,	European Committee for Standardization, CEN	Evrokod EC6. Proračun zidanih konstrukcija, Deo 1-1		GF, Beograd	2006	
2,	European Committee for Standardization, CEN	Evrokod EC8, Proračun seizmički otpornih konstrukcija, Deo 1		GF, Beograd	2006	
3,	Radić, J. i suradn.	Zidane konstrukcije 1		HSN i GF Zagreb	2007	
4,	Folić, R.	Zidane konstrukcije-skripta		FTN, Novi Sad	2011	
5,	Drysdale, R. et al.	Masonry Structures-Beahvior and design		Prentice-Hall, E. Cliffs, New Jersey	1994	
6,	Roberts, J. et all.	Concrete Masonry-Designer's Manual		Spon, London nad New York	2001	

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Table 5.2 Course specification

Course:		Engineering Geodesy				
Course id:	GH507					
Number of ECTS:	4					
Teacher:	Ninkov Đ. Toša					
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 for acquiring professional knowledge and application in practice.						
2. Educational outcomes (acquired knowledge): Acquired knowledge is used in professional courses. Student is competent to utilize acquired knowledge in further education in professional courses.						
3. Course content/structure: Contemporary methods for gathering and processing data in surveying. Digital topography, photogrametry and remote detection. Digital terrain models (DTM) and their application in designing and building structures. Designing and realizing projects on local surveying networks. Elaborating projects on 3D marking of dots, lines and surfaces for approximating construction structures. Marking control. Calculating the amount of the realized works from DMT. Projects on deformation measuring. Application of surveying in designing, constructing and exploiting tunnels, dams and other high structures. GIS technology and application. Communal information systems.						
4. Teaching methods: Lectures. Exercises, Tutorials. Prerequisites: 30% of points should be provided through the obligatory tasks during the teaching process. Examination: Knowledge evaluation: guided and individual elaboration of obligatory tasks; The written examination – theory and tasks 35%, final examination – oral form 35%.						
Knowledge evaluation (maximum 100 points)						
Pre-examination obligations		Mandatory	Points	Final exam	Mandatory	Points
Computer exercise defence		Yes	20.00	Written part of the exam - tasks and theory	Yes	35.00
Computer exercise attendance		Yes	5.00	Oral part of the exam	Yes	35.00
Lecture attendance		Yes	5.00			
Literature						
Ord.	Author	Title		Publisher	Year	
1,	T. Ninkov	Inženjerska geodezija		skripta sa predavanja	2007	
2,	T. Ninkov	GIS tehnologija i njena primena		Građevinski rečnik	2001	
3,	T. Ninkov	GPS tehnologija i njena primena		skripta sa predavanja	2007	

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Table 5.2 Course specification

Course:		Special Metal Structures				
Course id:	GG513					
Number of ECTS:	4					
Teacher:	Kisin S. Srđan					
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: Obtaining knowledge necessary for designing, constructing and maintaining structures made of complex metals.						
2. Educational outcomes (acquired knowledge): Enabling students to calculate, dimension and constructively model metal structures from special steel, aluminium and other alloys.						
3. Course content/structure: Light-weight metal structures. Spatial truss systems – configuration, calculation, design and assembly specificities. Application with roof overhangs. Aluminium structures. Calculation specificities. Application in building engineering, in power-line pylons and transportation platforms. Technologies for welding steel, aluminium and certain alloys. Investigating the welded joints.						
4. Teaching methods: Lectures. Auditory and graphic practice. Tutorials.						
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			
Term paper		Yes	20.00			
Term paper		Yes	20.00			
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Grupa autora	Light-weight steel and aluminium structures		Elsevier, Oxford	1999	

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Table 5.2 Course specification

Course:		<h2 style="margin: 0;">Noise, Vibration and Earthquakes in Surroundings</h2>				
Course id:	GG524					
Number of ECTS:	4					
Teacher:	Gajin S. Slobodan					
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:						
Obtaining knowledge on basic principles, methods and techniques in the field of technical acoustics, vibrations and earthquakes, especially in the field of civil engineering and the protection of living and working environment.						
2. Educational outcomes (acquired knowledge):						
Acquired knowledge is used in professional courses and engineering practice. Student is capable of analysing and solving problems in the field of protection from noise in the living and working environment.						
3. Course content/structure:						
<p>Notions of a sound source, elastic environment and sound wave. Characteristic wave sizes: amplitude, period, frequency, circle frequency, wave distribution velocity, wave length. Air and structural waves. Musical tone, complex sound, sound wave spectre. Notion of acoustic space, characteristic sizes of sources and space: sound force of the source, sound intensity, sound energy density, density and pressure of an acoustic space, movement, velocity and acceleration of elastic environment particles, level of power, intensity and pressure, constant level of sound pressure – equivalent value, acoustic dose. Sound distribution in an open acoustic space, superpenetration of acoustic influences from multiple sources. Sound distribution in a closed acoustic space: reflection, breaking, diffraction, absorption and reverberation time. Quantitative and qualitative evaluation of sound effects. Measuring and research equipment for measuring and researching phenomena related to sound. Contemporary trends in the field of sampling, processing and acquisition of results of acoustic researches – acoustic map. Monitoring of acoustic parameters. Strategy of protection from vibrations and earthquakes. Methods and means of vibration protection. Methods and means of vibration protection applied for the protection of people, structures and sensitive equipment. Perspectives in developing methods and means of vibration protection.</p>						
4. Teaching methods:						
At lectures students are delivered theoretical and practical explanations predicted by the course content. At auditory practice students are presented with the possibilities of software and equipment for solving problems in the field of technical acoustics, vibrations, and earthquakes. Students have an obligation to do one graphic paper during the semester. Examination has an oral part (theoretical and practical). During the semester, oral examination can be taken as two partial examinations. Examination can be taken in the exam terms. Students who do not pass the oral part of the examination via partial examinations, has to pass it during the exam terms.						
Knowledge evaluation (maximum 100 points)						
Pre-examination obligations		Mandatory	Points	Final exam	Mandatory	Points
Exercise attendance		Yes	5.00	Coloquium exam	No	20.00
Graphic paper		Yes	30.00	Coloquium exam	No	20.00
Lecture attendance		Yes	5.00	Theoretical part of the exam	Yes	40.00
Practical part of the exam - tasks					Yes	20.00
Literature						
Ord.	Author	Title		Publisher	Year	
1,	EU	6.Pravna regulativa EU: Direktive 89/655/EEC, 2000/14/EC, 2002/49/EC i 2003/10/ EC, Brisel, EU.		EU	2003	
2,	CVETKOVIĆ, D., PRAŠČEVIĆ, M.	Buka i vibracije		Izdavačka jedinica Univerziteta u Nišu	1999	
3,	Gajin, S.	Dinamički uticaji tehničkog okruženja i zaštita od njih		Centar za univerzitetske studije, TEMPUS Centar	1994	

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Table 5.2 Course specification

Course:		Special Timber Structures				
Course id:	GG514					
Number of ECTS:	4					
Teacher:	Kočetov-Mišulić Đ. Tatjana					
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:						
Obtaining knowledge necessary for design, construction and maintenance of complex structures made of timber and modern wood products.						
2. Educational outcomes (acquired knowledge):						
Achieving competencies in solving complex structural problems in the field of timber structures – buildings and bridges.						
3. Course content/structure:						
Contemporary trends in developing of timber structures – materials and joints. Advanced design methods of timber structures according to limit states. Methods and techniques of laboratory and in situ testing of new materials, joints and elements. Prefabrication of composite wood based elements. Timber houses – systems, characteristics, basic elements and joints: behaviour of elements and joints under seismic action. Complex timber structures from glulam and cross-lam timber - concept, structural systems, static schemes and structural advantages. Timber bridges – static schemes, disposition solutions, elements of bearing structures. Construction, protection, maintenance.						
4. Teaching methods:						
Lectures and complex numerical/graphic tasks (obligatory attendance). Tutorials. Pre-examin obligations: Seminar paper – project. Oral exam. In every form of knowledge examination , a student has to pass the lower knowledge limit.						
Knowledge evaluation (maximum 100 points)						
Pre-examination obligations		Mandatory	Points	Final exam	Mandatory	Points
Project		Yes	50.00	Oral part of the exam	Yes	30.00
Project defence		Yes	20.00			
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Gojković M., Stojić D.	Drvene konstrukcije		Građevinski fakultet & Grosknjiga, Beograd	1996	
2,	Gojković M., Stevanović B.	Drveni mostovi		Naučna knjiga, Beograd	1985	
3,	Evrokod 5 -Proračun drvenih konstrukcija	Deo 1.1. - Opšta pravila i pravila za proračun zgrada		CEN	2004	
4,	Evrokod 5-Proračun drvenih konstrukcija	Deo 1.2. - Opšta pravila za konstrukcije pod dejstvom požara		CEN	2004	
5,	Evrokod 5 - Proračun drvenih konstrukcija	Deo 2. - Mostovi		CEN	2004	
6,	Kujundžić Vojislav	Savremene drvene konstrukcije		Građevinska knjiga, Beograd	1989	
7,	Gojković M., Stevanović B. i dr.	Drvene konstrukcije - zbirka zadataka i izvodi iz propisa		Građevinski fakultet, Beograd	2007	
8,	Zakić B., Kočetov Mišulić T., Čakić B.	Montažne drvene kuće u svetu i kod nas		Univerzitet u Prištini	1998	

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Table 5.2 Course specification

Course:		Composite Structures				
Course id:	GG512					
Number of ECTS:	4					
Teacher:	Kisin S. Srđan					
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: Obtaining knowledge in the field of application and modelling composite structures.						
2. Educational outcomes (acquired knowledge): Enabling students to calculate, dimension and structurally model composite structures.						
3. Course content/structure: Elements of composite cross section in compositing steel and concrete. Rheological model. Composite cross section analysis. Types of composite devices and calculation. Cross section calculation for various types of compositing. Compositing truss girders. Composite slabs with profile sheet metal. Composite posts. Application of composite structures in building construction and bridge construction. Compositing wood and concrete.						
4. Teaching methods: Lectures. Auditory and graphic practice. Tutorials.						
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	40.00
Graphic paper		Yes	20.00	Coloquium exam	Yes	10.00
Lecture attendance		Yes	5.00	Oral part of the exam	Yes	20.00
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Pržulj	Spregnute konstrukcije		Građevinska knjiga, Beograd	1989	
2,	Horvatić D.	Spregnute konstrukcije čelik - beton		Masmedia	2003	

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Table 5.2 Course specification

Course:		<h2 style="margin: 0;">Repair of Concrete Structures</h2>			
Course id:	GG518				
Number of ECTS:	4				
Teachers:	Malešev M. Mirjana, Radonjanin S. Vlastimir				
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					
1. Educational goal:					
Obtaining knowledge on basic aspects on the durability of concrete structures and the methodologies and methods for assessing the real condition of concrete and precast structures.					
2. Educational outcomes (acquired knowledge):					
Acquired knowledge is used in professional courses and engineering practice. A student is capable of selecting and planning the most optimal methods for repairing a determined concrete elements or structures depending on the cause and degree of damage, repair possibilities, availability of financial resources and other relevant conditions.					
3. Course content/structure:					
Technical conditions and criteria for selecting the material for concrete structure repair. Preparation of concrete structures for repair (concrete preparation, reinforcement preparation). Techniques of in-building reparatory materials. Methods for increasing the filling possibilities. Crack repair procedures. Structural repair and reinforcement (methods, details and calculation basis); decreasing the bearing capacity of structural elements; transferring the load to adjacent structural elements of satisfactory bearing capacity; decreasing the span in structures without satisfactory bearing capacity; alteration of the structural system; strengthening the structures by prestressing procedures; repairs by cross section increase; reinforcement and repair by gluing additional lamellas. Materials for repairs and protection of concrete structures. Technical regulative in the field of the repair of concrete structures. Examples of the repairs of concrete structures.					
4. Teaching methods:					
Within lectures, students are delivered presentations with photographs, tables, diagrams, formulas and emphasised texts – definitions to provide explanations for the content determined by the syllabus. There are also short thematic films. At auditory practice students are presented with diverse structures where the repair has been performed in order to be better acquainted with possible variations in the repair of concrete elements and structures. Students have an obligation to do a graphic paper with the elaboration and the defence of an idea and procedure for repairing a certain concrete element or structure. All students have an obligatory professional excursion (structures under repair). The examination has an oral part (theoretic and practical). During the semester, the oral examination can be taken as two partial examinations. The examination can be taken in the exam terms. Students who do not take oral part of the examinations via partial examinations are obliged to take the ora					
Knowledge evaluation (maximum 100 points)					
Pre-examination obligations		Mandatory	Points	Final exam	
		Mandatory	Points		
Exercise attendance		Yes	5.00	Coloquium exam	
Lecture attendance		Yes	5.00	Oral part of the exam	
Term paper		Yes	20.00		
Literature					
Ord.	Author	Title		Publisher	Year
1,	Urednik Bojan Grum	Sanacije Betonskih objekto		družba za založništvo izobraževanje raziskovanje	2004
2,	Vlastimir Radonjanin, Mirjana Malešev, Mihailo Muravljov	Materijali i tehnike sanacije i zaštite betonskih konstrukcija - materijali sa predavanja			2005
3,	Group of authors	Concrete Repair manual, Volume 1		ACI, BRE, ICRI, Concrete Society	2003
4,	Group of Authors	Concrete Repair Manual, Volume 2		ACI, BRE, ICRI, Concrete Society	2003

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Table 5.2 Course specification

Course:		<h2 style="margin: 0;">Damages and Repair of Masonry, Steel and Timber Structures</h2>			
Course id:	GG517				
Number of ECTS:	4				
Teachers:	Kočetov-Mišulić Đ. Tatjana, Malešev M. Mirjana, Radonjanin S. Vlastimir				
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:					
Introduction to basic aspects of durability of masonry, steel and timber structures.					
2. Educational outcomes (acquired knowledge):					
Student is competent to register and classify defects and damages, determine their cause and assess the condition of masonry, steel and timber structures. Student is also capable to elect and plan the most optimal method for repairing a certain element or an entire structure depending on the cause and level of damage, possibilities for repair, available financial means and other relevant conditions.					
3. Course content/structure:					
Masonry structures: Causes, deterioration mechanisms and forms of damage in masonry structures. Classification and presentation of damage in masonry structures due to structure overload, undistributed settlement and accidental actions (fire, earthquake, explosion, etc). Materials and techniques for structural repair of masonry structures. Materials and techniques for protecting masonry structures (moisture protection, heat protection, etc.). Steel structures: Damages on steel structures due to corrosion and their classification. Damages on steel structures due to high temperatures and fires, snow overloads, ice influence in closed steel profiles, etc. Methods and techniques for repairing the damaged steel structures. Protection of steel structures. Timber structures: Factors for providing durability and expected exploitation period of individual types of timber structures. Types, classification and illustration of defects and damages in timber structures related to the nature of the cause. Methods and techniques for identifying and quantifying damages. Methods and techniques for repair and protection (replacement, filaments, gluing, reinforcement, element addition, compression). Repairing the cultural heritage structures. Examples of characteristic damage, assessment and repair of masonry, steel and timber structures.					
4. Teaching methods:					
Within lectures, students are delivered presentations with photographs, tables, diagrams, formulas and emphasised texts – definitions to provide explanations for the content determined by the syllabus. There are also short thematic films. At auditory practice students are presented with diverse structures where assessment and repair is completed in order to be better acquainted with the methodology, gathered data processing and decision-making, as well as with possible repair solutions. In all teaching forms students need to take active participation. Students have an obligation to do a seminar paper. For all students there is an obligatory professional excursion (structures under repair). The examination has an oral part (theoretical and practical). During the semester, the oral examination can be taken as three partial examinations. Students who do not take the oral part of the examinations via partial examinations are obliged to take the oral examination in the exam terms.					
Knowledge evaluation (maximum 100 points)					
Pre-examination obligations		Mandatory	Points	Final exam	
		Mandatory	Points		
Exercise attendance		Yes	5.00	Coloquium exam	
Lecture attendance		Yes	5.00	Coloquium exam	
Presentation		No	10.00	Oral part of the exam	
Term paper		Yes	20.00		
Literature					
Ord.	Author	Title		Publisher	Year
1,	grupa autora	Oštećenja i sanacija zidanih, čeličnih i drvenih konstrukcija- tekstovi sa predavanja		autori	2007
2,	Jurgen Blaich	Poruchy stavieb		Jaga group vydavatelstvo, Bratislava	2001
3,	Svetislav Vučenović	Urbana i arhitektonska konzervacija		Društvo konzervatora Srbije	2004
4,	S.Thelandersson, H.J. Larsen	Timber Engineering		John Willey & Sons, LTD	2003

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Table 5.2 Course specification

Course:		Structure Monitoring and Diagnostics by Applying Dynamic Analysis Method				
Course id:	GG523					
Number of ECTS:	4					
Teacher:	Gajin S. Slobodan					
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:						
To obtain knowledge on fundamental principles, methods and techniques of dynamic analysis in the field of condition diagnostics and technical system monitoring, with a special overview of construction structures.						
2. Educational outcomes (acquired knowledge):						
Acquired knowledge is used in professional courses and engineering practice. Student is capable to perform monitoring and to perform condition diagnostics of a construction structure based on investigating its dynamic and structural parameters.						
3. Course content/structure:						
Experimental vibration analysis. Measuring and research equipment and instruments. "Vibration signature" of a structure. Application of the initial "vibration signature" method. Quality demands and/or acceptability of vibration parameters. Technical regulative in the field of vibrations and quakes of construction (fixed) structures. Some examples from engineering practice: identification of micro cracks in concrete slabs and walls based on the application of a "vibration map", identification of a source of induced vibrations on a structure made by machines and plants in the neighbourhood, identification of the source of vibration modulation on the bearing structure of a cooling tower, identification of a damage degree on a cement mill foundations based on a "vibration map". Structure condition parameters and their origin, processing and acquisition. Structure condition parameter monitoring in real time. Wireless systems for archiving the structure condition parameters: sensors, AD converters, inducers, communication system, system for processing and acquisition of condition parameter signals. Problems in defining acceptability and/or quality demands for structure condition parameters. Application of the wireless communication system in monitoring bridges, chimneys, towers, viaducts, aqueducts and industrial structures.						
4. Teaching methods:						
Within lectures, students are delivered presentations with photographs, tables, diagrams, formulas and emphasised texts – definitions to provide explanations for the content determined by the syllabus. At auditory practice students are presented with diverse structures where monitoring and condition diagnostics methods and techniques are realized based on measuring dynamic and structural parameters. Students have an obligation to do a graphic paper with the elaboration and the defence of a diagnosed condition of a certain structure. During the semester, the oral examination can be taken as two partial examinations. The examination can be taken in the exam terms. Students who do not take oral part of the examinations via partial examinations are obliged to take the oral examination in the exam term.						
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
Graphic paper		Yes	20.00	Coloquium exam	No	20.00
Lecture attendance		Yes	5.00	Coloquium exam	No	20.00
Oral part of the exam					Yes	40.00
Literature						
Ord.	Author	Title		Publisher	Year	
1,	BROCH, J. T.	Acoustic Noise Measurements, The Application of the Brüel&Kjar Measuring System		Brüel&Kjar	1973	
2,	Gajin, S.	Dinamički uticaji tehničkog okruženja i zaštita od njih		Centar za univerzitatske studije, TEMPUS Centar	1994	

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Table 5.2 Course specification

Course:		<h2 style="margin: 0;">Nonlinear Analysis of Structures</h2>				
Course id:	GG516					
Number of ECTS:	4					
Teacher:	Lađinović Ž. Đorđe					
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:						
Acquiring knowledge related to nonlinear analysis of line structures for diverse actions.						
2. Educational outcomes (acquired knowledge):						
Usability of the knowledge in the field of complex structure analysis for diverse actions and the capability for successful solving of concrete problems in the field of structure design.						
3. Course content/structure:						
Idealizations with linear static of line structures. Accurate theory on movement geometry and the balance conditions on a deformed rod. Material nonlinearity. Idealization with material nonlinearity. Links between interior and exterior forces with geometric nonlinearity. Knots equilibrium equations. Notion of imperfections, derivatives and solutions for differential equations for rods. Physical nonlinearity, basic notions. Approximation of physically nonlinear problems. General bilinear approximation. Plastic hinges and plastic analysis. Interaction of interior forces in physical nonlinearity. Simultaneous geometric and physical nonlinearity. Iterative procedures for calculating the bearing capacity and deformation of plane line systems. Computer application in solving nonlinear problems in line structures.						
4. Teaching methods:						
Interactive work with students in order to continually monitor their knowledge level. Theoretical analysis on the phenomena included in the course content and numeric modelling.						
Knowledge evaluation (maximum 100 points)						
Pre-examination obligations		Mandatory	Points	Final exam	Mandatory	Points
Computer exercise attendance		Yes	10.00	Written part of the exam - tasks and theory	Yes	40.00
Homework		Yes	20.00			
Term paper		Yes	30.00			
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Prakash V., Powell G.H., Campbell S.	DRAIN-2DX – Base Program Description and User Guide		Department of Civ.Eng., University of California	1993	
2,	Wilson E.L.	Three-Dimensional Static and Dynamic Analysis of Structures		CSI, Berkeley	2002	
3,	Bathe K.J.	Finite Element Procedures		Prentice Hall	1996	
4,	Sullivan T., Priestley N., Calvi G.	Seismic Design of Frame-Wall Structures		IUSS Press, Pavia, Italy	2006	

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Table 5.2 Course specification

Course:		Finite Element Method				
Course id:	GG515					
Number of ECTS:	4					
Teacher:	Kovačević I. Dušan					
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:						
Obtaining knowledge in the field of numerical modelling of structure behaviour for diverse actions by applying the finite element method (FEM) and the application of adequate computer software for FEM structure analysis.						
2. Educational outcomes (acquired knowledge):						
Enabling students in the field of numerical modelling of structure behaviour for diverse actions by applying the finite element method (FEM) and the application of adequate computer software for FEM structure analysis.						
3. Course content/structure:						
Basic concept of structure modelling. Continual and discrete calculation models. Historical development and interpretation of the finite element method (FEM). Diverse forms of FEM. Matrix formulation of basic equations of the theory of elasticity. Variation formulation of FEM. General theory of FEM: element analysis, transformation of the element stiffness matrix, formation of the system stiffness matrix, contour conditions, conditional equation solution, calculation result interpretation. Direct method. Residue method. Finite elements and interpolation functions: line, triangular and rectangular elements. Numerical integration. Computer implementation of the FEM application in stress-strain analysis and calculations on real engineering structures.						
4. Teaching methods:						
Interactive work with students in order to continually monitor their knowledge level. Theoretic analysis on the phenomena included in the course content and FEM numerical structure modelling for diverse actions by applying CASA (Computer Aided Structural Analysis) computer software.						
Knowledge evaluation (maximum 100 points)						
Pre-examination obligations		Mandatory	Points	Final exam	Mandatory	Points
Term paper		Yes	50.00	Theoretical part of the exam	Yes	50.00
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Miodrag Sekulović	Metod konačnih elemenata		Građevinska knjiga, Beograd	1988	
2,	Dušan Kovačević	MKE modeliranje u analizi konstrukcija		Građevinska knjiga, Beograd	2006	
3,	Bathe K.J.	Finite Element Procedures		Prentice Hall	1996	
4,	Hartmann F., Katz C.	Structural Analysis with Finite Elements		Springer, New York	2003	

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Table 5.2 Course specification

Course:		Design of Tall Buildings				
Course id:	GG522					
Number of ECTS:	4					
Teacher:	Lađinović Ž. Đorđe					
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: To obtain specific knowledge related to the calculation, design and construction of skyscrapers from various materials.						
2. Educational outcomes (acquired knowledge): Enabling students to solve complex problems in construction practice in the field of building construction design.						
3. Course content/structure: Notion, definition and specificities of skyscrapers. Main actions: constant and useful building loads, wind action, temperature action, seismic action. Overview of bearing systems in skyscrapers for gravitation action. Application of diverse bearing systems for providing lateral stability of structures: concrete, steel and composite structures. Specific manner of foundation in skyscrapers. Structural behaviour under the action of wind and earthquake forces. Dynamic response of skyscrapers. Analysis on the influences and calculation models for preliminary and detailed numerical analysis. Designing and constructing skyscrapers: conceptual design, main and brief project.						
4. Teaching methods: Lectures, numerical-graphic practice. Tutorials. Practice is done in groups according to the programme completely following the course content. Prerequisite for taking the examination are positively graded individual tasks and demanded success at partial examinations, or a defended seminar paper.						
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	40.00
Graphic paper		Yes	20.00			
Lecture attendance		Yes	5.00			
Term paper		Yes	30.00			
Literature						
Ord.	Author	Title		Publisher	Year	
1,	Aničić D., Fajfar P., Petrović B., Savitz-Nosan A., Tomaž	Zemljotresno inženjerstvo – visokogradnja		Građevinska knjiga, Beograd	1990	
2,	SRPS	Zbirka srpskih pravilnika i standarda za građevinske konstrukcije		GF, Beograd	1995	



Study Programme Accreditation

MASTER ACADEMIC STUDIES

Civil Engineering

Standard 06. Programme Quality, Contemporaneity and International Compliance

The study programme is coordinated with contemporary trends and situation in profession, and it is compatible with similar programmes in international higher education institutions.

The study programme at the graduate academic studies in Civil Engineering designed in this manner is omniscient and provides students with the latest scientific and professional knowledge in this field.

The study programme in Civil Engineering is compatible with:

1. University of Glasgow, Faculty: Engineering, Department: Civil Engineering

www.civil.gla.ac.uk/

2. Czech Technical University in Prague, Faculty of Civil Engineering,

www.fsv.cvut.cz/studente/bakalmag/bc/bce.php

3. Politehnika Warszawska, Civil Engineering

www.il.pw.edu.pl/index



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Study Programme Accreditation

MASTER ACADEMIC STUDIES

Civil Engineering

Standard 07. Student Enrollment

The Faculty of Technical Sciences, in accordance with the social demands and its own resources, enrolls at the Master studies in Civil Engineering, at the budget financing and self-financing, a certain number of students that is every year defined by the special Decision of the NNV FTN. The selection of the students and their enrolment is performed among the applied candidates based on their success during the previous education, as defined by the Statute on the enrolment of students to the study programmes.

Students from other study programmes, as well as those with already completed studies, can enrol this study programme. In these cases the Evaluation committee (made by the head of the study programme and all heads of the chairs participating in the realization of the study programme) evaluate all passed activities by the candidates and based on the acknowledged number of points determine whether the candidate can enrol the graduate – Master studies of the selected study group. The passed activities can be accepted entirely, can be accepted partially (the committee can ask for additional work) or need not be accepted.



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Study Programme Accreditation

MASTER ACADEMIC STUDIES

Civil Engineering

Standard 08. Student Evaluation and Progress

The final grade at each individual course in this programme is formed by continual monitoring of students' accomplishments and the results obtained during the academic year and on final examinations.

Students master the study programme by taking examinations and thus obtaining a certain number of ECTS credits, in accordance with the study programme. Each course at the study programme has a set number of ECTS credits which students obtain on successfully passing the examination.

The number of ECTS credits is determined on the basis of working activities of students in taking a certain course and by applying the unique methodology at the Faculty of Technical Sciences for all study programmes. 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. The minimal number of points that can be obtained by a student after fulfilling prerequisites during the teaching process is 30, and the maximal one is 70.

Each course at the study programme has a clear and publicly known mode of obtaining points. The manner of obtaining points during classes includes a number of points given to a student on the basis of each individual type of activities during classes, or by fulfilling prerequisites and taking examinations.

A student's 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.

A student can be able to take the examination from a given course if they have at least 15 ECTS credits from prerequisites. Additional conditions for taking the examination are defined individually for each course. Student's advancement during education is defined in the Regulations for Students at Master Studies.

**Study Programme Accreditation**

MASTER ACADEMIC STUDIES

Civil Engineering

Standard 09. Teaching Staff

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

Total number of lecturers is adequate to the demands of the study programme and depends on the number of courses performed and the number of classes per course. The total number of lecturers is adequate to cover the total number of classes at the study programme, so that each lecturer has in average 180 classes of active teaching (lectures, tutorials, practice, practical work,...) annually, i.e. 6 classes per week. Out of the total number of necessary teachers, all 100% is employed full-time.

The number of assistants is adequate for the demands of the study programme. The total number of assistants at the study programme is adequate to cover the entire number of classes at the programme, so that assistants have the average of 300 classes of active classes annually, i.e. 10 classes per week.

Scientific and professional qualifications of the teaching staff are adequate to educational scientific field and the level of their obligations. Each teacher has at least five references from the narrow professional and scientific field in which they hold lectures at the study programme.

The number of students in a group for lectures is 32, practice groups have 16 students and laboratory practice groups have up to 8 students.

All data on lecturers and assistants (CV, title appointed, references) are available to the public.

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Science, arts and professional qualifications

Name and last name:		Bačkalić M. Todor	
Academic title:		Associate Professor	
Name of the institution where the teacher works full time and starting date:		Faculty of Technical Sciences - Novi Sad 05.10.1992	
Scientific or art field:		Transport System Technologies	
Academic career	Year	Institution	Field
Academic title election:	2011		Transport System Technologies
PhD thesis	2001	Faculty of Technical Sciences - Novi Sad	Transport System Technologies
Magister thesis	1996	Faculty of Transport and Traffic Engineering - Beograd	Transport System Technologies
Bachelor's thesis	1992	Faculty of Technical Sciences - Novi Sad	Transport System Technologies
List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	S0216	Water Transport Technology	(S00) Traffic and Transport Engineering, Undergraduate Academic Studies (S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies
2.	S0220	Organization of Water Transport	(S00) Traffic and Transport Engineering, Undergraduate Academic Studies
3.	S0I4N4	Process management in water transport	(S00) Traffic and Transport Engineering, Undergraduate Academic Studies
4.	S0I51V	Waterways and Ports	(S00) Traffic and Transport Engineering, Master Academic Studies (G00) Civil Engineering, Master Academic Studies
5.	S0I52V	Ship design and exploitation of ships	(S00) Traffic and Transport Engineering, Master Academic Studies
6.	S0I53V	Navigation and vessel traffic control	(S00) Traffic and Transport Engineering, Master Academic Studies
7.	LIM25	Transport Technologies II	(LIM) Logistic Engineering and Management, Master Academic Studies
8.	S0MI12	Theory of ship's motion and maneuverability	(S00) Traffic and Transport Engineering, Master Academic Studies
9.	DSSB1	Water transport modelling	(S00) Traffic Engineering, Doctoral Academic Studies
10.	DSSB6	Traffic management on inland waterways	(S00) Traffic Engineering, Doctoral Academic Studies
Representative references (minimum 5, not more than 10)			
1.	Tehnologija vodnog saobraćaja deo I - Plovna prevozna sredstva, Edicija - "Tehničke nauke - udžbenici", 2003. (prvo izdanje), 2005. (drugo izdanje), Fakultet tehničkih nauka, Novi Sad		
2.	Eksplotaciona svojstva brodskih dizel motora, 2001., Saobraćajni odsek Fakulteta tehničkih nauka, Novi Sad		
3.	Analysis and Reallocation of Reliability of Power-Steering Group on Ships with "Z" Transmission", Proceedings of the First International Conference on Marine Industry "MARIND "96" Volume III pg. 271-279, Varna, Bulgaria, 2-7 June 1996.		
4.	Modeling of Vessel Traffic Process in One-Way Straits at Alternating Passing, The Second International Conference on Marine Industry "MARIND "98", Varna, Bulgaria, September 28-October 2 1998.		
5.	Modelling of Vessel Traffic Process at Controlled Navigation on Artificial Inland Waterways, European Inland Waterway Navigation Conference, Győr, Hungary, 11-13 June, 2003.		
6.	Renewal Process of Power-Steering Group on Motor Cargo Ships of MT-1500 Series, International Conference - Dependability and Quality Management DQM 2004, Belgrade, Serbia, 16-17 June, 2004., Proceedings pg. 120-124		
7.	Fuzzy approach to modelling of the control of the ship locking process, European Inland Waterway Navigation Conference, Szeged, Hungary, 11-13 June, 2005.		
8.	Organizacija saobraćaja na plovnom kanalima u funkciji propusne sposobnosti plovnog puta		
9.	Upravljanje saobraćajem na veštačkim plovnom putevima ograničenih dimenzija u funkciji njihove propusne sposobnosti		
10.	Balkan Arterial Waterway Danube-Morava-Danube, The First International Symposium Macedonian Transport Corridors, Bitola, Macedonia, 1996.		
Summary data for teacher's scientific or art and professional activity:			
Quotation total :		0	
Total of SCI(SSCI) list papers :		0	
Current projects :		Domestic :	International :
		2	0

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Science, arts and professional qualifications

Name and last name:	Brujić S. Zoran		
Academic title:	Assistant Professor		
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad 01.07.1996		
Scientific or art field:	Constructions in Civil Engineering		
Academic carieer	Year	Institution	Field
Academic title election:	2008	Faculty of Technical Sciences - Novi Sad	Constructions in Civil Engineering
PhD thesis	2008	Faculty of Technical Sciences - Novi Sad	Civil Engineering
Magister thesis	2001	Faculty of Technical Sciences - Novi Sad	Constructions in Civil Engineering
Bachelor's thesis	1993	Faculty of Technical Sciences - Novi Sad	Constructions in Civil Engineering

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

	ID	Course name	Study programme name, study type
1.	GG11	Fundamentals in Computing	(G00) Civil Engineering, Undergraduate Academic Studies
2.	GG203	Actions on Structures	(G00) Civil Engineering, Undergraduate Academic Studies
3.	GG25	Theory on Concrete Structures 1	(G00) Civil Engineering, Undergraduate Academic Studies
4.	GG28	Theory on Concrete Structures 2	(G00) Civil Engineering, Undergraduate Academic Studies
5.	GG30	Concrete Structures	(G00) Civil Engineering, Undergraduate Academic Studies
6.	GG405	Finishing Operations and Installation in Facilities	(G00) Civil Engineering, Undergraduate Academic Studies
7.	Z202	Graditeljstvo i životna sredina(uneti naziv na engleskom)	(Z20) Environmental Engineering, Undergraduate Academic Studies
8.	GG37	Basics of design in civil engineering structures	(G00) Civil Engineering, Undergraduate Academic Studies
9.	GH407	Concrete structures - Hydrotechnics	(G00) Civil Engineering, Undergraduate Academic Studies
10.	GP406	Concrete structures - Roads	(G00) Civil Engineering, Undergraduate Academic Studies
11.	GG501	Concrete Construction for Engineering Structures	(G00) Civil Engineering, Master Academic Studies
12.	GG505	Concrete Bridges	(G00) Civil Engineering, Master Academic Studies
13.	GG510	Assembled Concrete Structures	(G00) Civil Engineering, Master Academic Studies
14.	GG511	Special Prestressed and Composite Concrete Structures	(G00) Civil Engineering, Master Academic Studies
15.	GG531	Odabrana poglavlja zidanih konstrukcija	(G00) Civil Engineering, Master Academic Studies
16.	GD015	Rheology of Concrete Structures	(G00) Civil Engineering, Doctoral Academic Studies

Representative references (minimum 5, not more than 10)

1.	Starčev-Ćurčin A., Rašeta A., Brujić Z.: Automatic Obtaining of the Strutt-and-Tie Models for RC Plane Elements Vol. 8., No. 4., 11/12.2013, Technics Technologies Education Management / TTEM, 2013, Vol. 8, No 4, ISSN 1840-1503
2.	Brujić Z., Folić R.: Slenderness ratio criterion of reinforced concrete columns, Bulletins for Applied and Computer Mathematics, 2001
3.	Folić R., Brujić Z.: Dynamic analysis of columns made of time-dependent materials, Bulletins for Applied Mathematics, 1996, ISSN 0133-3526
4.	Folić R., Brujić Z.: Stability of compressed columns according to linear creep theory, Bulletins for Applied Mathematics, 1996, ISSN 0133-3526
5.	Starčev-Ćurčin A., Rašeta A., Brujić Z.: STRUT-AND-TIE MODELS OF REINFORCED CONCRETE PLANE MEMBERS, 4. Građevinarstvo nauka i praksa, Žabljak: Univerzitet Crne Gore, Građevinski fakultet, 20-24 Februar, 2012, pp. 329-336, ISBN 978-86-82707-21-9
6.	Brujić Z.: Optimal design of rectangular RC cross-sections subjected to uni-axial bending according to Eurocode 2, 1. International Symposium about Research and Application of Modern Achievements in Civil Engineering in the Field of Materials and Structures, Tara: Društvo za ispitivanje i istraživanje materijala i konstrukcija Srbije, 19-21 Oktobar, 2011, pp. 243-250, ISBN 978-86-87615-02-1
7.	Starčev-Ćurčin A., Rašeta A., Brujić Z.: Optimization of RC Plane Elements by Strut-and-Tie Models, 1. International Symposium about Research and Application of Modern Achievements in Civil Engineering in the Field of Materials and Structures, Tara: Društvo za ispitivanje i istraživanje materijala i konstrukcija Srbije, 19-21 Oktobar, 2011, pp. 195-202, ISBN 978-86-87615-02-1
8.	Folić R., Brujić Z., Lekić R.: Condition assesment and design of structures for water aerator Naziv skupa: 11th Internationa Conference Structural Faults Repair-2006, UDK: Abstracts p. 139-140 CD Rom – OBUL-FOL-B
9.	Folić R., Brujić Z.: Numerical analysis of Reinforced Concrete Slender Columns Design Procedures Naziv skupa: The Ninth Symposium of Mathematics and its Applications
10.	Folić R., Lađinović Đ., Brujić Z.: Analysis and Design of RC Structures According to EC 8 Naziv skupa: International Symposium on Earthquake Engineering ISEE 2000 Proceedings, UDK: 624.042.7 (082) (063)

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

Civil Engineering

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

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	Study Programme Accreditation MASTER ACADEMIC STUDIES Civil Engineering	

Science, arts and professional qualifications

Name and last name:		Cekić D. Zoran	
Academic title:		Full Professor	
Name of the institution where the teacher works full time and starting date:		-	
Scientific or art field:		Organization, Construction Technology and Management	
Academic carier	Year	Institution	Field
Academic title election:	2011	University Union Nikola Tesla - Beograd	Organization, Construction Technology and Management
PhD thesis	2004	Faculty of Civil Engineering - Beograd	Organization, Construction Technology and Management
Magister thesis	2001	Faculty of Civil Engineering - Beograd	Organization, Construction Technology and Management
Bachelor's thesis	1991	Faculty of Civil Engineering - Beograd	Constructions in Civil Engineering
List of courses being held by the teacher in the accredited study programmes			
ID	Course name	Study programme name, study type	
1.	GM510 Management of International Projects	(G00) Civil Engineering, Master Academic Studies	
2.	GD025 Selected topics in project management in construction	(G00) Civil Engineering, Doctoral Academic Studies	
Representative references (minimum 5, not more than 10)			
1.	Cirovic, G. and Cekić, Z. (2002) "Case Based Reasoning Model applied as a decision support for construction projects", "Kybernetes", No. 6, Vol 31, pp. 896-908, 'Official Journal of the World Organisation of Systems and Cybernetics, MCB Univ. Press, Bradford, ISSN 0368-492X, UK, 2002		
2.	Cekic, Z. (2002) "Methodology of IT-enabled Process Change in the Construction Industry", "Tehnika - Naše građevinarstvo" Vol 56, No 1, Januar 2002, strand. 7-16		
3.	Cekic, Z. (2002) "Integration of Computer Application in Construction", "Izgradnja", Vol 56, No 1-2, Januar-Februar 2002, strane. 42-50		
4.	Cekic, Z. (2004) "IT protocol of construction project process", "Izgradnja", Vol 58, No 1-2, Januar-February 2004, strane 5-11		
5.	Cekic, Z. (2004) "Strategic Information System of Construction Company", "Tehnika - Naše građevinarstvo", Vol 58, No 6, 2004, strane. 1 - 8		
6.	Cekic, Z. (2004) "Neural Network Model Applied in International Project Portfolio and Corporate Strategy Developing", "Izgradnja", Vol 58, No 10, Octobar 2004, strane 257 - 267		
7.	Cekic, Z. (2004) "Application of Delphi Method in Selection of International Projects", "Management" Monthly Review of Faculty of Organizational Sciences, University of Belgrade, Year IX, No 36, December 2004, pp. 47 - 56,		
8.	Cekic, Z. (2005) "Influence of the National Environment on the International Competetiveness of Serbian Construction Companies according to the porter Diamond Framework", "Tehnika - Naše građevinarstvo", Vol 59, No 4, 2005, strane 1 - 12		
9.	Cekic, Z. (2005) "Application of Delphi Method in Selection of International Competitive Advantages of Construction Companies", "Izgradnja", Vol 59, No 10-11, November 2005, strane 389 - 396		
10.	Cirovic, G and Cekić, Z. (2006) "Case-Based Reasoning Applied in Preliminary Design Phase of Construction Projects", "Izgradnja", Vol 60, No 3-4, April 2006, strand. 55 - 62,		
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 :	0

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	Study Programme Accreditation MASTER ACADEMIC STUDIES Civil Engineering	

Science, arts and professional qualifications

Name and last name:	Ćirović S. Goran		
Academic title:	Guest Professor		
Name of the institution where the teacher works full time and starting date:	-		
Scientific or art field:	Organization, Construction Technology and Management		
Academic career	Year	Institution	Field
Academic title election:	2009		Organization, Construction Technology and Management
PhD thesis	1994	Faculty of Civil Engineering - Beograd	Organization, Construction Technology and Management
Magister thesis	1987	Faculty of Civil Engineering - Beograd	Organization, Construction Technology and Management
Bachelor's thesis	1982	Faculty of Civil Engineering - Beograd	Organization, Construction Technology and Management

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

	ID	Course name	Study programme name, study type
1.	GG519	Building Management	(G00) Civil Engineering, Master Academic Studies
2.	GI531	Application of GNSS systems	(GI0) Geodesy and Geomatics, Master Academic Studies
3.	GI540	Valuation of real estate	(GI0) Geodesy and Geomatics, Master Academic Studies
4.	SDGI3A	Selected topics in the valuation of buildings	(GI0) Geodesy and Geomatics, Specialised Academic Studies
5.	SDGI4A	Selected chapters of Land Management	(GI0) Geodesy and Geomatics, Specialised Academic Studies
6.	SDGI6A	Selected Chapters in Appraisal	(GI0) Geodesy and Geomatics, Specialised Academic Studies
7.	GD021	Selected Chapters in Process Modelling in Construction	(G00) Civil Engineering, Doctoral Academic Studies (OM1) Mathematics in Engineering, Doctoral Academic Studies

Representative references (minimum 5, not more than 10)

1.	Ćirović, G., editor in chief, International congress Sport Facilities / Standardizations and Trends SPOFA 2011, University of Belgrade, Faculty of Sport and Physical and Education Serbia, ISBN: 9788680855774 Belgrade 2011, pp. 195.
2.	Ćirović, G., editor in chief, International congress Sport Facilities / Current Position and Perspectives SPOFA 2009, University of Belgrade, Faculty of Sport and Physical and Education Serbia, ISBN: 9788680255576 Belgrade, 2009, pp. 215.
3.	Ćirović, G., Pamučar, D.: Decision support model for prioritizing railway level crossings for safety improvements: Application of the adaptive neuro-fuzzy system, Expert Systems with Applications, ISSN: 0957-4174, http://dx.doi.org/10.1016/j.eswa.2012.10.041 , In press
4.	Ćirović, G., Radonjanin, N., Trivunic, M., Nikolić, D., Optimization of uhpfr beams subjected to bending using genetic algorithms, Journal of Civil Engineering and Management, to be appear 2013
5.	Ćirović G, Pamučar D., Đorović B., Sekulovic D., "Optimizing a multi-product and multi-supplier the economic production quantity model using genetic algorithm ", International Journal of the Physical Sciences, ISSN 1992 - 1950, vol 7(2), pp. 262-272, 2012 godina.
6.	Peško, I., Trivunić, M., Ćirović, G., Mučenski, V., A preliminary estimate of time and cost in urban road construction using neural networks, Tehnički vjesnik, to be appear 2013.
7.	Regodić, M., Sekulović, D., Ćirović, G., Tadić, V., Drobnyak, S., Comparative analysis of pixel-based and object-oriented classification by using multi-spectral spot 5 images, Technics Technologies Education Management - TTEM, Vol. 8., No. 1., 2013.
8.	Ćirović, G., Sekulović, D., Pamučar, D., Regodić, M., Application of fuzzy logic in the process of vehicle routing optimization in logistic support, Technics Technologies Education Management - TTEM, Vol. 8., No. 2., 2013.
9.	Pamučar D., Đorović B., Božanić D., Ćirović G., "Modification of the dynamic scale of marks in analytic hierarchy process (ahp) and analytic network approach (anp) through application of fuzzy approach", Scientific Research and Essays, ISSN 1992 - 2248, vol 7(1), pp. 24 - 37, 2012 godina.
10.	Bakrac, S., Anđelić, S., Ćirović G., Pamučar, D., Sekulovic D., "Using a method of decoding aerial photographs in analyzing the accuracy of determining the orientation of medieval churches in Serbia ", Metalurgia international, ISSN 582-2214, vol. 17 br. 11, str. 224-231, 2012.

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

Quotation total :	18		
Total of SCI(SSCI) list papers :	2		
Current projects :	Domestic :	1	International : 1

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	Study Programme Accreditation MASTER ACADEMIC STUDIES Civil Engineering	

Science, arts and professional qualifications

Name and last name:		Dalmacija D. Božo	
Academic title:		Full Professor	
Name of the institution where the teacher works full time and starting date:		Faculty of Sciences - Novi Sad 20.02.1978	
Scientific or art field:		Chemist Science	
Academic carieer	Year	Institution	Field
Academic title election:	1996	Faculty of Sciences - Novi Sad	Chemist Science
PhD thesis	1984	Faculty of Sciences - Novi Sad	Chemist Science
Magister thesis	1981	Faculty of Sciences - Novi Sad	Chemist Science
Bachelor's thesis	1975	Faculty of Mathematics - Beograd	Chemist Science
List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	GH504	Water Quality	(G00) Civil Engineering, Master Academic Studies
2.	MPK024	Wastewater Treatment Process Design	(MPK) Inženjerstvo tretmana i zaštite voda - TEMPUS(uneti naziv na engleskom), Master Academic Studies
3.	MPK025	Drinking Water Treatment Process Design	(MPK) Inženjerstvo tretmana i zaštite voda - TEMPUS(uneti naziv na engleskom), Master Academic Studies
Representative references (minimum 5, not more than 10)			
1.	Tričković J., Ivančev-Tumbas I., Dalmacija B., Nikolić A., Trifunović S. (2007) Pentachlorobenzene sorbtion onto sediment organic matter, <i>Organic Geochemistry</i> 38/10, 1757-1769.		
2.	Prica, M., Dalmacija, B., Dalmacija, M., Agbaba, J., Krcmar, D., Trickovic, J., Karlovic, E. (2010) Changes in metal availability during sediment oxidation and the correlation with the immobilization potential, <i>EcoToxicology and Environmental Safety</i> , 73(6), 1370-1377.		
3.	Dalmacija M., Prica M., Dalmacija B., Rončević S., Klašnja M. (2011) QUANTIFYING THE ENVIRONMENTAL IMPACT OF As AND Cr IN STABILIZED/SOLIDIFIED MATERIALS, <i>Science of the Total Environment</i> , 412-413, 366-374.		
4.	Molnar J., Agbaba J., Dalmacija B., Rončević S., Prica M., Tubić A. (2012) Influence of pH and ozone dose on the content and structure of haloacetic acid precursors in groundwater. <i>Environmental Science and Pollution Research</i> , 19, 3079-3086.		
5.	Mohora E., Rončević S., Dalmacija B., Agbaba J., Watson M., Karlović E., Dalmacija M. (2012) Removal of natural organic matter and arsenic from water by electrocoagulation/flotation continuous flow reactor, <i>Journal of Hazardous Materials</i> , in press		
6.	Dalmacija, M., Prica, M., Dalmacija, B., Rončević, S., Rajić, L. (2010) Correlation between the results of sequential extraction and effectiveness of immobilization treatment of lead- and cadmium-contaminated sediment, <i>TheScientificWorldJOURNAL: TSW Environment</i> 10, 1–19.		
7.	J. Molnar, J. Agbaba, B. Dalmacija, M. Klašnja, M. Dalmacija, M. Kragulj (2012) A comparative study of the effects of ozonation and TiO ₂ -catalyzed ozonation on the selected chlorine disinfection by-product precursors content and structure, <i>Science of the Total Environment</i> , 425, 169-75.		
8.	Ljiljana Rajić, Božo Dalmacija, Milena Dalmacija, Srđan Rončević, Svetlana Ugarčina Perović (2012) Enhancing electrokinetic lead removal from sediment: Utilizing the moving anode technique and increasing the cathode compartment length, <i>Electrochimica Acta</i> , doi: 10.1016/j.electacta.2012.02.029.		
9.	Velimirović M., Prica M., Dalmacija B., Rončević S., Dalmacija M., Bečelić M., Tričković J. (2011) Characterisation, availability and risk assessment of the metals in sediment after aging, <i>Water Air Soil Pollut.</i> 214 (1-4) 219-229.		
10.	Miljana Prica, Božo Dalmacija; Milena Dalmacija; Jasmina Agbaba; Dejan Krcmar; Jelena Trickovic; Elvira Karlovic, (2010) Changes in metal availability during sediment oxidation and the correlation with the immobilization potential, <i>EcoToxicology and Environmental Safety</i> , 73(6), 1370-1377.		
Summary data for teacher's scientific or art and professional activity:			
Quotation total :		241	
Total of SCI(SSCI) list papers :		53	
Current projects :		Domestic :	International :
		2	4

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	Study Programme Accreditation MASTER ACADEMIC STUDIES Civil Engineering	

Science, arts and professional qualifications

Name and last name:	Dražić J. Jasmina		
Academic title:	Associate Professor		
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad 26.06.1985		
Scientific or art field:	Building Engineering - Construction and Architectural Constructions		
Academic career	Year	Institution	Field
Academic title election:	2010	Faculty of Technical Sciences - Novi Sad	Building Engineering - Construction and Architectural Constructions
PhD thesis	2005	Faculty of Technical Sciences - Novi Sad	Civil Engineering
Magister thesis	1993	Faculty of Technical Sciences - Novi Sad	Civil Engineering
Bachelor's thesis	1982	Faculty of Technical Sciences - Novi Sad	Civil Engineering

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

	ID	Course name	Study programme name, study type
1.	A374	Project and Construction Management 1	(A00) Architecture, Undergraduate Academic Studies
2.	GG13	Building Engineering 1	(G00) Civil Engineering, Undergraduate Academic Studies
3.	GG16	Building Engineering 2	(G00) Civil Engineering, Undergraduate Academic Studies
4.	GG31	Technology and Building Organization 1	(G00) Civil Engineering, Undergraduate Academic Studies
5.	GG33	Technology and Building Organization 2	(G00) Civil Engineering, Undergraduate Academic Studies
6.	GG404	Precasting and Assembly Technology	(G00) Civil Engineering, Undergraduate Academic Studies
7.	URZP22	Safety Aspects in the Built Environment	(ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies
8.	ZR302A	Safety at work in construction	(Z01) Safety at Work, Undergraduate Academic Studies
9.	ZRI43A	Management of safety at work process in construction	(Z01) Safety at Work, Undergraduate Academic Studies
10.	A394	Project and Building Management 2	(AH0) Architecture, Master Academic Studies
11.	GG520	Industrial Methods in Construction	(G00) Civil Engineering, Master Academic Studies
12.	GM501	System Theory and System Analysis	(G00) Civil Engineering, Master Academic Studies
13.	ZP514	Planning and organizing activities during events with catastrophic consequences	(ZP1) Disaster Risk Management and Fire Safety, Master Academic Studies

Representative references (minimum 5, not more than 10)

1.	Letić M., Dražić J.: Zgradarstvo, Novi Sad, Univerzitet u Novom Sadu Fakultet tehničkih nauka, 2001, str. 1-189, ISBN 86-80249-28-9
2.	Trivunić M., Dražić J.: Montaža betonskih konstrukcija zgrada, Drugo dopunjeno izdanje, Beograd, Univerzitet u Novom Sadu, FTN Novi Sad, AGM knjiga Beograd, 2009, str. 1-277, ISBN 978-86-86363-19-0
3.	Dražić J.: Conceptual designing of aseismic structures-evaluation of design solution, Materijali i konstrukcije, 2009, Vol. 1, No 52 (2009) 3-4, pp. 21-35, ISSN 0543-0798, UDK: 699.841=861
4.	Dražić J.: Vrednovanje i optimizacija montažnih konstrukcija-tehnološki aspekt., Tehnika, 2010, Vol. 1, br 3, str. 103-111, ISSN 0040-2176
5.	Dražić J.: Resursi za planiranje proizvodnje elemenata konstrukcija montažnih hala, Izgradnja, 2010, Vol. 1, br 3-4, str. 155-161, ISSN 0350-5421, UDK: 624.91.021.4:725.4
6.	Dražić J., Mučenski V., Trivunić M., Peško I.: Influence a risk of assembly process realization on the choice of assembly metod, 1. International Scientific Conference Peeople, Building and Environment, Brno: University of Technology and Mendel University og Agriculture and Forestry in Brno, Fakulty of Civil Engineering, Fakulty of Forestry and Wood Technology , 26-27 Novembar, 2009, pp. 183-187, ISBN 978-80-7204-660-7
7.	Dražić J., Folić R., Lađinović Đ.: Influence of design solution of structural behaviour under seismic actions, 3. Građevinarstvo nauka i praksa, Žabljak: Univerzitet Crne Gore, Građevinski fakultet u Podgorici, 15-20 Februar, 2010, pp. 481-487, ISBN 978-86-82707-18-9
8.	Dražić J., Trivunić M., Mučenski V., Peško I.: Prefabrication in the Context of Sustainability, 1. International Symposium about Research and Application of Modern Achievements in Civil Engineering in the Field of Materials and Structures, Tara: Society for Materials and Structures Testing of Serbia, 19-21 Oktobar, 2011, pp. 471-478, ISBN 978-86-87615-02-1
9.	Dražić J.: Configuration of the Seismically Resistant Buildings, 1. International Symposium about Research and Application of Modern Achievements in Civil Engineering in the Field of Materials and Structures, Tara: Society for Materials and Structures Testing of Serbia, 19-21 Oktobar, 2011, pp. 351-358, ISBN 978-86-87615-02-1
10.	Dražić J., Malešević E., Aleksić I.: Influence of Life Cycle Costs on the Choice of Optimal Variation of Floor Covering, 4. Građevinarstvo nauka i praksa, Žabljak: Univerzitet Crne Gore, Građevinski fakultet u Podgorici, 20-24 Februar, 2012, pp. 2351-2358, ISBN 978-86-82707-21-9

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

Civil Engineering

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

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	Study Programme Accreditation MASTER ACADEMIC STUDIES Civil Engineering	

Science, arts and professional qualifications

Name and last name:		Đogo B. Mitar	
Academic title:		Full Professor	
Name of the institution where the teacher works full time and starting date:		Faculty of Technical Sciences - Novi Sad 05.12.1986	
Scientific or art field:		Geotechnics	
Academic carieer	Year	Institution	Field
Academic title election:	2010	Faculty of Technical Sciences - Novi Sad	Geotechnics
PhD thesis	1996	Faculty of Technical Sciences - Novi Sad	Geotechnics
Magister thesis	1992	Faculty of Technical Sciences - Novi Sad	Geotechnics
Bachelor's thesis	1986	Faculty of Technical Sciences - Novi Sad	Civil Engineering
List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	A309	Soil Mechanics and Foundations	(A00) Architecture, Undergraduate Academic Studies
2.	GG24	Soil Mechanics	(G00) Civil Engineering, Undergraduate Academic Studies
3.	GG32	Foundation	(G00) Civil Engineering, Undergraduate Academic Studies
4.	GI505	Advanced Techniques in Geodetic Design and Monitoring	(GI0) Geodesy and Geomatics, Undergraduate Academic Studies
5.	GP404	Geotechnics	(G00) Civil Engineering, Undergraduate Academic Studies
6.	URZP18	Stability of terrain	(ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies
7.	GG37	Basics of design in civil engineering structures	(G00) Civil Engineering, Undergraduate Academic Studies
8.	GG506	Professional Practice	(G00) Civil Engineering, Master Academic Studies
9.	GP504	Tunnels	(G00) Civil Engineering, Master Academic Studies
10.	MPK017	Fundamentals of Geosciences	(MPK) Inženjerstvo tretmana i zaštite voda - TEMPUS(uneti naziv na engleskom), Master Academic Studies
11.	GD002	Selected Chapters in Foundation	(G00) Civil Engineering, Doctoral Academic Studies
Representative references (minimum 5, not more than 10)			
1.	Uplift test results of piles. 9 th Danube European Conference on Soil Mechanics and Found. Eng., pp.158-163, Budapest. Milovic, D., Djogo, M., (1990)		
2.	Settlement of circular foundation of any rigidity. 10 th European Conference on Soil Mechanics and Found. Eng., pp. 497-500, Firenze. Milovic, D., Djogo, M., (1991)		
3.	Stresses and settlements of circular foundation of any rigidity. 13 th Canadian congress of applied mechanics, pp. 257-258, Manitoba. Milovic, D., Djogo, M., (1991)		
4.	Rectangular raft of any rigidity on the layer of limited thickness. XIVth International Conference on Soil Mechanics & Foundation Engineering, pp. 857-858, Milovic, D. Djogo, M. Hamburg., (1997)		
5.	A pile loaded by horizontal force and moment – theoretical and field load test results. Proceedings of the 16 th International Conference on Soil Mechanics and Geotechnical Engineering, Vol. 4, pp. 2023-2026, Osaka. Milovic, D., Djogo, M., (2005)		
6.	Greške u fundiranju. Monografija. Fakultet tehničkih nauka, str. 1-438, Novi Sad. Milović, D., Đogo, M., (2005)		
7.	Đogo, M., Vasić, M., (2011): Landslide in the area of the bridge on the Danube in Novi Sad. Proceedings of the ICE - Geotechnical Engineering, Volume 164, Issue 1, pp. 3-10, Thomas Telford, London. ISSN: 1353-2618, E-ISSN: 1751-8563, DOI: 10.1680/geng.2011.164.1.3		
8.	Đogo, M., Vasić, M., Čosić, M., (2011): Engineering geological evaluation of the conditions for constructing a bridge and a tunnel in the zone of the old Petrovaradin Fortress. Bulletin of Engineering Geology & the Environment, Volume 70, Number 1, pp. 139-142, Springer, Berlin. ISSN: 1435-9529, E-ISSN: 1435-9537, DOI: 10.1007/s10064-010-0292-0		
9.	Milović, D., Đogo, M., (2009): Analysis of piled raft foundation. Materials and structures 3-4. pp. 3-20, Beograd.		
10.	Milović, D., Đogo, M., (2009): Problemi interakcije tlo - temelj - konstrukcija. Monografija. SANU - Ogranak u Novom Sadu, str. 1-428, Novi Sad.		
Summary data for teacher's scientific or art and professional activity:			
Quotation total :		7	
Total of SCI(SSCI) list papers :		2	
Current projects :		Domestic :	International :
		2	0

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	Study Programme Accreditation MASTER ACADEMIC STUDIES Civil Engineering	

Science, arts and professional qualifications

Name and last name:		Đurić V. Duško	
Academic title:		Associate Professor	
Name of the institution where the teacher works full time and starting date:		Faculty of Technical Sciences - Novi Sad 03.11.2005	
Scientific or art field:		Hydrotechnics	
Academic carier	Year	Institution	Field
Academic title election:	2010		Hydrotechnics
PhD thesis	1999	Faculty of Civil Engineering - Beograd	Hydrotechnics
Magister thesis	1987	Faculty of Civil Engineering - Zagreb	Hydrotechnics
Bachelor's thesis	1977	Faculty of Civil Engineering - Beograd	Hydrotechnics
List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	GG18	Fundamentals in Hydromechanics and Hydrotechnics	(G00) Civil Engineering, Undergraduate Academic Studies
2.	GG301	Hydrotechnical Facilities and Systems	(G00) Civil Engineering, Undergraduate Academic Studies
3.	GG408	Municipal Hydrotechnics	(G00) Civil Engineering, Undergraduate Academic Studies
4.	GH405	River Regulation and Flood Protection	(G00) Civil Engineering, Undergraduate Academic Studies
5.	A702	Architectural Technology 3	(A00) Architecture, Undergraduate Academic Studies
6.	GH402	Hydrotechnical Structures	(G00) Civil Engineering, Master Academic Studies
7.	MPK004	Fundamentals of Hydromechanics and hydrotechinc	(MPK) Inženjerstvo tretmana i zaštite voda - TEMPUS(uneti naziv na engleskom), Master Academic Studies
8.	MPK018	River Basin Management	(MPK) Inženjerstvo tretmana i zaštite voda - TEMPUS(uneti naziv na engleskom), Master Academic Studies
Representative references (minimum 5, not more than 10)			
1.	Snabdevanje vodom za piće, Arhitektonsko-građevinski fakultet Banja Luka, 2001 (strana 1-234)		
2.	"Interakcija urbanih hidrotehničkih sistema" - Međunarodna konferencija i seminar "Održiva rehabilitacija gradskih sistema i životne sredine", Zbornik radova (str.50-63), Urbanistički zavod Republike Srpske, a.d Banja Luka, 2001.godine		
3.	Uticaj suše na vodne resurse", Zbornik radova sa simpozijuma" Strategije razvoja gradova i saobraćaj"-Urbanistički zavod Republike Srpske Banja Luka, Udruženje urbanista Srbije - Beograd, str.416-422,2001.godine		
4.	APPLICATION OF HYDRODYNAMICAL MODELS IN REDUCING THE INDETERMINACY OF THE INPUT PARAMETERS FOR UNDERGROUND STREAMS SIMULATION, Nis 2006. FACTA UNIVERSITATIS, University of Nis.		
5.	Dr. Duško Đurić dipl. inž. građ. : "Problemi zaštite izvorišta Grmić u Bijeljini" - Voda i mi, časopis Javnog preduzeća za vodno područje slivova rijeke Save, Sarajevo 2005. godine, br. 41, str. 17. - 22.		
6.	Duško Đurić: "Primena hidrodinamičkih modela u smanjenju neodređenosti ulaznih parametara za simulaciju podzemnih tokova", Konferencija Savremena praksa - Fakultet tehničkih nauka Institut za građevinarstvo Novi Sad, Društvo građevinskih inženjera i tehničara Novi Sad, Zbornik radova str. 55 – 68. Novi Sad, 15 i 16. mart 2006.		
7.	Svetomir Prokić, Duško Đurić, Miomir Arsić: "Retenzioni kapacitet akumulacije Bočac" – Jugoslovensko društvo za visoke brane, drugi kongres Kladovo 2003. Zbornik radova, knjiga 1, str 269 - 276.		
Summary data for teacher's scientific or art and professional activity:			
Quotation total :		0	
Total of SCI(SSCI) list papers :		0	
Current projects :		Domestic :	International :
		3	2



	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	Study Programme Accreditation MASTER ACADEMIC STUDIES Civil Engineering	

Science, arts and professional qualifications

Name and last name:	Folić J. Radomir		
Academic title:	Emeritus Professor		
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad		
	01.03.1980		
Scientific or art field:	Constructions in Civil Engineering		
Academic career	Year	Institution	Field
Academic title election:	2008	Faculty of Technical Sciences - Novi Sad	Constructions in Civil Engineering
PhD thesis	1983	Faculty of Civil Engineering - Beograd	Theory of Construction
Magister thesis	1974	Faculty of Civil Engineering - Zagreb	Theory of Construction
Bachelor's thesis	1963	Faculty of Civil Engineering - Beograd	Constructions in Civil Engineering

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

ID	Course name	Study programme name, study type
1. A002S	Scientific Research Method	(A00) Architecture, Specialised Academic Studies (E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies (G10) Geodesy and Geomatics, Specialised Academic Studies (I12) Industrial Engineering, Specialised Academic Studies (I22) Engineering Management, Specialised Academic Studies (Z00) Environmental Engineering, Specialised Academic Studies
2. GG505	Concrete Bridges	(G00) Civil Engineering, Master Academic Studies
3. GS015	Scientific Research Method	(G10) Energy Efficiency in Buildings, Specialised Academic Studies
4. A120S	Proces, principi i tehnike naučnog istraživanja-odabrana poglavlja	(A00) Architecture, Specialised Academic Studies
5. GG531	Odabrana poglavlja zidanih konstrukcija	(G00) Civil Engineering, Master Academic Studies
6. DGI002	Selected Chapters in Engineering Geodesy	(G10) Geodesy and Geomatics, Doctoral Academic Studies
7. DZ001	Scientific Research Method	(A00) Architecture, Doctoral Academic Studies (AS0) Scenic Design, Doctoral Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies (E20) Computing and Control Engineering, Doctoral Academic Studies (F00) Graphic Engineering and Design, Doctoral Academic Studies (F20) Engineering Animation, Doctoral Academic Studies (G00) Civil Engineering, Doctoral Academic Studies (G10) Geodesy and Geomatics, Doctoral Academic Studies (H00) Mechatronics, Doctoral Academic Studies (I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies (M00) Mechanical Engineering, Doctoral Academic Studies (M40) Technical Mechanics, Doctoral Academic Studies (OM1) Mathematics in Engineering, Doctoral Academic Studies (S00) Traffic Engineering, Doctoral Academic Studies (Z00) Environmental Engineering, Doctoral Academic Studies (Z01) Safety at Work, Doctoral Academic Studies
8. A120	Proces, principi i tehnike naučnog istraživanja - odabrana poglavlja(uneti naziv na engleskom)	(A00) Architecture, Doctoral Academic Studies
9. GD027	Process, principles and techniques of scientific research - selected chapters	(G00) Civil Engineering, Doctoral Academic Studies
Representative references (minimum 5, not more than 10)		

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6		
	Study Programme Accreditation MASTER ACADEMIC STUDIES Civil Engineering		
Representative references (minimum 5, not more than 10)			
1.	Folić, R. (1983): Spojevi i veze montažnih betonskih zgrada. U knjizi Montažni građevinski objekti, (Ed. B. Žeželj, A. Flašar) Ekonomika, Beograd, str. 117-167. (9 autorskih tabaka)		
2.	Folić, R. (1983): Statika konstrukcija - Zbirka rešenih zadataka. FTN IIG, Novi Sad, str. 1-486. II izdanje (1987). III izdanje Građevinska knjiga, Beograd (1991).		
3.	Folić, R., Tatomirović, M. (1999): Spregnute betonske konstrukcije-I deo. Građevinski kalendar, 1999. str. 289-386; II deo, Građevinski kalendar, 2001, str. 217-290		
4.	Folić, R. (1991): Classification of damage and its causes as applied to precast concrete buildings. Material and Structures. RILEM - Journal, Chapman & Hall, Vol. 24, pp. 276-285.		
5.	Folić, R., Ivanov, D. (1991): In situ behaviour of concrete structures deterioration of concrete, influence of earthquake and a fire in Diagnosis of Concrete Structures - State of the Art Report, Ed. by T. Javor, Expertcentrum, Bratislava, pp. 135-146.		
6.	Folić, R. (1985): Analiza aktivne širine ploče i graničnih stanja kod elemenata od armiranog i prethodno napregnutog betona. FTN IIG Posebno izdanje 7, Novi Sad, str. 1-193.		
7.	Folić, R., Radonjanin, V. (1998): Experimental research on polymer modified concrete, Materials Journal, ACI, VOL. 95 No. 4, July/August 1998, pp.463-470.		
8.	Folić, R. (1991): A classification of damage to concrete buildings in earthquakes, illustrated by examples. Material and Structures, RILEM - Journal, Chapman & Hall, Vol. 24, pp. 286-292.		
9.	Javor, T., Naus, D.J., Folić, R., Zakić, B.: (1992): Diagnosis of Concrete Structures. RILEM - Journal Materials and Structures, Chapman & Hall, Vol. 25, pp. 437-440.		
10.	Folić, R., Radonjanin, V. (1998): Experimental research on polymer modified concrete, Materials Journal, ACI, VOL. 95 No. 4, July/August 1998, pp.463-470.		
Summary data for teacher's scientific or art and professional activity:			
Quotation total :		11	
Total of SCI(SSCI) list papers :		8	
Current projects :		Domestic :	2
		International :	1

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	Study Programme Accreditation MASTER ACADEMIC STUDIES Civil Engineering	

Science, arts and professional qualifications

Name and last name:		Gajin S. Slobodan	
Academic title:		Full Professor	
Name of the institution where the teacher works full time and starting date:		-	
Scientific or art field:		Materials in Civil Engineering, Condition Assessment and Construction	
Academic career	Year	Institution	Field
Academic title election:	2000		Materials in Civil Engineering, Condition Assessment and Construction Sanation
PhD thesis	1992	Faculty of Civil Engineering - Beograd	Civil Engineering
Bachelor's thesis	1974	Faculty of Mathematics - Beograd	Mechanics
Magister thesis	-	Faculty of Technical Sciences - Novi Sad	Civil Engineering
List of courses being held by the teacher in the accredited study programmes			
ID	Course name	Study programme name, study type	
1.	GG523 Structure Monitoring and Diagnostics by Applying Dynamic Analysis Method	(G00) Civil Engineering, Master Academic Studies	
2.	GG524 Noise, Vibration and Earthquakes in Surroundings	(G00) Civil Engineering, Master Academic Studies	
Representative references (minimum 5, not more than 10)			
1.	Gajin, S., Folić, R. (1985): Jastification of Frequency Equation Linearization for Pile Longitudinal Oscilations. Bulletins for Applied Mathematics BAM - 331, ISSN 0133-3526, TU Budapest, pp. 139-150.		
2.	Gajin, S., Folić, R., Mešter, Đ. (1985): Mathematical modelling of the optimum vibro-isolation of a discrete mass supported by a plate on elastic base, BAM - 348, Budapest, pp. 105-116.		
3.	Gajin, S., Folić, R. (1985): Jastification of Frequency Equation Linearization for Pile Longitudinal Oscilations. Bulletins for Applied Mathematics BAM - 331, ISSN 0133-3526, TU Budapest, pp. 139-150.		
4.	Gajin, S., Folić, R., Orlov, V. (1987): Die durch Rippe Verstärkte Quadratförmige Stahlbetonplatte unter Dynamischer und Stossbelastung. Bulletins for Applied Mathematics, BAM 474 (XLVI), pp. 251-268.		
5.	Folić, R., Gajin, S. (1988): Mathematical modelling of Pile parametric Vibrations. Bulletins for Applied Mathematics, BAM 613-638 LI (89) TU, Budapest, pp. 11-30.		
6.	Folić, R., Gajin, S. (1989): Simplified Dynamic Analysis of Natural Oscillations for Suspension Roofs, Bulletins for Applied Mathem., BAM 640 LII-89, TU Budapest, pp. 43-56.		
7.	Gajin, S., Folić, R., Kuzmanović, S.(2002): Diagnosis of state of end winding in generator's stator, Journal of Politehnica University Temisoara Romania, May/02, Tom 47 (61)-2, pp. 9-16.		
8.	Folić, R., Gajin, S. (1986): A Contribution to Studies of Piles under Dynamic Loads. Proceedings of the International Conference on Deep Foundations, Beijing, China, Volume I, pp. 2176-2181.		
9.	Brčić, V., Gajin, S., Folić, R. (1987): Vibration repair works of framed foundations at a power plant. Structural Faults and Repair, Third Intern. Conf., London, Vol. 2, pp. 151-157.		
10.	Folić, R., Gajin, S., Folić, B. (2003): Repair of Increased Level of Power Saw Foundation in Industrial Zone in Pančevo, The Tenth International Conference "Structural Faults+Repair-2003" 1st-3rd July, London, Abstracts pp 187+CD-Rom pp 10.		
Summary data for teacher's scientific or art and professional activity:			
Quotation total :			
Total of SCI(SSCI) list papers :			
Current projects :		Domestic :	International :

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	Study Programme Accreditation MASTER ACADEMIC STUDIES Civil Engineering	

Science, arts and professional qualifications

Name and last name:	Gilezan K. Silvia		
Academic title:	Full Professor		
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad		
	01.04.1984		
Scientific or art field:	Mathematics		
Academic carier	Year	Institution	Field
Academic title election:	2005	Faculty of Technical Sciences - Novi Sad	Mathematics
PhD thesis	1993	Faculty of Sciences - Novi Sad	Mathematical Sciences
Magister thesis	1988	Faculty of Mathematics - Beograd	Mathematical Sciences
Bachelor's thesis	1981	Faculty of Sciences - Novi Sad	Mathematical Sciences

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

	ID	Course name	Study programme name, study type
1.	GH404	Mathematical Statistics	(G00) Civil Engineering, Master Academic Studies (G00) Civil Engineering, Undergraduate Academic Studies
2.	GI303B	Probability and Mathematical Statistics	(GI0) Geodesy and Geomatics, Undergraduate Academic Studies
3.	IAM003	Formal Mathematical Models	(F10) Engineering Animation, Undergraduate Academic Studies
4.	S011	Mathematics 1	(S00) Traffic and Transport Engineering, Undergraduate Academic Studies (S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies
5.	Z203	Statistical Methods	(Z01) Safety at Work, Undergraduate Academic Studies (ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies (Z20) Environmental Engineering, Undergraduate Academic Studies
6.	IM1012	Probability and Statistics	(I10) Industrial Engineering, Undergraduate Academic Studies (I20) Engineering Management, Undergraduate Academic Studies (P00) Production Engineering, Undergraduate Academic Studies
7.	0M506	Semantics of Programming Languages	(OM1) Mathematics in Engineering, Master Academic Studies
8.	0M507	Logic in Computer Science	(OM1) Mathematics in Engineering, Master Academic Studies
9.	0M513	Introduction to Functional Programming Languages	(OM1) Mathematics in Engineering, Master Academic Studies
10.	0ML506	Semantics of programming languages	(OM1) Mathematics in Engineering, Master Academic Studies
11.	0ML507	Logic in computer science	(OM1) Mathematics in Engineering, Master Academic Studies
12.	0ML513	Introduction to Functional Programming Languages	(OM1) Mathematics in Engineering, Master Academic Studies
13.	DZ01MS	Selected Chapters in Mathematics	(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies (I12) Industrial Engineering, Specialised Academic Studies (I22) Engineering Management, Specialised Academic Studies (Z00) Environmental Engineering, Specialised Academic Studies
14.	GH404	Mathematical Statistics	(G00) Civil Engineering, Master Academic Studies (G00) Civil Engineering, Undergraduate Academic Studies
15.	SD0M06	Logic in Computer Science	(GI0) Geodesy and Geomatics, Specialised Academic Studies



Study Programme Accreditation

MASTER ACADEMIC STUDIES

Civil Engineering

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

ID	Course name	Study programme name, study type
16. MPK001	Statistical and Numerical Methods	(MPK) Inženjerstvo tretmana i zaštite voda - TEMPUS(uneti naziv na engleskom), Master Academic Studies
17. D0M05	Semantics of Programming Languages	(OM1) Mathematics in Engineering, Doctoral Academic Studies
18. D0M06	Logic in Computer Science	(OM1) Mathematics in Engineering, Doctoral Academic Studies
19. D0M11	Models of Computation	(OM1) Mathematics in Engineering, Doctoral Academic Studies
20. D0M12	Introduction to Functional Programming Languages	(OM1) Mathematics in Engineering, Doctoral Academic Studies
21. D0M13	Theory of Mobile Processes	(OM1) Mathematics in Engineering, Doctoral Academic Studies
22. D0M14	Process Algebra	(OM1) Mathematics in Engineering, Doctoral Academic Studies
23. DZ01M	Selected Chapters in Mathematics	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies (E20) Computing and Control Engineering, Doctoral Academic Studies (F00) Graphic Engineering and Design, Doctoral Academic Studies (F20) Engineering Animation, Doctoral Academic Studies (G00) Civil Engineering, Doctoral Academic Studies (G10) Geodesy and Geomatics, Doctoral Academic Studies (H00) Mechatronics, Doctoral Academic Studies (I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies (M00) Mechanical Engineering, Doctoral Academic Studies (M40) Technical Mechanics, Doctoral Academic Studies (OM1) Mathematics in Engineering, Doctoral Academic Studies (S00) Traffic Engineering, Doctoral Academic Studies (Z00) Environmental Engineering, Doctoral Academic Studies (Z01) Safety at Work, Doctoral Academic Studies
24. AID05	Theory of Mobile Processes	(F20) Engineering Animation, Doctoral Academic Studies

Representative references (minimum 5, not more than 10)

1.	"Inhabitation in lambda calculus with intersection and union types", Journal of Logic and Computation 6 (1993) 671-685, Oxford University Press
2.	"Characterizing strong normalization in the Curien-Herbelin symmetric lambda calculus: extending the Coppo-Dezani heritage, (sa D.Dougherty, P.Lescanne) Theoretical Computer Science 2007
3.	"Separating Points by Parallel Hyperplanes " (sa J. Pantovic, J. Zunic), IEEE Transactions of Neural Networks 18(5) (2007) 1356-1363
4.	"Lambda terms for natural deduction, sequent calculus and cut elimination" (sa H.P.Barendregt), Journal of Functional Programming, 10 (2000) 121-134.
5.	"Confluence of untyped lambda calculus via simple types" (with V.Kuncak), ICTCS'01, Lecture Notes in Computer Science 2201, 38-49.
6.	"Full intersection types and topologies in lambda calculus", Journal of Computer and System Sciences, 62 (2001) 1-14.
7.	"Behavioural inverse limit lambda models" (sa M. Dezani-Ciancaglini, S. Likavec), Theoretical Computer Science Vol 316/1-3 (2004) 49-74.
8.	"Strong normalization of the classical sequent calculus" (sa D. Dougherty, P. Lescanne, S.Likavec), Lecture Notes in Computer Science 3835 (2005) 169-183.
9.	"Security types for dynamic web data" (sa M.Dezani-Ciancaglini, J. Pantovic), Trustworthy Global Computing, TGC'06, Lecture Notes in Computer Science 4661 (2007) 263-280.
10.	Zbirka rešenih zadataka iz statistike (sa Z.Luzanin, Z.Ovcin, Lj.Nedović, T.Grbić, B.Mihailović) 2005

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

Quotation total : | 325



UNIVERSITY OF NOVI SAD

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



Study Programme Accreditation

MASTER ACADEMIC STUDIES

Civil Engineering

Total of SCI(SSCI) list papers :	17			
Current projects :	Domestic :	2	International :	4

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	Study Programme Accreditation MASTER ACADEMIC STUDIES Civil Engineering	

Science, arts and professional qualifications

Name and last name:		Kisin S. Srđan	
Academic title:		Full Professor	
Name of the institution where the teacher works full time and starting date:		Faculty of Technical Sciences - Novi Sad 01.09.1992	
Scientific or art field:		Constructions in Civil Engineering	
Academic carier	Year	Institution	Field
Academic title election:	1998	Faculty of Technical Sciences - Novi Sad	Constructions in Civil Engineering
PhD thesis	1985	Faculty of Civil Engineering - Beograd	Constructions in Civil Engineering
Magister thesis	1980	Faculty of Civil Engineering - Beograd	Constructions in Civil Engineering
Bachelor's thesis	1976	University of Belgrade - Beograd	Constructions in Civil Engineering
List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	GG27	Metal Structures 1	(G00) Civil Engineering, Undergraduate Academic Studies
2.	GG35	Metal Structures 2	(G00) Civil Engineering, Undergraduate Academic Studies
3.	A305	Bearing structures 1	(A00) Architecture, Undergraduate Academic Studies
4.	GG503	Metal Bridges	(G00) Civil Engineering, Master Academic Studies
5.	GG512	Composite Structures	(G00) Civil Engineering, Master Academic Studies
6.	GG513	Special Metal Structures	(G00) Civil Engineering, Master Academic Studies
Representative references (minimum 5, not more than 10)			
1.	S. Kisin: " Teorija stabilnosti ", udžbenik, 173 strane, Građevinski fakultet u Sarajevu, Sarajevo, 1986.		
2.	S. Kisin, H. Mujčić: "Zbirka zadataka iz teorije statički određenih linijskih nosača", zbirka zadataka, 213 strana, Građevinski fakultet u Sarajevu, Sarajevo, 1987.		
3.	S. Kisin, H.Mujčić: "Zbirka zadataka iz teorije statički neodređenih linijskih nosača", zbirka zadataka, 357 strana, Građevinski fakultet u Sarajevu, Sarajevo, 1988.		
4.	S. Kisin: "Bočno izvijanje monosimetričnih čeličnih nosača deformabilnog poprečnog preseka", monografija, 86 strana, Građevinski fakultet u Sarajevu, Sarajevo, 1986.		
5.	S. Kisin: "Profilisani limovi u funkciji nosivosti metalnih konstrukcija", monografija, 76 strana, Beograd, IMS, 1994.		
6.	S. Kisin: "Stabilnost metalnih konstrukcija", I izdanje, knjiga, 228 strana, Građevinska knjiga, Beograd, 1997.		
7.	R. Đorđević, S. Kisin, A.Vukić: "Cylindrical Shell as a Foundation ", Časopis BAM 977/94, pp.177 - 186, Budapest, 1994.		
8.	S. Kisin, R. Đorđević: "Modification of Incremental Numerical Analysis Based on Geometrical Nonlinear Process", Časopis BAM 1046/94, pp. 35 - 42, Budapest, 1994.		
9.	S. Kisin, Z. Petrašković : "Profil rovanje nastilj kak sb@zi v metalLeskih sistemah". Montaanlie i specialInie rabotni v stroitelstve, str. 17-20., Moskva, 1996.		
10.	S.Kisin, N. Ravić, J. Kovačević, Z. Hriberšek: "The First Road Bridge on Stay Cables in Bosnia and Herzegovina", Structural Engineering International, SEI Volume 13, Number 3, August 2003., Recent structures		
Summary data for teacher's scientific or art and professional activity:			
Quotation total :		0	
Total of SCI(SSCI) list papers :		0	
Current projects :		Domestic :	0 International : 0

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	Study Programme Accreditation MASTER ACADEMIC STUDIES Civil Engineering	

Science, arts and professional qualifications

Name and last name:	Kočetov-Mišulić Đ. Tatjana		
Academic title:	Assistant Professor		
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad 01.01.1989		
Scientific or art field:	Constructions in Civil Engineering		
Academic career	Year	Institution	Field
Academic title election:	2009	Faculty of Technical Sciences - Novi Sad	Constructions in Civil Engineering
PhD thesis	2008	Faculty of Technical Sciences - Novi Sad	Constructions in Civil Engineering
Magister thesis	1997	Faculty of Technical Sciences - Novi Sad	Constructions in Civil Engineering
Bachelor's thesis	1988	Faculty of Technical Sciences - Novi Sad	Constructions in Civil Engineering

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

	ID	Course name	Study programme name, study type
1.	GG203	Actions on Structures	(G00) Civil Engineering, Undergraduate Academic Studies
2.	GG30	Concrete Structures	(G00) Civil Engineering, Undergraduate Academic Studies
3.	GG34	Timber Structures	(G00) Civil Engineering, Undergraduate Academic Studies
4.	GI308A	Fundamentals in Civil Engineering	(GI0) Geodesy and Geomatics, Undergraduate Academic Studies
5.	A305	Bearing structures 1	(A00) Architecture, Undergraduate Academic Studies
6.	GG37	Basics of design in civil engineering structures	(G00) Civil Engineering, Undergraduate Academic Studies
7.	GG411	Masonry structures	(G00) Civil Engineering, Undergraduate Academic Studies
8.	GH407	Concrete structures - Hydrotechnics	(G00) Civil Engineering, Undergraduate Academic Studies
9.	GP406	Concrete structures - Roads	(G00) Civil Engineering, Undergraduate Academic Studies
10.	GG514	Special Timber Structures	(G00) Civil Engineering, Master Academic Studies
11.	GG517	Damages and Repair of Masonry, Steel and Timber Structures	(G00) Civil Engineering, Master Academic Studies
12.	URZP62	Assessment of Damaged Structures	(ZP1) Disaster Risk Management and Fire Safety, Master Academic Studies
13.	AD0009	Complex Timber Structures	(AD0) Digital Techniques, Design and Production in Architecture and Urban Planning, Master Academic Studies

Representative references (minimum 5, not more than 10)

1.	Zakić, B., Kočetov Mišulić, T., Čakić, B. (1998): "Montažne drvene kuće u svetu i kod nas". Univerzitet u Prištini, Priština, SRJ, 105 str.
2.	Zakić, B., Lekić, R., Đukić, Lj., Kočetov, T. (1992): "Naponsko stanje u truss joist nosačima". "Materijali i konstrukcije", br. 1-2, Beograd, SRJ, str. 30-36.
3.	Zakić, B., Kočetov Mišulić, T. (2000): "Osnovi plastične teorije kod drveta". "Materijali i konstrukcije", Beograd, SRJ, 43 br. 3-4, str. 37-40.
4.	Zakić, B., Kočetov, T. (1994): "Composite beam structures - wood and concrete". Proceedings of 4th ASCCS International Conference on Steel-Concrete Composite Structures, Košice, Slovakia, pp. 328-334.
5.	Kočetov Mišulić, T., Gramatikov, K. (2003): "Proračun i ispitivanje veza u drvenim konstrukcijama prema EC-5 i EN standardima". Zbornik radova INDIS 2003. - 9.og nacionalnog simpozijuma, Novi Sad, SCG, str. 291-298.
6.	Kočetov Mišulić, T., Stevanović, B. (2005): "Preporuke za održavanje, praćenje, i ocenu stanja drvenih konstrukcija". Zbornik radova IV naučno-stručnog savetovanja Ocena stanja, održavanje i sanacija građevinskih objekata i naselja, Zlatibor, str.175-180.
7.	Stevanović, B., Kočetov Mišulić, T. (2005): "Faktori obezbeđenja trajnosti i zaštita drvenih konstrukcija". Zbornik radova IV naučno-stručnog savetovanja Ocena stanja, održavanje i sanacija građevinskih objekata i naselja, Zlatibor, SCG, str.181-186.
8.	Kočetov Mišulić T., Stevanović B. (2008): "Eksperimentalna podloga za uvođenje klasa čvrstoće četinarske rezane građe na domeće tržište", "Materijali i konstrukcije", br. 4, Beograd, str. 50-62.
9.	Kočetov Mišulić, T., Gramatikov, K. (2005): "Experimentally supported investigation of in row nailed connections under monotone and cyclic loadings". Proceedings of the 11th International MASE Symposium, Ohrid, Republic Macedonia, SI-2, pp. 275-280.
10.	Zakić, B., Janković, D., Kovačević, D., Kočetov, T. (1990): "Izmereni smičući i glavni naponi kod lameliranih lepljenih konstrukcija". Zbornik radova IX Kongresa JUDIMK-a, Novi Sad, SFRJ, Knjiga II, str. 265-273.

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

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

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	Study Programme Accreditation MASTER ACADEMIC STUDIES Civil Engineering	

Science, arts and professional qualifications

Name and last name:	Kolaković R. Srđan		
Academic title:	Full Professor		
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad 01.09.2002		
Scientific or art field:	Hydrotechnics		
Academic career	Year	Institution	Field
Academic title election:	2003	Faculty of Technical Sciences - Novi Sad	Hydrotechnics
Magister thesis	1998	Faculty of Civil Engineering - Beograd	Hydrotechnics
PhD thesis	1993	Faculty of Civil Engineering Subotica - Subotica	Hydrotechnics
Bachelor's thesis	1982	Faculty of Civil Engineering Subotica - Subotica	Hydrotechnics

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

	ID	Course name	Study programme name, study type
1.	GG18	Fundamentals in Hydromechanics and Hydrotechnics	(G00) Civil Engineering, Undergraduate Academic Studies
2.	GG301	Hydrotechnical Facilities and Systems	(G00) Civil Engineering, Undergraduate Academic Studies
3.	GH406	Hydrotechnical Ameliorations	(G00) Civil Engineering, Undergraduate Academic Studies
4.	GI308A	Fundamentals in Civil Engineering	(GI0) Geodesy and Geomatics, Undergraduate Academic Studies
5.	URZP59	Flood Defense Measures	(ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies
6.	Z210	Fundamentals of Water Protection	(Z01) Safety at Work, Undergraduate Academic Studies (Z20) Environmental Engineering, Undergraduate Academic Studies
7.	Z417	Methods and Systems for Water Treatment	(Z20) Environmental Engineering, Undergraduate Academic Studies
8.	Z417	Postupci i postrojenja za tretman voda(uneti naziv na engleskom)	(Z20) Environmental Engineering, Undergraduate Academic Studies
9.	GG506	Professional Practice	(G00) Civil Engineering, Master Academic Studies
10.	GH505	Framework Directives E3 (WDF)	(G00) Civil Engineering, Master Academic Studies
11.	MPK028	Hydrotechnical objects and systems	(MPK) Inženjerstvo tretmana i zaštite voda - TEMPUS(uneti naziv na engleskom), Master Academic Studies
12.	DGI002	Selected Chapters in Engineering Geodesy	(GI0) Geodesy and Geomatics, Doctoral Academic Studies
13.	DGI019	Selected Chapters in Municipal Information Systems	(GI0) Geodesy and Geomatics, Doctoral Academic Studies
14.	GD006	Selected Chapters in Hydraulics	(G00) Civil Engineering, Doctoral Academic Studies
15.	GD016	Selected Chapters in Water Regulation and Protection	(G00) Civil Engineering, Doctoral Academic Studies
16.	GD026	Selected Chapters in Hydro-informatics	(G00) Civil Engineering, Doctoral Academic Studies

Representative references (minimum 5, not more than 10)

1.	Trajkovic, S., Kolakovic, S.: Evolution of Reference Evapotranspiration Equations under Humid Conditions, Water Resources Management, 2009, vol. 23 br. 14, str. 3057-3067 UDK: doi: 10.1007/s11269-009-9423-4
2.	Trajkovic, S., Kolakovic, S.: Comparison of Simplified Pan-Based Equations for Estimating Reference Evapotranspiration, Journal of Irrigation and Drainage Engineering, American Society of Civil Engineers (ASCE), 136(2), 137-140, 2010., ISSN 0733-9437
3.	Trajkovic S., Kolakovic S., Estimating Reference Evapotranspiration Using Limited Weather Data, Journal of Irrigation and Drainage Engineering -ASCE, Vol. 135, Number 4. str. 443-449 ISSN 0733-9437, 2009.
4.	Trajkovic S., Kolakovic S., Wind-adjusted Turc equation for estimating reference evapotranspiration at humid European locations, Hydrology Research (formerly Nordic Hydrology), 2009, Vol. 40, No. 1, str. 45- 52, ISSN 0029-1277.
5.	Stipic M., Prodanovic D., Kolakovic S., Rationalization and reliability improvement of fire fighting systems in big cities, Urban Water, 008, vol. 6 br. 2, str. 169-181, ISSN 1462-0758.
6.	Kolakovic S., Stevanovic D., Miličević D., Trajković S., Milenković S., Kolaković S.S., Anđelković Lj.: EFFECTS OF REACTIVE FILTERS BASED ON MODIFIED ZEOLITE IN DAIRY INDUSTRY WASTEWATER TREATMENT PROCESS, Chemical Industry & Chemical Engineering Quarterly, DOI:10.2298/CICEQ120629092K
7.	HIDROTEHNIČKE MELIORACIJE – ODVODNJAVANJE (dopunjeno izdanje sa zadacima i CD diskom sa softverom za proračun ETP) , autori: Srđan Kolaković i Slaviša Trajković, Edicija "Tehničke nauke", Fakultet tehničkih nauka – Novi Sad i Građevinsko-arhitektonski fakultet u Nišu (zajednički udžbenik na dva fakulteta), ISBN 186-789-002-5, 626.86(075.8) 335 strana.
8.	O PRELIVIMA UZ NASUTE BRANE, (monografija) , G.Hajdin, S.Kolaković, L.Hovanj, Đ.Fabian, Građevinski fakultet - Subotica, 1998., ISBNi 86-80297-22-4Naučna knjiga i monografija nacionalnog značaja



UNIVERSITY OF NOVI SAD

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

**Study Programme Accreditation**

MASTER ACADEMIC STUDIES

Civil Engineering

Representative references (minimum 5, not more than 10)

- | | |
|-----|---|
| 9. | PUBLIC OPINION SURVEY AS A FORM OF PUBLIC PARTICIPATION IN THE IMPLEMENTATION OF THE WATER FRAMEWORK DIRECTIVE-LESKOVAC FIELD IRRIGATION, FACTA UNIVERSITAS, SERIES:ARCHITECTURE AND CIVIL ENGINEERING, 3 (2), 173-184, 2005, 14, Trajković, S., Kolaković, S., Injatović, M. |
| 10. | Kolakovic S., Fabian Đ., Santrac P.; STATE OF CHANNEL BEGA 300 YEARS AFTERWARD ITS COMPLETION, Workshop on the Bega Channel, Subotica 19-21 october 2001 |

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

Quotation total :	0			
Total of SCI(SSCI) list papers :	6			
Current projects :	Domestic :	2	International :	3

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	Study Programme Accreditation MASTER ACADEMIC STUDIES Civil Engineering	

Science, arts and professional qualifications

Name and last name:	Kosec L. Borut		
Academic title:	Guest Professor		
Name of the institution where the teacher works full time and starting date:	-		
Scientific or art field:	Environment Protection Engineering		
Academic career	Year	Institution	Field
Academic title election:	2009	Faculty of Technical Sciences - Novi Sad	Environment Protection Engineering
PhD thesis	1998	University of Ljubljana - Ljubljana	Metallurgical Engineering
Magister thesis	1993	University of Ljubljana - Ljubljana	Metallurgical Engineering
Bachelor's thesis	1989	University of Ljubljana - Ljubljana	Metallurgical Engineering

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

ID	Course name	Study programme name, study type
1. Z309A	Solid Waste Management	(Z01) Safety at Work, Undergraduate Academic Studies (Z20) Environmental Engineering, Undergraduate Academic Studies
2. Z309A	Upravljanje čvrstim otpadom(uneti naziv na engleskom)	(Z20) Environmental Engineering, Undergraduate Academic Studies
3. Z508	Specific Design Conditions in Environment Protection	(Z20) Environmental Engineering, Master Academic Studies
4. ZR501	Hazardous Materials and Hazardous Waste	(Z01) Safety at Work, Master Academic Studies
5. Z508	Specifični uslovi projektovanja u zaštiti životne sredine(uneti naziv na engleskom)	(Z20) Environmental Engineering, Master Academic Studies
6. GH508	Landfill desing and municipal waste treatmant systems	(G00) Civil Engineering, Master Academic Studies
7. SZDH1	Modern Methods of Eco-design	(Z00) Environmental Engineering, Specialised Academic Studies
8. SZSP09	Remediation of contaminated locations	(Z00) Environmental Engineering, Specialised Academic Studies
9. SZSP18	Contemporary scientific approaches in life cycle assessment of products (LCA)	(Z00) Environmental Engineering, Specialised Academic Studies
10. SZSP21	Design and Planning Processes to Minimize Waste and Hazardous Materials	(Z00) Environmental Engineering, Specialised Academic Studies
11. ZR406A	System Regulations and EU Practice in Occupational Health and Safety	(Z01) Safety at Work, Master Academic Studies
12. ZDH1	Modern Methods of Eco-design	(Z00) Environmental Engineering, Doctoral Academic Studies
13. ZSP09	Remediation of Contaminated Sites	(Z00) Environmental Engineering, Doctoral Academic Studies
14. ZSP18	Modern Scientific Approaches in Product Life Cycle Assessment (LCA)	(Z00) Environmental Engineering, Doctoral Academic Studies
15. ZSP20	Systemic Regulation of Environment	(G00) Civil Engineering, Doctoral Academic Studies
16. ZSP21	Design and Planning Processes to Minimize Waste and Hazardous Materials	(OM1) Mathematics in Engineering, Doctoral Academic Studies (Z00) Environmental Engineering, Doctoral Academic Studies (Z01) Safety at Work, Doctoral Academic Studies

Representative references (minimum 5, not more than 10)

1.	Nagode, A., Klančnik, G., Schwarczova, H., Kosec, B., Gojić, M., Kosec, L.: Analyses of defects on the surface of hot plates for an electric stove, Engineering Failure Analysis 23, pp. 82-89, 2012, ISSN 1350-6307.
2.	Agarski, B., Budak, I., Kosec, B., Hodolic, J.: An Approach to Multi-criteria Environmental Evaluation with Multiple Weight Assignment, Environmental Modeling and Assessment 17 (3), pp. 255-266, 2012, ISSN 1420-2026.
3.	Antić, A., Petrović, P.B., Zeljković, M., Kosec, B., Hodolič, J.: The influence of tool wear on the chip-forming mechanism and tool vibrations, Materials and Technology 46 (3), pp. 279-285, 2012, ISSN 1580-2949.
4.	Klobčar, D., Kosec, L., Kosec, B., Tušek, J.: Thermo fatigue cracking of die casting dies, Engineering Failure Analysis 20, pp. 43-53, 2012, ISSN 1350-6307.
5.	Kosec, B., Karpe, B., Nagode, A., Budak, I., Ličen, M., Dordević, M., Kosec, G.: Efficiency and quality of inductive heating and quenching of planetary shafts, Metalurgija 51 (1), pp. 71-74, 2012, ISSN 0543-5846.



UNIVERSITY OF NOVI SAD

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

**Study Programme Accreditation**

MASTER ACADEMIC STUDIES

Civil Engineering

Representative references (minimum 5, not more than 10)

6.	Jevremovic, D., Puskar, T., Kosec, B., Vukelic, D., Budak, I., Aleksandrovic, S., Egbeer, D., Williams, R.: The analysis of the mechanical properties of F75 Co-Cr alloy for use in selective laser melting (SLM) manufacturing of removable partial dentures (RPD), Metalurgija 51 (2) , pp. 171-174, 2012, ISSN 0543-5846.
7.	Kores, S., Vončina, M., Kosec, B., Medved, J.: Formation of ALFeSi phase in ALSi12 alloy with Ce addition, Metalurgija 51 (2) , pp. 216-220, 2012, ISSN 0543-5846.
8.	Česnik, D., Bratuš, V., Kosec, B., Bizjak, M.: Distortion of ring type parts during fine-blanking, Metalurgija 51 (2) , pp. 157-160, 2012, ISSN 0543-5846.
9.	Gojić, M., Nagode, A., Kosec, B., Kožuh, S., Šavli, Š., Holjevac-Grgurić, T., Kosec, L.: Failure of steel pipes for hot air supply, Engineering Failure Analysis 18 (8) , pp. 2330-2335, 2011, ISSN 1350-6307.
10.	Kovačević, D., Budak, I., Antić, A., Kosec, B.: Special finite elements: Theoretical background and application, Tehnicki Vjesnik - Technical Gazette, 18 (4) , pp. 649-655, 2011, ISSN 1330-3651.

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

Quotation total :	93			
Total of SCI(SSCI) list papers :	39			
Current projects :	Domestic :	1	International :	1

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	Study Programme Accreditation MASTER ACADEMIC STUDIES Civil Engineering	

Science, arts and professional qualifications

Name and last name:	Kovačević I. Dušan		
Academic title:	Full Professor		
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad 22.10.1985		
Scientific or art field:	Theory of Construction		
Academic career	Year	Institution	Field
Academic title election:	2011		Theory of Construction
PhD thesis	2001	Faculty of Civil Engineering - Beograd	Theory of Construction
Magister thesis	1992	Faculty of Technical Sciences - Novi Sad	Theory of Construction
Bachelor's thesis	1985	Faculty of Technical Sciences - Novi Sad	Theory of Construction

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

	ID	Course name	Study programme name, study type
1.	GG29	Structural Stability and Dynamics	(G00) Civil Engineering, Undergraduate Academic Studies
2.	GG36	Theory on Plates and Shells	(G00) Civil Engineering, Undergraduate Academic Studies
3.	GG403	Structure Testing	(G00) Civil Engineering, Undergraduate Academic Studies
4.	MG402	Computer Aided Structural Modeling	(M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies
5.	A502	Theory of structures and structural systems	(A00) Architecture, Undergraduate Academic Studies
6.	ASO15	Structural Systems in Scene Design	(AS0) Scenic Architecture, Technique and Design, Undergraduate Academic Studies
7.	ASO21	Structures, Materials and Technologies in Scene Design	(AS0) Scenic Architecture, Technique and Design, Undergraduate Academic Studies
8.	GG413	FEM modeling in structural analysis	(G00) Civil Engineering, Undergraduate Academic Studies
9.	GG506	Professional Practice	(G00) Civil Engineering, Master Academic Studies
10.	GG515	Finite Element Method	(G00) Civil Engineering, Master Academic Studies
11.	GD011	Selected Chapters in FEM	(G00) Civil Engineering, Doctoral Academic Studies (OM1) Mathematics in Engineering, Doctoral Academic Studies
12.	GD025	Selected topics in project management in construction	(G00) Civil Engineering, Doctoral Academic Studies

Representative references (minimum 5, not more than 10)

1.	D. Kovačević, I. Budak, Aco Antić, A. Nagode, B. Kosec: FEM Modeling and Analysis in Prevention of the Waterway Dredger's Crane Serviceability Failure, Engineering Failure Analysis, ISSN: 1350-6307, DOI: 10.1016/j.engfailanal.2012.10.009, ELSEVIER
2.	D. Kovacevic, M. Sokovic, I. Budak, A. Antic, B. Kosec: Optimal Finite Elements Method (FEM) Model for The Jib Structure of a Waterway Dredger, Metallurgy Vol.51, No1, 113-116, ISSN0543-5846, METABK 51(1) 113-116 (2012), UDC-UDK 669.14.018.298:669.18=111
3.	D. Kovacevic, I. Budak, A. Antic, B Kosec: Special Finite Elements: Theoretical Background and Application, Technical Gazette, ISSN 1330-3651, No. 4 18 (2011) 649-655, UDC/UDK 519.61:624.046
4.	A. Nagode, G. Klančnik, M. Bizjak, D. Kovačević, B. Kosec, E. Dervarič, B. Zorc, L. Kosec: Structural and Thermodynamic Analysis of Whiskers on the Surface of Grey Cast Iron, Technical Gazette, ISSN 0543-5846, UDC – UDK 669.14.018.298:669.18=111, pp. 11-14, Zagreb, 2012.
5.	Antić,A., Kozak, D.,Kosec, B., Šimunović, G., Šarić, T., Kovačević, D., Čep, R: Influence of Tool Wear on the Mechanism of Chips Segmentation and Tool Vibration, Technical Gazette, ISSN 1330-3651, Zagreb, Article in Press, 2012.
6.	D. Kovacevic, S. Rankovic: FEM Modeling of Spatial Structural Systems in Evaluation of the Real Structural Performances, Facta Universitatis, Series: Architecture and Civil Engineering, ISSN 0354-4605, Nis, 2012.
7.	D. Kovacevic: Model for RC Frames Loaded by Seismic Forces, Invited paper , The 16th European Conference of Fracture (ECF16) - Mini-symposium: Integrity of Dynamical Systems, Proceedings, ISBN 978-1-4020-4971-2, pp. 779-786, Alexandroupoulos, Greece, 2006.
8.	R. Folić & D. Kovačević: Link Finite Elements Application In FEM Structural Modeling, The 11th International Symposium of Mathematics and its Applications, Invited paper, Proceedings, pp12-23, Timișoara, 2006.
9.	D. Kovačević, Ž. Janjić & I. Džolev: Special Finite Elements - Why and Where? INDIS 2009, 5th International Scientific Conference, Invited paper, ISBN 978-86-7892-221-3, Novi Sad, pp. 63-72, 2009.
10.	Dušan Kovačević: MKE modeliranje u analizi konstrukcija, 336 str, Građevinska knjiga, Beograd, 2006.

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

Quotation total :	82
Total of SCI(SSCI) list papers :	5



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



Study Programme Accreditation

MASTER ACADEMIC STUDIES

Civil Engineering

Current projects :	Domestic :	2	International :	0
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	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	Study Programme Accreditation MASTER ACADEMIC STUDIES Civil Engineering	

Science, arts and professional qualifications

Name and last name:	Lađinović Ž. Đorđe		
Academic title:	Full Professor		
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad 17.11.1980		
Scientific or art field:	Theory of Construction		
Academic career	Year	Institution	Field
Academic title election:	2012	Faculty of Technical Sciences - Novi Sad	Theory of Construction
PhD thesis	2002	Faculty of Technical Sciences - Novi Sad	Theory of Construction
Magister thesis	1995	Faculty of Technical Sciences - Novi Sad	Theory of Construction
Bachelor's thesis	1980	Faculty of Technical Sciences - Novi Sad	Civil Engineering

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

	ID	Course name	Study programme name, study type
1.	GG22	Structural Analysis 1	(G00) Civil Engineering, Undergraduate Academic Studies
2.	GG25	Theory on Concrete Structures 1	(G00) Civil Engineering, Undergraduate Academic Studies
3.	GG26	Structural Analysis 2	(G00) Civil Engineering, Undergraduate Academic Studies
4.	URZP58	Earthquake Impact on Civil Engineering Structures	(ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies
5.	A311	Bearing structures 2	(A00) Architecture, Undergraduate Academic Studies
6.	A502	Theory of structures and structural systems	(A00) Architecture, Undergraduate Academic Studies
7.	GG37	Basics of design in civil engineering structures	(G00) Civil Engineering, Undergraduate Academic Studies
8.	GG502	Seismic Analysis of Structures	(G00) Civil Engineering, Master Academic Studies
9.	GG516	Nonlinear Analysis of Structures	(OM1) Mathematics in Engineering, Master Academic Studies (G00) Civil Engineering, Master Academic Studies
10.	GG522	Design of Tall Buildings	(G00) Civil Engineering, Master Academic Studies
11.	GG530	Seismic Analysis of Engineering Structures	(G00) Civil Engineering, Master Academic Studies

Representative references (minimum 5, not more than 10)

1.	Folić R., Lađinović Đ.: Three dimensional analysis of tall buildings subjected to earthquake loading. Facta Universitatis – Architecture and Civil Engineering, Vol. 1, No 2 (ISSN 0354-4605), 1995, pp. 153 -166.
2.	Folić R., Alendar V., Lađinović Đ.: EC8 - Design of Earthquake Resistant Structure. MASE, 7-th International Symposium, Ohrid, Republic of Macedonia, October 2-4, 1997, Volume 1, General reports, pp. VR14/1-12.
3.	Lađinović Đ., Nenadić G., Đukić Lj.: Varadinska duga – dinamička analiza glavne mostovske konstrukcije. Časopis "Izgradnja" br. 4, Beograd, april 2001., str. 117-124.
4.	Lađinović Đ., Folić R.: Seismic analysis of building structures using damage spectra. International Conference in Earthquake Engineering SE 40EEE, Skopje, 26 – 29 August 2003, CD-ROM – Paper Reference 0067, pp. 1-8.
5.	Lađinović Đ., Folić R.: Non-linear analysis of multi-storey building structures by using equivalent SDOF model. Bulletin for Applied Mathematics, BAM-2080/2003 (CIII), Technical University of Budapest, 2003., pp. 495-502.
6.	Lađinović Đ., Folić R.: Analiza konstrukcija zgrada na zamljotresna dejstva. Časopis "Materijali i konstrukcije" br. 3-4, JUDIMK, Beograd, 2004, str. 31-64.
7.	Lađinović Đ.: Statika konstrukcija 1. Fakultet tehničkih nauka Novi Sad, 2007
8.	Lađinović Đ.: Savremene metode seizmičke analize konstrukcija zgrada. Materijali i konstrukcije (ISSN 0543-0798), 2008, Vol. 51 (2), str. 25-40.
9.	Lađinović Đ., Radujković A., Rašeta A.: Seismic Performance Assessment Based On Damage Of Structures – Part 1: Theory. Facta Universitatis - series: Architecture and Civil Engineering (ISSN 0354-4605), Vol. 9, No 1, 2011, pp. 77-88.
10.	Lađinović Đ.: Estimation of Deformation and Strength Demands for Performance Seismic Design. Seminar: Seismic Design Of Structures, Serbian Chamber of Engineers and Bulgarian Chamber in Investment design, Beograd, April 08, 2011.

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

Quotation total :	35		
Total of SCI(SSCI) list papers :	1		
Current projects :	Domestic :	2	International : 0

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	Study Programme Accreditation MASTER ACADEMIC STUDIES Civil Engineering	

Science, arts and professional qualifications

Name and last name:	Malešev M. Mirjana		
Academic title:	Associate Professor		
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad 16.01.1984		
Scientific or art field:	Materials in Civil Engineering, Condition Assessment and Construction		
Academic career	Year	Institution	Field
Academic title election:	2008	Faculty of Technical Sciences - Novi Sad	Materials in Civil Engineering, Condition Assessment and Construction Sanation
PhD thesis	2003	Faculty of Civil Engineering - Beograd	Materials in Civil Engineering and Concrete Technology
Magister thesis	1994	Faculty of Technical Sciences - Novi Sad	Materials in Civil Engineering and Concrete Technology
Bachelor's thesis	1983	Faculty of Technical Sciences - Novi Sad	Constructions in Civil Engineering

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

	ID	Course name	Study programme name, study type
1.	A202	Structures, Materials and Building	(A00) Architecture, Undergraduate Academic Studies
2.	GG09	Materials in Construction 2	(G00) Civil Engineering, Undergraduate Academic Studies
3.	GG21	Concrete Technology	(G00) Civil Engineering, Undergraduate Academic Studies
4.	URZP13	Building materials and structures	(ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies
5.	GG504	Durability and Assessment of Concrete Structures	(G00) Civil Engineering, Master Academic Studies
6.	GG517	Damages and Repair of Masonry, Steel and Timber Structures	(G00) Civil Engineering, Master Academic Studies
7.	GG518	Repair of Concrete Structures	(G00) Civil Engineering, Master Academic Studies
8.	GG521	Construction Business and Regulative	(G00) Civil Engineering, Master Academic Studies
9.	GP502	Bridge Management	(G00) Civil Engineering, Master Academic Studies
10.	URZP62	Assessment of Damaged Structures	(ZP1) Disaster Risk Management and Fire Safety, Master Academic Studies
11.	GS009	Energy-efficient materials and diagnostic of building thermotechnical performances	(G10) Energy Efficiency in Buildings, Specialised Academic Studies
12.	GS010	The design of energy efficient buildings	(G10) Energy Efficiency in Buildings, Specialised Academic Studies
13.	GS011	Energy revitalization of buildings	(G10) Energy Efficiency in Buildings, Specialised Academic Studies
14.	SDG11A	Odabrana poglavlja iz građevinskih materijala i konstrukcija	(G10) Geodesy and Geomatics, Specialised Academic Studies
15.	GD005	Selected Chapters in Concrete Theory and Technology	(G00) Civil Engineering, Doctoral Academic Studies
16.	GD008	Contemporary Methods in Concrete Structure Design	(G00) Civil Engineering, Doctoral Academic Studies
17.	GD015	Rheology of Concrete Structures	(G00) Civil Engineering, Doctoral Academic Studies

Representative references (minimum 5, not more than 10)

1.	Malešev, M. (1994) Primena metode ultrazvuka pri određivanju otpornosti betona na dejstvo mraza, Magistarska teza
2.	Malešev, M. (2003) Parametarska analiza uticaja novih vrsta cementa proizvedenih prema EN 197-1 na osnovna svojstva betona, Doktorska disertacija
3.	Malešev, M., Folić, R., Muravljov, M., Radonjanin, V. (1996): Eksperimentalno istraživanje zavisnosti između brzine ultrazvuka i otpornosti betona na dejstvo mraza, XX Kongres JUDIMK, Cetinje, str. 73 - 79.
4.	Radonjanin, V., Malešev, M. (1997): Concrete Quality Control by Using Statistical Methods, Bulletins for Applied & Computer Mathematics, BAM-1324, Vol.LXXXIB, Budapest, Hungary, pp. 95-104.
5.	Stojanović G., Radovanović M., Malešev M., Radonjanin V.: Monitoring of Water Content in Building Materials Using a Wireless Passive Sensor, Sensors, 2010, Vol. 10, No 5, pp. 4270-4280, ISSN 1424-8220, UDK: 10.3390/s100504270
6.	Malešev M., Radonjanin V., Radeka M., Milovanović V., Lukić I.: Basic properties of structural lightweight aggregate concrete in relation to type and quantity of cementitious materials - part 1, 1. International Symposium about Research and Application of Modern Achievements in Civil Engineering in the Field of Materials and Structures, Tara: Društvo za ispitivanje i istraživanje materijala i konstrukcija Srbije, Beograd, 19-21 Oktobar, 2011, pp. 159-168, ISBN 978-86-87615-02-1



UNIVERSITY OF NOVI SAD

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

**Study Programme Accreditation**

MASTER ACADEMIC STUDIES

Civil Engineering

Representative references (minimum 5, not more than 10)

7.	Radonjanin V., Malešev M., Radeka M., Lukić I., Milovanović V.: Basic properties of structural lightweight aggregate concrete in relation to type and quantity of cementitious materials - part 2, 1. International Symposium about Research and Application of Modern Achievements in Civil Engineering in the Field of Materials and Structures, Tara: Društvo za ispitivanje i istraživanje materijala i konstrukcija Srbije, Beograd, 19-21 Oktobar, 2011, pp. 169-178, ISBN 978-86-87615-02-1
8.	Malešev M., Radonjanin V., Emhemed Saed M., Milovanović V.: Zeleni betoni-nove mogućnosti održivog građevinarstva, 12. Konferencija Savremena građevinska praksa, Andrevlje: Fakultet tehničkih nauka i Društvo građevinskih inženjera Novog Sada, 19-20 Maj, 2011, pp. 209-226, ISBN 978-86-7892-324-1
9.	Marinković S., Radonjanin V., Malešev M., Ignjatović I.: Comparative environmental assessment of natural and recycled aggregate concrete, Waste Management, 2010, Vol. 30, No 11, pp. 2255-2264, ISSN 0956-053X, UDK: doi: 10.1016/j.wasman.2010.04.012
10.	Maksimović M., Stojanović G., Radovanović M., Malešev M., Radonjanin V., Radosavljević G., Smetana W.: Application of a LTCC sensor for measuring moisture content of building materials, Construction and Buildings Materials, 2012, Vol. 26, No 1, pp. 327-333, ISSN 0950-0618(02)00045-4, UDK: 10.1016/j.conbuildmat.2011.06.029

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

Quotation total :	4		
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	
	Study Programme Accreditation MASTER ACADEMIC STUDIES Civil Engineering	

Science, arts and professional qualifications

Name and last name:		Malešević B. Erika	
Academic title:		Full Professor	
Name of the institution where the teacher works full time and starting date:		Faculty of Technical Sciences - Novi Sad 15.09.2007	
Scientific or art field:		Organization, Construction Technology and Management	
Academic carier	Year	Institution	Field
Academic title election:	2003	Faculty of Civil Engineering Subotica - Subotica	Organization, Construction Technology and Management
PhD thesis	1995	Faculty of Economics - Beograd	Economic Science
Magister thesis	1983	Faculty of Economics - Beograd	Economic Science
Bachelor's thesis	1974	Faculty of Economics - Subotica	Economic Science
List of courses being held by the teacher in the accredited study programmes			
ID	Course name	Study programme name, study type	
1.	GG02 Sociology and Economics in Civil Engineering	(G00) Civil Engineering, Undergraduate Academic Studies	
2.	GG104 Economics of Civil Engineering	(G00) Civil Engineering, Undergraduate Academic Studies	
3.	GG105 Sociology of Work	(G00) Civil Engineering, Undergraduate Academic Studies	
4.	GG521 Construction Business and Regulative	(G00) Civil Engineering, Master Academic Studies	
5.	GM502 Management in Construction	(G00) Civil Engineering, Master Academic Studies	
6.	GM503 Management in a Construction Company	(G00) Civil Engineering, Master Academic Studies	
7.	GM504 Selected Chapters in Construction Economy	(G00) Civil Engineering, Master Academic Studies	
8.	Z513A Economics and the environmental protection	(Z20) Environmental Engineering, Master Academic Studies	
9.	Z513 Ekonomija i zaštita životne sredine(uneti naziv na engleskom)	(Z20) Environmental Engineering, Master Academic Studies	
Representative references (minimum 5, not more than 10)			
1.	Upravljanje investicijama, Autori: Dr E. Malešević, Đ. Malešević, izd. Proleter, Bečej 2011.		
2.	Upravljanje projektima u funkciji menadžmenta poslovnog sistema,Pregledni članak,Zbornik radova,Gf.Subotica,2006		
3.	Metodološki problemi ekonomske i društvene ocene investicionih projekata,Izgradnja,br.5.2001 Beograd.,str.171-145		
4.	Analiza rizika investicionih projekta sa ocenom tehničkih faktora profitabilnosti.Privredna izgradnja br.5,Novi Sad,2001, ad,		
5.	Primena stabla odlučivanja prilikom donošenja investicione odluke,Računovodstvo,br.6.2002,Beograd,str.14-21.,naučni rad		
6.	Significance of communications in conflicts" decrease in project management,Međunarodna konferenija iz projekt menadžmenta IPMA 2004, Budimpešta		
7.	Uloga vrednosne analize u vrednovanju investicionih projekta,Internacionalni naučno-stručni skup Građevinarstvo-nauka i praksa,2007,Žabljak,str.873-879		
8.	Upravljanje indirektnim troškovima građenja,Autori:Dr E.Malešević,Mr A Segedi,Internacionalni simpozijum iz projekt menadžmenta,YUPMA 2006,Zlatibor,Zbornik radova,str.299-304		
9.	Malesevic,E.,Trivunic,M.,Mucenski,V., SUCESS ANALYSIS OF THE PROJECT USING THE MODEL OF BALANCED SCOREARD,8th International conference Organization,technology and management inconstruction, Umag,Croatia, 2008, str.31-1 - 31-8,ISBN 95396245-92		
10.	Dražič,J., Malešević,E., Aleksić,I., (2012):Influence of Life Cycle Costs on the Choice of Optimal Variation of Floor Covering,4-th international Conference Civil Engineering – Science and Practice,Zbornik radova,Univerzitet Crne Gore,Građevinski Fakultet u Podgorici,Žabljak,str 2351-2358, ISBN: 978-86-82707-21-9		
Summary data for teacher's scientific or art and professional activity:			
Quotation total :		0	
Total of SCI(SSCI) list papers :		0	
Current projects :		Domestic :	0
		International :	0

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	Study Programme Accreditation MASTER ACADEMIC STUDIES Civil Engineering	

Science, arts and professional qualifications

Name and last name:	Milošević P. Mijodrag		
Academic title:	Assistant Professor		
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad 01.03.1998		
Scientific or art field:	Technological Process Design and Optimization and Technical Preparation		
Academic career	Year	Institution	Field
Academic title election:	2012	Faculty of Technical Sciences - Novi Sad	Technological Process Design and Optimization and Technical Preparation for Manufacturing
PhD thesis	2012	Faculty of Technical Sciences - Novi Sad	Technological Processes, Techno-Economic Optimization and Virtual Design
Magister thesis	2005	Faculty of Technical Sciences - Novi Sad	Technological Processes, Techno-Economic Optimization and Virtual Design
Bachelor's thesis	1997	Faculty of Technical Sciences - Novi Sad	Metrology, Quality, Fixtures and Ecological-Engineering Aspects

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

	ID	Course name	Study programme name, study type
1.	P1403	Integrated CAPP Systems and Technological Database	(P00) Production Engineering, Undergraduate Academic Studies
2.	P1503	Technological Logistics and Entrepreneurship	(P00) Production Engineering, Undergraduate Academic Studies
3.	P308	Process Planning	(P00) Production Engineering, Undergraduate Academic Studies
4.	P4408	Entrepreneurship in Small and Medium Enterprises	(P00) Production Engineering, Undergraduate Academic Studies
5.	P320	Technological Preparation of Production in Precision Engineering	(P00) Production Engineering, Undergraduate Academic Studies
6.	GM502	Management in Construction	(G00) Civil Engineering, Master Academic Studies
7.	P1506	Internet Technologies in Production Engineering	(PM0) Production Engineering, Master Academic Studies
8.	P315	Intelligent Process Planning	(PM0) Production Engineering, Master Academic Studies
9.	PLIS1	Logistics and Simulation in Technologies of Plastics Processing	(PM0) Production Engineering, Master Academic Studies
10.	SM1	Methods and Software Tools for Collaborative Design	(PM0) Production Engineering, Master Academic Studies
11.	DP001	Design and Research Methods in Production Engineering	(M00) Mechanical Engineering, Doctoral Academic Studies
12.	DP017	Selected Chapters in e-Manufacturing	(M00) Mechanical Engineering, Doctoral Academic Studies
13.	DP018	Modern Approach in Development Technological Preparation of Production	(M00) Mechanical Engineering, Doctoral Academic Studies
14.	DP022	Collaborative Engineering	(M00) Mechanical Engineering, Doctoral Academic Studies
15.	ZRD232	Logistics in the Security Services and Health at Work	(Z01) Safety at Work, Doctoral Academic Studies

Representative references (minimum 5, not more than 10)

1.	Antić, A., Novák Marcinčin J., Kovačević, D., Milošević, M., Ungureanu, N.: Depending Tool Vibrations of Tool Wear and Chip Forming Mechanism, New Ways In Manufacturing Technologies 2012, Prešov, Slovakia, 21th-23th June 2012.
2.	Todić, V., Zeljković, M., Tepić, J., Milošević, M., Lukić, D.: Techno-Economic Method for Evaluation and Selection of Flexible Manufacturing Systems, Metalurgija, ISSN 0543-5846, Vol. 51, No. 3, pp.349-353, 2012.
3.	Todić, V., Tepić, J., Kostelac, M., Lukić, D., Milošević, M.: Design and Economic Justification of Group Blanks Application, Metalurgija, ISSN 0543-5846, Vol. 51, No. 2, pp. 269-272, 2012.
4.	Todić, V., Tepić, J., Milošević, M., Lukić, D., Hadžistević M.: Design of Casting Blanks in CAPP System for Parts of Piston-Cylinder Assembly of Internal Combustion Engines, Metalurgija, ISSN 0543-5846, Vol. 51, No. 1, pp. 75-78, 2012.
5.	Milošević, M., Todić, V., Lukić, D.: Internet-Based Collaborative System For Process Planning, Journal of Production Engineering, ISSN 1821-4932, Vol.15, No.1, pp.45-48, Faculty of Technical Science, Department of Production Engineering, Novi Sad, 2012.
6.	Tepić, J., Todić, V., Lukić, D., Milošević, M., Borojević, S.: Development of the Computer-Aided Process Planning (CAPP) System for Polymer Injection Mold Manufacturing, Metalurgija, ISSN 0543-5846, Vol.50, No.4, pp. 273-277, 2011.
7.	Milošević, M., Todić, V., Lukić, D.: Web-Based Collaborative Environment for Process Planning, 34th International Conference on Production Engineering, Proceedings, pp.109-112, ISBN 978-86-6055-019-6, Faculty of Mechanical Engineering, Niš, September 2011.
8.	Todić, V., Penezić, N., Lukić, D., Milošević, M.: Tehnološka logistika i preduzetništvo, FTN Izdavaštvo, ISBN 978-86-7892-368-5, Fakultet tehničkih nauka, Novi Sad, 2011.



UNIVERSITY OF NOVI SAD

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

**Study Programme Accreditation**

MASTER ACADEMIC STUDIES

Civil Engineering

Representative references (minimum 5, not more than 10)

- | | |
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| 9. | Milošević, M., Todić, V., Lukić, D.: Model Development of Collaborative System for Process Planning, Proceedings of The International Scientific Conference "Flexible Technologies" - MMA, ISBN 978-86-7892-223-7, pp. 170 - 173, Faculty of Technical Science, Department for Production Engineering, Novi Sad, October 2009. |
| 10. | Todić, V., Lukić, D., Stević, M., Milošević, M.: Integrated CAPP System for Plastic Injection Mold Manufacturing, Materiale Plastice, ISSN 0025-5289, Vol. 45, No. 4, pp. 381-389, 2008. |

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

Quotation total :	8			
Total of SCI(SSCI) list papers :	5			
Current projects :	Domestic :	0	International :	2

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	Study Programme Accreditation MASTER ACADEMIC STUDIES Civil Engineering	

Science, arts and professional qualifications

Name and last name:	Milutin N. Darko		
Academic title:	Assistant Professor		
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad 01.10.2007		
Scientific or art field:	Hydrotechnics		
Academic carier	Year	Institution	Field
Academic title election:	2012	Faculty of Technical Sciences - Novi Sad	Hydrotechnics
PhD thesis	1998	Faculty of Civil Engineering - Beograd	Hydrotechnics
Bachelor's thesis	1988	Faculty of Civil Engineering - Beograd	Hydrotechnics
Magister thesis	-		Hydrotechnics

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

	ID	Course name	Study programme name, study type
1.	GG18	Fundamentals in Hydromechanics and Hydrotechnics	(G00) Civil Engineering, Undergraduate Academic Studies
2.	GG301	Hydrotechnical Facilities and Systems	(G00) Civil Engineering, Undergraduate Academic Studies
3.	GH502	Hydrology with Hydrometry	(G00) Civil Engineering, Undergraduate Academic Studies
4.	GI021	Structure Value Assessment	(GI0) Geodesy and Geomatics, Undergraduate Academic Studies
5.	URZP16	Climatology	(ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies
6.	URZP48	Fundamentals of Climatology and Hydrology	(ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies
7.	URZP57	Natural Hazards	(ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies (I20) Engineering Management, Undergraduate Academic Studies
8.	URZP59	Flood Defense Measures	(ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies
9.	GH505	Framework Directives E3 (WDF)	(G00) Civil Engineering, Master Academic Studies
10.	MPK004	Fundamentals of Hydromechanics and hydrotechinc	(MPK) Inženjerstvo tretmana i zaštite voda - TEMPUS(uneti naziv na engleskom), Master Academic Studies
11.	MPK022	hydrometric	(MPK) Inženjerstvo tretmana i zaštite voda - TEMPUS(uneti naziv na engleskom), Master Academic Studies

Representative references (minimum 5, not more than 10)

1.	Milutin D., and J.J. Bogardi, On Two Decomposition Schemes for Optimization of Multiple-Reservoir Systems, abstract, Annales Geophysicae, Part II: Oceans, Atmosphere, Hydrology & Nonlinear Geophysics, , XX General Assembly of European Geophysical Society, Hmburg, Germany, Suppl. II to Vol. 13, EGS, p. C462, 1995
2.	Bogardi, J.J. and D. Milutin, Sequential Decomposition in the Assessment of Long Term Operation of Large Scale Systems, in S.P. Simonovic, Z. Kundzewicz, D. Rosbjerg and K. Takeuchi (eds.), Modelling and Management of Sustainable Basin Scale Water Resource Systems, Proceedings of an international symposium held during the XXI General Assembly of the International Union of Geodesy and Geophysics, Boulder, Colorado, IAHS Publ. No. 231, 233 240, 1995.
3.	Milutin, D. and J.J. Bogardi, Performance Criteria for Multiunit Reservoir Operation and Water Allocation Problems, Presented at the Third IHP/IAHS George Kovacs Colloquium: Risk, Reliability, Uncertainty and Robustness of Water Resources Systems, UNESCO, Paris, 19 21 September 1996. To appear in International Hydrology Series, Cambridge University Press, eds: J.J. Bogardi and Z.W. Kundzewicz (under publication).
4.	Prohaska, S. and D. Milutin, Matimaticeskaya model prognozirovaniya sostoyanii vodohranilisc v realnom vremeni (Mathematical Model for the Real Time Forecasting of Inflows to a System of Hydropower Plants), Proceedings of the XV Conference of the Danube Countries on Hydrologic Forecasting, Varna, Bulgaria, 1990 (in Russian).
5.	Milutin, D. and J.J. Bogardi, Reliability Criteria in the Assessment of a Multiple Reservoir Operational Strategy Under Mediterranean Conditions, Proceedings of the European Symposium on Water Resources Management in the Mediterranean Under Drought or Water Shortage Conditions: Economic, Technical, Environmental and Social Issues (Nicosia, Cyprus), Balkema, Rotterdam, The Netherlands, 265 271, 1995
6.	Milutin, D., Interactive Water Resources Management Support System for Tunisia, a poster presented at The Forum of the UNESCO International School for Science for Peace on "Water Security in the Third Millennium: Mediterranean Countries towards a Regional Vision", Como, Italy, 1999
7.	Louati, M.E.H. and D. Milutin, Joint Operation of a Multiple Reservoir – Interbasin Water Transfer System: The Tunisian Case Study, presented at The Second World Water Forum (Session: Water-Use Management), The Hague, The Netherlands, March 17, 2000.



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

**Study Programme Accreditation**

MASTER ACADEMIC STUDIES

Civil Engineering

Representative references (minimum 5, not more than 10)

- | | |
|----|---|
| 8. | Bogardi, J.J.K.M., B.A.H.V. Brorens, M.D.U.P. Kularathna, D. Milutin and K.D.W. Nandalal, Long Term Assessment of a Multi Unit Reservoir System Operation: The ShellDP Program Package Manual, Report Series, Report 59, Department of Water Resources, Wageningen Agricultural University, The Netherlands, 272pp, 1995. |
| 9. | Bogardi, J.J., D. Milutin, M.E.H. Louati and G. Keser, The Performance of a Long Term Operational Policy of Multi Unit Reservoir Systems Under Drought Conditions, Proceedings of the VIII IWRA World Congress: Satisfying Future National and Global Demands, Cairo, Egypt, 1994. |

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

Quotation total :	15		
Total of SCI(SSCI) list papers :	0		
Current projects :	Domestic :	2	International : 5

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	Study Programme Accreditation MASTER ACADEMIC STUDIES Civil Engineering	

Science, arts and professional qualifications

Name and last name:	Ninkov Đ. Toša		
Academic title:	Full Professor		
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad 15.02.1994		
Scientific or art field:	Geodesy		
Academic carier	Year	Institution	Field
Academic title election:	2002	Faculty of Technical Sciences - Novi Sad	Geodesy
PhD thesis	1982	Faculty of Civil Engineering - Beograd	Geodesy
Magister thesis	1979	Faculty of Civil Engineering - Beograd	Geodesy
Bachelor's thesis	1972	Faculty of Civil Engineering - Beograd	Geodesy

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

	ID	Course name	Study programme name, study type
1.	GI019	Bathymetry	(GI0) Geodesy and Geomatics, Undergraduate Academic Studies
2.	GI025B	Geodetic Metrology	(GI0) Geodesy and Geomatics, Undergraduate Academic Studies
3.	GI029	Utility Information Systems and their Application	(GI0) Geodesy and Geomatics, Undergraduate Academic Studies
4.	GI307A	Engineering Geodesy	(GI0) Geodesy and Geomatics, Undergraduate Academic Studies
5.	GI402	Engineering Geodesy 2	(GI0) Geodesy and Geomatics, Undergraduate Academic Studies
6.	GI505	Advanced Techniques in Geodetic Design and Monitoring	(GI0) Geodesy and Geomatics, Undergraduate Academic Studies
7.	GI009	Introduction to deformation measurement and analysis	(GI0) Geodesy and Geomatics, Undergraduate Academic Studies
8.	GH507	Engineering Geodesy	(G00) Civil Engineering, Master Academic Studies
9.	GI403	Methods for Precise Geodetic Measurements and Data Processing	(GI0) Geodesy and Geomatics, Master Academic Studies
10.	GI514	Engineering Geodesy 3	(GI0) Geodesy and Geomatics, Master Academic Studies
11.	GI518	Geodesy in City Planning	(GI0) Geodesy and Geomatics, Master Academic Studies
12.	GI601	Geodynamics	(GI0) Geodesy and Geomatics, Master Academic Studies
13.	URZP65	Geodetic methods for the determination of geodynamic movements	(ZP1) Disaster Risk Management and Fire Safety, Master Academic Studies
14.	GS005	Contemporary recording methods of energy losses of buildings	(G10) Energy Efficiency in Buildings, Specialised Academic Studies
15.	GI516	Deformation analysis and measurements	(GI0) Geodesy and Geomatics, Master Academic Studies
16.	GI531	Application of GNSS systems	(GI0) Geodesy and Geomatics, Master Academic Studies
17.	GI540	Valuation of real estate	(GI0) Geodesy and Geomatics, Master Academic Studies
18.	GIAU02	Position Based Services	(E20) Computing and Control Engineering, Master Academic Studies
19.	SDGI02	Selected topics in engineering geodesy	(GI0) Geodesy and Geomatics, Specialised Academic Studies
20.	SDGI06	Selected Chapters in Real Estate Cadastre	(GI0) Geodesy and Geomatics, Specialised Academic Studies
21.	SDGI10	Selected Chapters in Landscape Arrangement	(GI0) Geodesy and Geomatics, Specialised Academic Studies
22.	SDGI11	Selected topics in deformation measurements and analysis	(GI0) Geodesy and Geomatics, Specialised Academic Studies
23.	SDGI14	Selected topics in geodetic networks and their optimization	(GI0) Geodesy and Geomatics, Specialised Academic Studies
24.	SDGI5D	Selected Chapters in the Mass Appraisal of Real Estate	(GI0) Geodesy and Geomatics, Specialised Academic Studies
25.	SDGI6A	Selected Chapters in Appraisal	(GI0) Geodesy and Geomatics, Specialised Academic Studies
26.	DGI002	Selected Chapters in Engineering Geodesy	(GI0) Geodesy and Geomatics, Doctoral Academic Studies



Study Programme Accreditation

MASTER ACADEMIC STUDIES

Civil Engineering

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

ID	Course name	Study programme name, study type
27.	DGI006 Selected Chapters in Real Estate Cadastre	(GI0) Geodesy and Geomatics, Doctoral Academic Studies
28.	DGI009 Selected Chapters in GNSS Systems	(GI0) Geodesy and Geomatics, Doctoral Academic Studies
29.	DGI010 Selected Chapters in Landscape Arrangement	(GI0) Geodesy and Geomatics, Doctoral Academic Studies
30.	DGI011 Selected Chapters in Deformation Analysis and Measurements	(GI0) Geodesy and Geomatics, Doctoral Academic Studies
31.	DGI014 Selected Chapters in Geodesic Networks and Their Optimization	(GI0) Geodesy and Geomatics, Doctoral Academic Studies
32.	DGI019 Selected Chapters in Municipal Information Systems	(GI0) Geodesy and Geomatics, Doctoral Academic Studies
33.	DGI012 Selected topics in integrated systems of surveying	(GI0) Geodesy and Geomatics, Doctoral Academic Studies
34.	DGI015 Selected topics in geophysics	(GI0) Geodesy and Geomatics, Doctoral Academic Studies

Representative references (minimum 5, not more than 10)

1.	Ninkov, T. (1988): "Optimizacija projektovanja geodetskih mreža" Naučna knjiga, Gradjevinski fakultet, Beograd 1989
2.	Ninkov, T. (1982): "A new method of land Surveying networks optimization". Meeting of Study Eroup 5 B. Survey Control Networks; Alborg, edited by K. Borre i W.M. Welsch Rep 7 Schriftenreihe Wissenschaftlicher Studiengang Wermessungswesen der Hochschule der Bundeswehr Munchen, pp. 293-300.
3.	Bulatović V., Sušić Z., Ninkov T.: Estimate of the ASTER-GDEM regional systematic errors and their removal, INT J REMOTE SENS, 2012, Vol. 33, No 18, pp. 5915-5926, ISSN 0143-1161
4.	Tosa Ninkov, Miro Govedarica, Milan Trifkovic: One Method of Renewal of Stereographics Survey Data in Coka Municipality, Geodetski list: glasilo Hrvatskoga geodetskog društva. 68(88), (2011), 4; (IF 2010 0.038)
5.	Govedarica Miro, Boskovic Dubravka, Petrovacki Dusan, Ninkov Tosa: Metadata Catalogues in Spatial Information Systems (Review) GEODETSKI LIST, (2010), vol. 64 br. 4, str. 313-334 (IF 2009 0.167)
6.	Vladimir Bulatović, Toša Ninkov, Zoran Sušić: Open Geospatial Consortium Web Services Complex Distribution Systems, Geodetski list, (2009), br 1, str.13-29, (IF 2009 0.167)
7.	Jasmina Nedeljković Ostojić, Miro Govedarica, Toša Ninkov: Analysis of Structure Surveying Method by 3D Laser Scanners Geodetski list:glasilo Hrvatskoga geodetskog društva 65(88), (2011), 1; (IF 2010 0.038)
8.	Bulatović V., Ninkov T., Malenković V., Vulić M.: Contemporary Methods of Determining Energy Losses in Structures, TTEM. Tehnics technologies education management, 2012, Vol. 7, No 2, pp. 687-692, ISSN 1840-1503
9.	- Projekat informacionog sistema postojeće kanalizacione mreže Beograda i 3D modela sadržaja na fizičkoj površini zemlje koristeći GPS merenja, satelitski snimak sistema IKONOS i postojeću dokumentaciju (Beograd 2006)
10.	- GIS projekat Naftnog i gasnog distributivnog sistema QGPC-a (Qatar General Petroleum Corporation)1999-2000 Šef projekta za GIS

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

Quotation total :	86
Total of SCI(SSCI) list papers :	5
Current projects :	Domestic : 3 International : 2





Science, arts and professional qualifications

Name and last name:	Perović I. Veselin		
Academic title:	Associate Professor		
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad 24.10.2006		
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	2006	Faculty of Technical Sciences - Novi Sad	Engineering Management
Magister thesis	2004	Faculty of Technical Sciences - Novi Sad	Engineering Management
Education Specialist Thesis	2003	Faculty of Technical Sciences - Novi Sad	Engineering Management
Bachelor's thesis	1982	Faculty of Economics - Beograd	Economic Science

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

	ID	Course name	Study programme name, study type
1.	Z310	Social Ecology	(Z20) Environmental Engineering, Undergraduate Academic Studies
2.	A206	Sociology and Economy of the Built Enviroment	(A00) Architecture, Undergraduate Academic Studies
3.	ASO311	Sociology of Art and Culture	(AS0) Scenic Architecture, Technique and Design, Undergraduate Academic Studies
4.	ETI41	Sociology of Technique	(E02) Electronics and Telecommunications, Undergraduate Professional Studies
5.	IM1018	Management Accounting and Financial Management	(I20) Engineering Management, Undergraduate Academic Studies
6.	IM1414	Analyses of business reports	(I20) Engineering Management, Undergraduate Academic Studies
7.	IM1415	Indicators of Business Performance	(I20) Engineering Management, Undergraduate Academic Studies
8.	IM1417	Controlling	(I20) Engineering Management, Undergraduate Academic Studies
9.	IM1718	Controlling and Auditing in Insurance	(I20) Engineering Management, Undergraduate Academic Studies
10.	A005S	Urban sociology and economics: selected chapters	(A00) Architecture, Specialised Academic Studies
11.	GM502	Management in Construction	(G00) Civil Engineering, Master Academic Studies
12.	GM503	Management in a Construction Company	(G00) Civil Engineering, Master Academic Studies
13.	GM504	Selected Chapters in Construction Economy	(G00) Civil Engineering, Master Academic Studies
14.	IMDS89	Controlling and Internal Audit in Corporate Governance	(I22) Engineering Management, Specialised Academic Studies
15.	IMDS90	Selected Chapters of Strategic Management Accounting	(I22) Engineering Management, Specialised Academic Studies
16.	KIR002	Controlling	(I20) Engineering Management, Specialised Professional Studies (IB0) Engineering Management - MBA, Specialised Professional Studies
17.	KIR003	Financial Modeling	(I20) Engineering Management, Specialised Professional Studies (IB0) Engineering Management - MBA, Specialised Professional Studies
18.	KON01	Controlling Planning	(I20) Engineering Management, Specialised Professional Studies (IB0) Engineering Management - MBA, Specialised Professional Studies
19.	KON02	Controlling Data and Reporting	(I20) Engineering Management, Specialised Professional Studies (IB0) Engineering Management - MBA, Specialised Professional Studies

UNIVERSITY OF NOVI SAD		FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
			
Study Programme Accreditation			
MASTER ACADEMIC STUDIES		Civil Engineering	
List of courses being held by the teacher in the accredited study programmes			
ID	Course name	Study programme name, study type	
20.	MUO00 ₂ Management Accounting, Auditing and Controlling	(I20) Engineering Management, Specialised Professional Studies	
21.	SZP003 Selected Chapters in Applied Management	(I20) Engineering Management, Specialised Professional Studies (IB0) Engineering Management - MBA, Specialised Professional Studies	
22.	Z513A Economics and the environmental protection	(Z20) Environmental Engineering, Master Academic Studies	
23.	IM2319 Project evaluation	(OM1) Mathematics in Engineering, Master Academic Studies (I20) Engineering Management, Master Academic Studies	
24.	IM2419 Business in Terms of Globalization	(I20) Engineering Management, Master Academic Studies	
25.	IM2426 Operational Audit and Controlling	(M50) Energy Management, Master Academic Studies (OM1) Mathematics in Engineering, Master Academic Studies	
26.	ZRMI3A Sociological and Legal Aspects of Occupational Safety	(Z01) Safety at Work, Master Academic Studies	
27.	A005 Urban Sociology and Economics – Selected Chapters	(A00) Architecture, Doctoral Academic Studies	
28.	IMDR89 Controlling and Internal Audit in Corporate Governance.	(I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies	
29.	IMDR90 Selected Chapters of Strategic Management Accounting	(I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies	
Representative references (minimum 5, not more than 10)			
1.	Perović V., Nerandžić B., Bulatović B.: The Transition Process in the Context of Privatization in the Republic of Serbia (2001-2010) , Actual Problems of Economics, 2013, No 02-2013, ISSN 1993-6788		
2.	Perović V., Nerandžić B., Bojanić R., Živkov E., Bulatović B.: Influence of Controlling the Investment Projection ERP (M) With Primary Focus on the Cash-flow in the Company, Metalurgia international, 2013, No 3 - 2013, ISSN 1582-2214		
3.	Nerandžić B., Perović V.: Personality and moral character traits and acknowledging the principles of management ethics, auditing and accounting ethics, African Journal of Business Management, 2011, ISSN 1993-8233		
4.	Perović V.: Controlling as a useful management instrument in crisis times, African Journal of Business Management, 2011, ISSN 1993-8233		
5.	Pečujlija M., Perović V., Nerandžić B.: Initiating innovation in Serbian companies organizational cultures, African Journal of Business Management, 2010, Vol. 4, No 18, pp. 3957-3967, ISSN 1993-8233		
6.	Perović V.: Controlling - a Chalange or necessity in time of crisis, 9. International Conference, Srećanje kontrolerjev: IZZivi in priložnosti kontrolinga, Ptuj, 24-25 Septembar, 2009		
7.	Demko-Rihter J., Perović V., Nerandžić B.: Harmonizacija finansijske i perspektive učenja i rasta u cilju povećanja vrednosti multidivizionalnog preduzeća, 15. Strategic Management and decision support systems in strategic Management, Subotica: Ekonomski fakultet Subotica, 22 April, 2010, ISBN 978-86-7233-252-0		
8.	Perović V., Nerandžić B., Bojanić R., Radišić S., Demko-Rihter J.: Controlling – as a Choice for Recent SME's, 3. International Conference for Entrepreneurship, Innovation and Regional Development ICEIRD, Novi Sad: Fakultet tehničkih nauka, 27-29 Maj, 2010, pp. 633-639		
9.	Nerandžić B., Perović V.: Internal audit, operational audit and corporative management, 4. Internacional Conference on Engineering Technologies - ICET, Novi Sad: Fakultet tehničkih nauka, 28-30 April, 2009, pp. 233-238, ISBN 978-86-7892-227-5, UDK: COBISS.SR-ID 245100807		
10.	Perović V., Nerandžić B., Todorović A., Bojanić R.: Controlling in a big company, 4. Internacional Conference on Engineering Technologies - ICET, Novi Sad: Fakultet tehničkih nauka, 28-30 April, 2009, pp. 239-242, ISBN 978-86-7892-227-5, UDK: COBISS.SR-ID 245100807		
Summary data for teacher's scientific or art and professional activity:			
Quotation total :		1	
Total of SCI(SSCI) list papers :		5	
Current projects :		Domestic :	1
		International :	0

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	Study Programme Accreditation MASTER ACADEMIC STUDIES Civil Engineering	

Science, arts and professional qualifications

Name and last name:	Radonjanin S. Vlastimir		
Academic title:	Associate Professor		
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad 01.11.1987		
Scientific or art field:	Materials in Civil Engineering, Condition Assessment and Construction		
Academic career	Year	Institution	Field
Academic title election:	2008	Faculty of Technical Sciences - Novi Sad	Materials in Civil Engineering, Condition Assessment and Construction Sanation
PhD thesis	2003	Faculty of Civil Engineering - Beograd	Materials in Civil Engineering and Concrete Technology
Magister thesis	1994	Faculty of Technical Sciences - Novi Sad	Materials in Civil Engineering and Concrete Technology
Bachelor's thesis	1982	Faculty of Civil Engineering - Beograd	Civil Engineering

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

	ID	Course name	Study programme name, study type
1.	A202	Structures, Materials and Building	(A00) Architecture, Undergraduate Academic Studies
2.	GG09	Materials in Construction 2	(G00) Civil Engineering, Undergraduate Academic Studies
3.	GG21	Concrete Technology	(G00) Civil Engineering, Undergraduate Academic Studies
4.	URZP13	Building materials and structures	(ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies
5.	GG504	Durability and Assessment of Concrete Structures	(G00) Civil Engineering, Master Academic Studies
6.	GG506	Professional Practice	(G00) Civil Engineering, Master Academic Studies
7.	GG517	Damages and Repair of Masonry, Steel and Timber Structures	(G00) Civil Engineering, Master Academic Studies
8.	GG518	Repair of Concrete Structures	(G00) Civil Engineering, Master Academic Studies
9.	GP502	Bridge Management	(G00) Civil Engineering, Master Academic Studies
10.	URZP62	Assessment of Damaged Structures	(ZP1) Disaster Risk Management and Fire Safety, Master Academic Studies
11.	GS009	Energy-efficient materials and diagnostic of building thermotechnical performances	(G10) Energy Efficiency in Buildings, Specialised Academic Studies
12.	GS010	The design of energy efficient buildings	(G10) Energy Efficiency in Buildings, Specialised Academic Studies
13.	GS011	Energy revitalization of buildings	(G10) Energy Efficiency in Buildings, Specialised Academic Studies
14.	SDG11A	Odabrana poglavlja iz građevinskih materijala i konstrukcija	(G10) Geodesy and Geomatics, Specialised Academic Studies
15.	GD005	Selected Chapters in Concrete Theory and Technology	(G00) Civil Engineering, Doctoral Academic Studies
16.	GD008	Contemporary Methods in Concrete Structure Design	(G00) Civil Engineering, Doctoral Academic Studies
17.	GD013	Earthquake Engineering	(G00) Civil Engineering, Doctoral Academic Studies
18.	GD015	Rheology of Concrete Structures	(G00) Civil Engineering, Doctoral Academic Studies

Representative references (minimum 5, not more than 10)

1.	Radonjanin,V. (2003): Prilog istraživanju osnovnih karakteristika betona modifikovanih polimerima sa aspekta njihove primene u armiranobetonskim konstrukcijama, Magistarska teza
2.	Radonjanin,V.(1994): Parametarska analiza karakteristika reparaturnih maltera sa aspekta njihove primene pri sanaciji armiranobetonskih konstrukcija, Doktorska disertacija
3.	Folić, R., Radonjanin, V. (1998): Experimental research on polymer modified concrete, ACI Materials Journal, VOL. 95 No. 4, July/August 1998, pp.463-470.
4.	Marinkovic Snezana B, Radonjanin Vlastimir S, Malesev Mirjana, Ignjatovic IS,Comparative environmental assessment of natural and recycled aggregate concrete (Article), WASTE MANAGEMENT, (2010), vol. 30 br. 11, str. 2255-2264
5.	Stojanovic Goran M, Radovanovic Milan, Malesev Mirjana, Radonjanin Vlastimir S, Monitoring of Water Content in Building Materials Using a Wireless Passive Sensor (Article), SENSORS, (2010), vol. 10 br. 5, str. 4270-4280
6.	Maksimovic M.; Stojanovic G.; Radovanovic M.; Malesev M.; Radonjanin V.; Radosavljevic G.; Smetana W (2012).: Application of a LTCC sensor for measuring moisture content of building materials, Elsevier - Construction and Building Materials, Volume 26, Issue 1, January 2012, pp. 327–333 (http://dx.doi.org/10.1016/j.conbuildmat.2011.06.029)
7.	Folić, R., Radonjanin, V., Malešev, M. (2002): The assessment of the Structure of Novi Sad Open University Damaged in Fire, Journal "Construction and Building Materials", No. 16 (2002), Elsevier Science, London, pp.427 - 440.



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

**Study Programme Accreditation**

MASTER ACADEMIC STUDIES

Civil Engineering

Representative references (minimum 5, not more than 10)

- | | |
|-----|---|
| 8. | Matić B., Tepić J., Sremac S., Radonjanin V., Matić D., Jovanović P.: Development and evaluation of the model for the surface payment temperature prediction, Journal "Metalurgija", Croatian metallurgical society, Zagreb, Croatia, ISSN: 0543-5846, 2012 (UDC – UDK 621.747.621.006.2:658.564=111), pp.329-332 |
| 9. | Pavlović, P., Folić, R., Radonjanin, V., Tatomirović, M. (1997): The Testing and Repair of Steel Silo, Journal "Construction and Building Materials", Vol. 11. No. 5-6 (1997), Elsevier Science, London, pp.353-363. |
| 10. | Radonjanin, V., Malešev, M., Folić, R. (2007): Assessment and repair of the bearing structure of a multi-storey parking garage, Journal of Building Appraisal, Volume 2, Issue 4, Publisher "Palgrave Macmillan", London, UK, February 2007, pp. 335-354. |

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

Quotation total :	24		
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	
	Study Programme Accreditation MASTER ACADEMIC STUDIES Civil Engineering	

Science, arts and professional qualifications

Name and last name:		Radović M. Nebojša			
Academic title:		Assistant Professor			
Name of the institution where the teacher works full time and starting date:		Faculty of Technical Sciences - Novi Sad			
Scientific or art field:		Traffic Paths			
Academic carieer	Year	Institution	Field		
Academic title election:	2010		Traffic Paths		
PhD thesis	2006	Faculty of Technical Sciences - Novi Sad	Traffic Paths		
Magister thesis	1999	Faculty of Civil Engineering - Beograd	Traffic Paths		
Bachelor's thesis	1989	Faculty of Civil Engineering - Beograd	Traffic Paths		
List of courses being held by the teacher in the accredited study programmes					
	ID	Course name	Study programme name, study type		
1.	GP403	Selected Chapters in Road Design	(G00) Civil Engineering, Undergraduate Academic Studies		
2.	GP501	Traffic Network Management	(G00) Civil Engineering, Master Academic Studies		
3.	GP503	Selected Chapters in Planning and Designing City Traffic Routes	(G00) Civil Engineering, Master Academic Studies		
Representative references (minimum 5, not more than 10)					
1.	"Tipologija vangradskih puteva", zbornik radova sa XIX Svetskog kongresa za puteve u Marakešu - izbor i sinteza radova po pitanju vangradskih puteva, izdavač Savez organizacija za puteve Jugoslavije, (str. 246-254), 1992., Beograd				
2.	"Životna sredina i razvoj puteva", zbornik radova sa XIX Svetskog kongresa za puteve u Marakešu - izbor i sinteza radova po pitanju vangradskih puteva, izdavač Savez organizacija za puteve Jugoslavije, (str. 236-245), 1992., Beograd.				
3.	"Nove tehnike za održavanje i pojačanje kolovoza", zbornik radova sa XX Svetskog kongresa za puteve u Montrealu - generalni izveštaj po pitanju IV - izbor i sinteza materijala, izdavači Društvo za puteve Jugoslavije, Društvo za puteve Srbije, Društvo za puteve Crne Gore, (str. 86-116), 1996., Beograd				
4.	"Gradska područja", zbornik radova sa XX Svetskog kongresa za puteve u Montrealu - Tehnički komitet za gradska područja - izbor i sinteza materijala, izdavači Društvo za puteve Jugoslavije, Društvo za puteve Srbije, Društvo za puteve Crne Gore, (str. 306-328), 1996., Beograd.				
5.	"Osnove za optimizaciju upravljanja održavanjem kolovoza", Građevinski kalendar 2009. (str. 46-105), Savez građevinskih inženjera Srbije, Beograd, 2008., YU ISSN 0352-2733, UDK 625.76; 625.8.08.				
6.	"Racionalizacija gospodarenja autocestom E-75, Novi Sad- Beograd", Ceste i Mostovi (str. 123-130), posebni broj I, Zagreb, Republika Hrvatska, 2007.				
7.	"Analyses of Pavement Rehabilitation Needs on the road network of the Republic of Serbia", 3rd IRF Congress for East - South Europe, 2002. Belgrade				
8.	"The Republic of Serbia Road Database Management System", THE SECOND B&H CONGRESS ON ROADS, Bosnia and Herzegovina, Sarajevo 24-25.09.2009.				
9.	"Analyses of Pavement Surface Distresses with Road Vision software", Proceedings: "Computer in the Practice of Building and Civil Engineering", (str. 387-391), Worldwide ECCE Symposium, European Council of Civil Engineers, Lahti, Finland, September 1997.				
10.	"Pavement Evaluation and Rehabilitation Programme in the Republic of Serbia", Special Focus Yugoslavia, 3rd IRF Congress for East - South Europe, 2002. Belgrade.				
Summary data for teacher's scientific or art and professional activity:					
Quotation total :		0			
Total of SCI(SSCI) list papers :		1			
Current projects :		Domestic :	0	International :	0

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	Study Programme Accreditation MASTER ACADEMIC STUDIES Civil Engineering	

Science, arts and professional qualifications

Name and last name:		Stipić S. Matija	
Academic title:		Assistant Professor	
Name of the institution where the teacher works full time and starting date:		-	
Scientific or art field:		Hydrotechnics	
Academic career	Year	Institution	Field
Academic title election:	2010		Hydrotechnics
PhD thesis	2009		Hydrotechnics
Magister thesis	1999		Hydrotechnics
Bachelor's thesis	1987		Hydrotechnics
List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	GG408	Municipal Hydrotechnics	(G00) Civil Engineering, Undergraduate Academic Studies
2.	URZP17	Devices and systems in fire protection	(ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies
3.	URZP40	Stationary Systems for Fire Extinguishing	(ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies
4.	GH501	Hydraulics 2	(G00) Civil Engineering, Master Academic Studies
5.	ZP507	Design and Maintenance of Stationary Fire Extinguishing Systems	(ZP1) Disaster Risk Management and Fire Safety, Master Academic Studies
6.	MPK003	Napredno sanitarno inženjerstvo(uneti naziv na engleskom)	(MPK) Inženjerstvo tretmana i zaštite voda - TEMPUS(uneti naziv na engleskom), Master Academic Studies
7.	MPK029	Hidraulika podzemnih voda	(MPK) Inženjerstvo tretmana i zaštite voda - TEMPUS(uneti naziv na engleskom), Master Academic Studies
Representative references (minimum 5, not more than 10)			
Summary data for teacher's scientific or art and professional activity:			
Quotation total :			
Total of SCI(SSCI) list papers :			
Current projects :		Domestic :	International :

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	Study Programme Accreditation MASTER ACADEMIC STUDIES Civil Engineering	

Science, arts and professional qualifications

Name and last name:	Trivunić R. Milan		
Academic title:	Full Professor		
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad 22.10.1985		
Scientific or art field:	Organization, Construction Technology and Management		
Academic career	Year	Institution	Field
Academic title election:	2007	Faculty of Technical Sciences - Novi Sad	Organization, Construction Technology and Management
PhD thesis	1996	Faculty of Technical Sciences - Novi Sad	Organization, Construction Technology and Management
Magister thesis	1992	Faculty of Technical Sciences - Novi Sad	Organization, Construction Technology and Management
Bachelor's thesis	1985	Faculty of Technical Sciences - Novi Sad	Organization, Construction Technology and Management

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

	ID	Course name	Study programme name, study type
1.	A374	Project and Construction Management 1	(A00) Architecture, Undergraduate Academic Studies
2.	GG31	Technology and Building Organization 1	(G00) Civil Engineering, Undergraduate Academic Studies
3.	GG311	Technology and Building Organization in Hydrotechnics	(G00) Civil Engineering, Undergraduate Academic Studies
4.	GG33	Technology and Building Organization 2	(G00) Civil Engineering, Undergraduate Academic Studies
5.	GG404	Precasting and Assembly Technology	(G00) Civil Engineering, Undergraduate Academic Studies
6.	ZR302A	Safety at work in construction	(Z01) Safety at Work, Undergraduate Academic Studies
7.	ZRI43A	Management of safety at work process in construction	(Z01) Safety at Work, Undergraduate Academic Studies
8.	A394	Project and Building Management 2	(AH0) Architecture, Master Academic Studies
9.	GG506	Professional Practice	(G00) Civil Engineering, Master Academic Studies
10.	GG520	Industrial Methods in Construction	(G00) Civil Engineering, Master Academic Studies
11.	GM501	System Theory and System Analysis	(G00) Civil Engineering, Master Academic Studies
12.	ZP514	Planning and organizing activities during events with catastrophic consequences	(ZP1) Disaster Risk Management and Fire Safety, Master Academic Studies
13.	GD004	Selected Chapters in Construction Management	(G00) Civil Engineering, Doctoral Academic Studies
14.	GD010	Advanced Building Technologies	(G00) Civil Engineering, Doctoral Academic Studies
15.	ZRD237	State and development trends of health and safety at work in the construction	(Z01) Safety at Work, Doctoral Academic Studies

Representative references (minimum 5, not more than 10)

1.	Trivunić, M., Matijević, Z. (2004, 2006): Tehnologija i organizacija građenja. Praktikum, Univerzitet u Novom Sadu, Fakultet tehničkih nauka, Edicija tehničke nauke, br. 96 i br. 126, Novi Sad, str. 1-199.
2.	Vuković, S., Trivunić, M. (1995): "Site management and production analysis of concrete hall assembly". The International Journal of Research, Development and Demonstration "Building Research and Information", Volume 23, Number 1, E. and F.N. Spon, UK, pp. 55-59.
3.	Trivunić, M. (1997): "An Expert System for The Optimization of Prefabricated Concrete Hall Element Assembly". CIB W-24 International Seminar on Industrialization Building: Present State and Future Trends, Haifa, Israel, pp. E-1-E-11.
4.	Trivunić, M. (1999): "PRIMATES-An Expert System For Selecting The Optimal Hall Assembly Method". 16th IAARC/IFAC/IEEE International Symposium on Automation and Robotics in Construction, Madrid, Spain, pp. 173-179.
5.	Trivunić, M., Folić, R. (1999): "Proračun ankera i užadi za zahvatanje montažnih betonskih elemenata". "Izgradnja", br. 53, 6/99, str. 148-157.
6.	Trivunić, M., Dražić, J. (2000): "The optimization of prefabricated concrete hall element production". Međunarodna konferencija "Građevinarstvo-građevinski menadžment 2000" – Nemzetközi konferencia "ÉPÍTŐIPAR – ÉPÍTÉSI MENEDZSMENT 2000", Budapest, pp. 109-116.
7.	Trivunić, M. (2001): "Tehnologija i organizacija nadgradnje zgrada". "Materijali i konstrukcije", br. 1-2, Beograd, str. 56-60.
8.	Matijević, Z., Trivunić, M. (2006): "Adaption of Benchmarking for The Application in The Hybrid method for Improving The Performances of A Company", International Conference VSU"2006, 22 may - 23 may, 2006, Sofia, Bulgaria, Vol II, pp. V-1 - V-6.
9.	Matijević, Z., Trivunić, M. (2006): "Transformation of the Organisational Structure of Construction Companies for the Purpose of Mass Customization", Adaptables2006, TU/e, International Conference On Adaptable Building Structures Eindhoven, The Netherlands, 03-05 July 2006, Volume 1, pp.3-232 - 3-236.



UNIVERSITY OF NOVI SAD

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

**Study Programme Accreditation**

MASTER ACADEMIC STUDIES

Civil Engineering

Representative references (minimum 5, not more than 10)

10.	Trivunić, M. (1997): Assembly management as a part of the construction process. ?Construction Technology - Construction Management ?97? (editors: K.Delević, E.Malešević, Ž.Prašćević, J.Gyulay), Faculty of Civil Engineering Subotica, Faculty of Civil Engineering Beograd, Faculty of Civil Engineering Budapest, Faculty of Architecture Budapest, Subotica, June 3rd-4th 1997, pp.84-91.
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Summary data for teacher's scientific or art and professional activity:

Quotation total :	0			
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	
	Study Programme Accreditation MASTER ACADEMIC STUDIES Civil Engineering	

Science, arts and professional qualifications

Name and last name:	Ubavin M. Dejan		
Academic title:	Assistant Professor		
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad 01.08.2005		
Scientific or art field:	Environment Protection Engineering		
Academic career	Year	Institution	Field
Academic title election:	2012	Faculty of Technical Sciences - Novi Sad	Environment Protection Engineering
PhD thesis	2012	Faculty of Technical Sciences - Novi Sad	Environment Protection Engineering
Magister thesis	2008	Faculty of Technical Sciences - Novi Sad	Environment Protection Engineering
Bachelor's thesis	2004	Faculty of Technical Sciences - Novi Sad	Environment Protection Engineering

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

	ID	Course name	Study programme name, study type
1.	Z205	Sustainable Use of Natural Resources and Environmental Protection System	(G10) Geodesy and Geomatics, Undergraduate Academic Studies (Z01) Safety at Work, Undergraduate Academic Studies (Z20) Environmental Engineering, Undergraduate Academic Studies
2.	Z309A	Solid Waste Management	(Z01) Safety at Work, Undergraduate Academic Studies (Z20) Environmental Engineering, Undergraduate Academic Studies
3.	Z401A	Design and Planning in Environmental Protection	(Z20) Environmental Engineering, Undergraduate Academic Studies
4.	Z401B	Design and Planning in Environmental Engineering	(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
5.	Z409A	Hazardous Waste Management and Recycling Technologies	(Z20) Environmental Engineering, Undergraduate Academic Studies
6.	Z414	Contemporary Methods of Soil Remediation	(Z20) Environmental Engineering, Undergraduate Academic Studies
7.	OAS214	Integralni katastar zagađivača(uneti naziv na engleskom)	(Z20) Environmental Engineering, Undergraduate Academic Studies
8.	Z309A	Upravljanje čvrstim otpadom(uneti naziv na engleskom)	(Z20) Environmental Engineering, Undergraduate Academic Studies
9.	M3202	Identification and reduction of pollution from industry	(M30) Energy and Process Engineering, Undergraduate Academic Studies
10.	ZC047	Waste to energy technologies	(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
11.	Z452	Design and maintenance of quality control in environmental engineering	(M40) Technical Mechanics and Technical Design, Master Academic Studies
12.	Z508	Specific Design Conditions in Environment Protection	(Z20) Environmental Engineering, Master Academic Studies
13.	Z511	Institutional Framework for Accidental Risk Management	(Z20) Environmental Engineering, Master Academic Studies
14.	ZR501	Hazardous Materials and Hazardous Waste	(Z01) Safety at Work, Master Academic Studies
15.	ZR502	Occupational Risk Assessment	(Z01) Safety at Work, Master Academic Studies
16.	Z508	Specifični uslovi projektovanja u zaštiti životne sredine(uneti naziv na engleskom)	(Z20) Environmental Engineering, Master Academic Studies
17.	Z511	Institucionalni okviri upravljanja akcidentnim rizicima(uneti naziv na engleskom)	(Z20) Environmental Engineering, Master Academic Studies
18.	GH508	Landfill desing and municipal waste treatmant systems	(G00) Civil Engineering, Master Academic Studies
19.	MPK027	Management of environmental facilities	(MPK) Inženjerstvo tretmana i zaštite voda - TEMPUS(uneti naziv na engleskom), Master Academic Studies
20.	SZSP21	Design and Planning Processes to Minimize Waste and Hazardous Materials	(Z00) Environmental Engineering, Specialised Academic Studies
21.	ZD052	Efficient Use of Natural Resources and Low-Carbon Development	(Z00) Environmental Engineering, Doctoral Academic Studies
22.	ZDI23	Material Flow Analysis in Urban Systems	(Z00) Environmental Engineering, Doctoral Academic Studies



Study Programme Accreditation

MASTER ACADEMIC STUDIES

Civil Engineering

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

ID	Course name	Study programme name, study type
23. ZSP21	Design and Planning Processes to Minimize Waste and Hazardous Materials	(OM1) Mathematics in Engineering, Doctoral Academic Studies (Z00) Environmental Engineering, Doctoral Academic Studies (Z01) Safety at Work, Doctoral Academic Studies
24. ZRD213	Current state and development tendencies of quality management of work environment	(Z01) Safety at Work, Doctoral Academic Studies
25. ZRD231	Economic implication of occupational health and safety projects implementation	(Z01) Safety at Work, Doctoral Academic Studies

Representative references (minimum 5, not more than 10)

1.	Stanisavljević N., Ubavin D., Batinić B., Fellner J., Vujić G.: Methane emissions from landfills in Serbia and potential mitigation strategies: a case study, WASTE MANAGE RES, 2012, ISSN 0734-242X
2.	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
3.	Vujić G., Jovičić N., Maja Đ., Ubavin D., Nakomčić Smaragdakis B., Gordana J., Dušan G.: INFLUENCE OF AMBIENCE TEMPERATURE AND OPERATIONAL - CONSTRUCTIVE PARAMETERS ON LANDFILL GAS GENERATION - CASE STUDY NOVI SAD, Thermal Science - International Scientific Journal, 2010, Vol. 14, No 2, pp. 555-564, ISSN 0354-9836, UDK: 547.211:631.41
4.	Vujić B., Milovanović D., Ubavin D.: Analiza koncentracionih nivoa čestičnih materija (PM10, ukupnih suspendovanih čestica i čađi) u Zrenjaninu, Hemijska industrija, 2010, Vol. 64, No 5, pp. 453-458, ISSN 0367-598X
5.	Landfill gas modelling and risk assessment in the purpose of the good managing in municipal landfill of Novi Sad - CHISA 2004, 16th International Congress of Chemical and Process Engineering, Prague, Czech Republic, August 2004
6.	Analysis of location for building objects; - Sixth International Symposium and Exhibition on Environmental Contamination in Central and Eastern Europe and the Commonwealth of Independent States (Prague 2003), Czech Republic, September 2003
7.	Vujić, G. Batinić, B. Ubavin, D. Stanisavljević. N., Analysis of municipal waste content & waste amount as the basis for the new waste management policy in Vojvodina, Serbia, ISWA/WMRAS World Congress, Singapore: ISWA, 03. - 06. Novembar, 2008.
8.	Ubavin D., Vujić G., Stanisavljević N., Batinić B., Miroslavljević Z.: National Methane Emissions from Waste Disposal Sites in Serbia, 1. The ISWA 2012 World Solid Waste Congress, Florence: ISWA, 17-19 Septembar, 2012, pp. 1279-1287, ISBN 978-88-907694-2-9
9.	Stanisavljević N., Jokanović S., Batinić B., Ubavin D., Vujić G.: Evaluation of Different Waste Management Options for South East Europe, Exemplified for The City of Novi Sad, 1. The ISWA 2012 World Solid Waste Congress, Florence: ISWA, 17-19 Septembar, 2012, pp. 1266-1272, ISBN 978-88-907694-2-9
10.	Batinić B., Ubavin D., Stanisavljević N., Vujić G., Tot B.: Analysis of relation between socioeconomic factors and MSW practice using ANN models, 1. The ISWA 2012 World Solid Waste Congress, Florence: ISWA, 17-19 Septembar, 2012, ISBN 978-88-907694-2-9

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

Quotation total :	3
Total of SCI(SSCI) list papers :	4
Current projects :	Domestic : 3 International : 0

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	Study Programme Accreditation MASTER ACADEMIC STUDIES Civil Engineering	

Science, arts and professional qualifications

Name and last name:		Uzelac N. Dušan	
Academic title:		Full Professor	
Name of the institution where the teacher works full time and starting date:		Faculty of Technical Sciences - Novi Sad 09.11.1973	
Scientific or art field:		Applied Fluid Mechanics - Hydro Pneumatic Technics	
Academic carier	Year	Institution	Field
Academic title election:	2002	Faculty of Technical Sciences - Novi Sad	Applied Fluid Mechanics - Hydro Pneumatic Technics
PhD thesis	1991	Faculty of Technical Sciences - Novi Sad	Mechanical Engineering
Magister thesis	1981	Faculty of Technical Sciences - Novi Sad	Mechanical Engineering
Bachelor's thesis	1973	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.	M3301 Pumping and Compression Stations	(M30) Energy and Process Engineering, Undergraduate Academic Studies (ZC0) Clean Energy Technologies, Undergraduate Academic Studies	
2.	M3306 Devices for Mechanical Purification	(M30) Energy and Process Engineering, Undergraduate Academic Studies (ZC0) Clean Energy Technologies, Undergraduate Academic Studies	
3.	M3403 Fluid Machines	(M30) Energy and Process Engineering, Undergraduate Academic Studies	
4.	M3404 Hydropneumatic Components	(M30) Energy and Process Engineering, Undergraduate Academic Studies	
5.	M3452 Gas equipment	(M30) Energy and Process Engineering, Undergraduate Academic Studies	
6.	M3496 Pipeline Transportation	(M30) Energy and Process Engineering, Undergraduate Academic Studies	
7.	GH503 Hydro Mechanical Machinery	(G00) Civil Engineering, Master Academic Studies	
8.	M3516 Hidropneumatic systems	(M30) Energy and Process Engineering, Master Academic Studies	
Representative references (minimum 5, not more than 10)			
1.	Univerzitetski udžbenik HIDROPNEUMATSKE KOMPONENTE, godina izdanja 1995, izdavač STYLOS, Novi Sad		
2.	Priručnik KURS ZA RUKOVOĐENJE I ODRŽAVANJE CEVOVODA, UREĐAJA I POSTROJENJA ZA PRIRODNI GAS, FTN, Novi Sad, 2002		
3.	Skripta PUMPNE I KOMPRESORSKE STANICE, (autorizovana predavanja), FTN, Novi Sad, 2000		
4.	D. Uzelac, S. Tašin, Solving Flow Field in Centrifugal Impellers of Flow Machines by Applying Boundaru Elements Methods, Facta Universitatis, Vol 1, No3, Niš, 1996		
5.	Uzelac D., Šostakov R., Milisavljević B., Tašin S., Boundaru Elements Method Applied in Analysis of Flow Field in Turbomachines, Applied&Computing Mathematics, Vol 1, Košice,1997		
6.	Uzelac D., Šostakov R., Tašin S., Starting of an Electric Motor Drive with Hydrodynamic Coupling, Facta Universitatis, Vol 1, No5, Niš, 1998		
7.	Šostakov R., Uzelac D., Časnji F., Surveying The Transsient Operating Egimes of a Driving Mechanism Wiht a Hydrodynamic Coupling, Mobility&Vehicles Mechanics, Kragujevac, 1999		
8.	Uzelac, D., Tašin, S.: Delimična automatizacija dvolinijske gasne stanice, Termotehnika 1-4, Beograd, 1998		
9.	Šostakov R., Uzelac D., Brkijač N., ON A METHOD FOR REPRESENTING THE MACHINE DRIVING SYSTEMS OPERATION IN TRANSIENT REGIMES IN AN EASY-TO-SURVEY MANNER FOR PRACTICE AND EDUCATION, Machine Desing, Novi Sad, 2007		
Summary data for teacher's scientific or art and professional activity:			
Quotation total :		0	
Total of SCI(SSCI) list papers :		0	
Current projects :		Domestic :	International :
		0	0

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	Study Programme Accreditation MASTER ACADEMIC STUDIES Civil Engineering	

Science, arts and professional qualifications

Name and last name:		Uzelac D. Đorđe	
Academic title:		Full Professor	
Name of the institution where the teacher works full time and starting date:		Faculty of Technical Sciences - Novi Sad 01.10.1999	
Scientific or art field:		Traffic Paths	
Academic carier	Year	Institution	Field
Academic title election:	2004	Faculty of Technical Sciences - Novi Sad	Traffic Paths
PhD thesis	2000	Faculty of Civil Engineering - Beograd	Traffic Paths
Magister thesis	1987	Faculty of Civil Engineering - Beograd	Traffic Paths
Bachelor's thesis	1974	Faculty of Civil Engineering - Beograd	Traffic Paths
List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	GG20	Road and Traffic Networks	(G00) Civil Engineering, Undergraduate Academic Studies
2.	GP401	Information System Aided Structure Management	(G00) Civil Engineering, Undergraduate Academic Studies
3.	GP402	Road Structures	(G00) Civil Engineering, Undergraduate Academic Studies
4.	GP403	Selected Chapters in Road Design	(G00) Civil Engineering, Undergraduate Academic Studies
5.	S0326	Roads and Junctions	(S00) Traffic and Transport Engineering, Undergraduate Academic Studies
6.	GP502	Bridge Management	(G00) Civil Engineering, Master Academic Studies
Representative references (minimum 5, not more than 10)			
1.	Formiranje relacione baze podataka pomoću INFORMIX-SQL RDBMS, IMS Institut, Beograd, 1992. (181 strana).		
2.	Teza: "Razvoj optimalnog sistema za formiranje baze podataka o mreži puteva", Građevinski fakultet, Beograd, 1993.		
3.	Toplotni režim i njegov uticaj na mehaničko ponašanje materijala u kolovoznoj konstrukciji		
4.	Uzelac Đ. i saradnici: Baza podataka o mostovima, Uputstvo za rad. Fakultet tehničkih nauka, Novi Sad i Direkcija za puteve Republike Srbije, Beograd, oktobar 2003		
5.	Uzelac DJ.: Structures and Buildings maintenance management concept with example of bridges on national road network. 9TH National and 3RD International scientific meeting ""INDIS 2003"", Proceedings, University of Novi Sad in cooperation with Yugoslav Engineering Academy, Novi Sad, Novembar 2003, str. 395-406.		
6.	Uzelac Đ.: Baze podataka o putevima, mostovima i saobraćaju u okviru integrisanog informacionog sistema o putnoj mreži, Građevinski kalendar 1999. (str. 169-232), Savez građevinskih inženjera i tehničara Jugoslavije, Beograd, novembar 1998.		
7.	Uzelac Đ.: Seminar - Upravljanje putevima i sistemi upravljanja, poglavlje II: Informacioni sistem za puteve (strane 32 - 55 (strane 80 - 96), "Srbijaput", mart 1992.godine.		
8.	Babić B., Uzelac Đ. i grupa autora: Generalni izveštaj za XIX Svetski kongres za puteve, Jugoslovenski nacionalni izveštaj po "Temi II - Gradjenje i održavanje puteva", (str. 579-596), Marakeš, Maroko, septembar 1991. Đorđe Uzelac je autor odeljka "Analysis of the increased axle load impact on pavement structures".		
9.	Metode za obradu podataka izmerenih deflektografom "Lacroix", "Put i saobraćaj", 7-8/1980, (str. 37-43), Beograd		
10.	Problem utvrđivanja stanja kolovoznih konstrukcija i njihovog prilagodjavanja saobraćaju, "Put i saobraćaj", 3-4/1985 (str. 10-15), Beograd		
Summary data for teacher's scientific or art and professional activity:			
Quotation total :		0	
Total of SCI(SSCI) list papers :		0	
Current projects :		Domestic :	International :
		1	0

	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	Study Programme Accreditation MASTER ACADEMIC STUDIES Civil Engineering	

Science, arts and professional qualifications

Name and last name:		Vasić V. Milinko	
Academic title:		Full Professor	
Name of the institution where the teacher works full time and starting date:		Faculty of Technical Sciences - Novi Sad 15.03.1976	
Scientific or art field:		Geotechnics	
Academic carieer	Year	Institution	Field
Academic title election:	2007	Faculty of Technical Sciences - Novi Sad	Geotechnics
PhD thesis	1993	Faculty of Mining and Geology - Beograd	Geotechnics
Magister thesis	1983	Faculty of Mining and Geology - Beograd	Geotechnics
Bachelor's thesis	1975	Faculty of Mining and Geology - Beograd	Geotechnics
List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type
1.	GG01	Engineering Geology	(G00) Civil Engineering, Undergraduate Academic Studies
2.	GI102	Fundamentals in Geosciences	(GI0) Geodesy and Geomatics, Undergraduate Academic Studies
3.	GP404	Geotechnics	(G00) Civil Engineering, Undergraduate Academic Studies
4.	URZP18	Stability of terrain	(ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies
5.	GP504	Tunnels	(G00) Civil Engineering, Master Academic Studies
6.	MPK017	Fundamentals of Geosciences	(MPK) Inženjerstvo tretmana i zaštite voda - TEMPUS(uneti naziv na engleskom), Master Academic Studies
7.	DGI020	Selected chapters in geodynamics	(GI0) Geodesy and Geomatics, Doctoral Academic Studies
Representative references (minimum 5, not more than 10)			
1.	Vasić M. Inženjerska geologija, udžbenik, FTN, 2002, 305str.		
2.	Vasić M. Geotehničke klasifikacije stenskih masa za podzemne objekte, Monografija, FTN, 2007, 180str.		
3.	P. Lokin., N.Pavlović., M.Petričević., M.Vasić : Primeri istraživanja klizišta u području Tuzle, naučno-stručni časopis Rudarstvo br17-18-Istraživanje i sanacija klizišta, str. 92-102., Tuzla, 2000.		
4.	P.Lokin, M.Vasić., M.Petričević, M., Z. Janošev: On the disturbance and protection of the geological medium in natural parks with special reference to Fruška Gora, eighth Internacional Congress International Association for Engineering Geology and the Environment, str. 2659-2666, Vancouver, Canada, 1998.		
5.	Lokin,P., Vasić,M., Saković,S., Petričević,M.: Landslide along the Danube bank at Novi Sad, Yugoslavia, 7. international symposium on landslide, str.803-808, Trondheim, Norway, 1996.		
6.	Vasić,M., Vasić,S: Klasifikovanje stenskih masa za podzemne objekte primenom računarskog programa KLASA IPO-96, Medjunarodna konferencija-Pravci razvoja geotehnike, str. 414-423, Beograd, 1996.		
7.	Đogo, M., Vasić, M., (2011): Landslide in the area of the bridge on the Danube in Novi Sad. Proceedings of the ICE - Geotechnical Engineering, Volume 164, Issue 1, pp. 3-10, Thomas Telford, London. ISSN: 1353-2618, E-ISSN: 1751-8563, DOI: 10.1680/geng.2011.164.1.3		
8.	Đogo, M., Vasić, M., Ćosić, M., (2011): Engineering geological evaluation of the conditions for constructing a bridge and a tunnel in the zone of the old Petrovaradin Fortress. Bulletin of Engineering Geology & the Environment, Volume 70, Number 1, pp. 139-142, Springer, Berlin. ISSN: 1435-9529, E-ISSN: 1435-9537, DOI: 10.1007/s10064-010-0292-0		
9.	Vasić, M., Đogo, M., (2012): Settlement of the Fabus building due to the infiltration of water into the loess soil. GNP 2012. 4 internacionalni naučno-stručni skup Građevinarstvo-nauka i praksa, Zbornik radova, pp. 1231-1236, Žabljak.		
10.	Đogo, M., Vasić, M., (2012): Geotechnical investigations for the oil Refinery in Novi Sad, Serbia. 11th Australia - New Zealand Conference on Geomechanics, ANZ 2012 Conference Proceedings, pp. 1118-1122, Melbourne.		
Summary data for teacher's scientific or art and professional activity:			
Quotation total :		3	
Total of SCI(SSCI) list papers :		2	
Current projects :		Domestic :	International :
		2	0


	UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6	
	Study Programme Accreditation MASTER ACADEMIC STUDIES Civil Engineering	

Science, arts and professional qualifications

Name and last name:	Vujić V. Goran		
Academic title:	Associate Professor		
Name of the institution where the teacher works full time and starting date:	Faculty of Technical Sciences - Novi Sad 20.02.1999		
Scientific or art field:	Environment Protection Engineering		
Academic carieer	Year	Institution	Field
Academic title election:	2012		Environment Protection Engineering
PhD thesis	2007	Faculty of Technical Sciences - Novi Sad	Environment Protection Engineering
Magister thesis	2003	Faculty of Technical Sciences - Novi Sad	Environment Protection 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.	E0S42	Renewable sources and environmental protection	(E01) Power Engineering - Renewble Sources of Electrical Energy, Undergraduate Professional Studies
2.	Z204A	Monitoring of the Living Environment	(Z01) Safety at Work, Undergraduate Academic Studies (ZC0) Clean Energy Technologies, Undergraduate Academic Studies (Z20) Environmental Engineering, Undergraduate Academic Studies
3.	Z309A	Solid Waste Management	(Z01) Safety at Work, Undergraduate Academic Studies (Z20) Environmental Engineering, Undergraduate Academic Studies
4.	Z401A	Design and Planning in Environmental Protection	(Z20) Environmental Engineering, Undergraduate Academic Studies
5.	Z401B	Design and Planning in Environmental Engineering	(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
6.	Z409A	Hazardous Waste Management and Recycling Technologies	(Z20) Environmental Engineering, Undergraduate Academic Studies
7.	OAS214	Integralni katastar zagađivača(uneti naziv na engleskom)	(Z20) Environmental Engineering, Undergraduate Academic Studies
8.	Z101	Uvod i principi zaštite okruženja(uneti naziv na engleskom)	(Z20) Environmental Engineering, Undergraduate Academic Studies
9.	Z205	Održivo korišćenje prirodnih resursa i sistem zaštite životne sredine(uneti naziv na engleskom)	(Z20) Environmental Engineering, Undergraduate Academic Studies
10.	Z309A	Upravljanje čvrstim otpadom(uneti naziv na engleskom)	(Z20) Environmental Engineering, Undergraduate Academic Studies
11.	Z401A	Projektovanje i planiranje u zaštiti životne sredine(uneti naziv na engleskom)	(Z20) Environmental Engineering, Undergraduate Academic Studies
12.	Z409A	Upravljanje opasnim otpadom(uneti naziv na engleskom)	(Z20) Environmental Engineering, Undergraduate Academic Studies
13.	M3202	Identification and reduction of pollution from industry	(M30) Energy and Process Engineering, Undergraduate Academic Studies
14.	ZC047	Waste to energy tehnologies	(ZC0) Clean Energy Technologies, Undergraduate Academic Studies
15.	Z452	Design and maintenance of quality control in environmental engineering	(M40) Technical Mechanics and Technical Design, Master Academic Studies
16.	Z508	Specific Design Conditions in Environment Protection	(Z20) Environmental Engineering, Master Academic Studies
17.	Z511	Institutional Framework for Accidental Risk Management	(Z20) Environmental Engineering, Master Academic Studies
18.	ZR501	Hazardous Materials and Hazardous Waste	(Z01) Safety at Work, Master Academic Studies
19.	Z508	Specifični uslovi projektovanja u zaštiti životne sredine(uneti naziv na engleskom)	(Z20) Environmental Engineering, Master Academic Studies
20.	GH508	Landfill desing and municipal waste treatmant systems	(G00) Civil Engineering, Master Academic Studies
21.	MPK012	Solid waste management	(MPK) Inženjerstvo tretmana i zaštite voda - TEMPUS(uneti naziv na engleskom), Master Academic Studies
22.	MPK014	Monitoring and system control	(MPK) Inženjerstvo tretmana i zaštite voda - TEMPUS(uneti naziv na engleskom), Master Academic Studies
23.	PIP16	Plastics and environmental protection	(PM0) Production Engineering, Master Academic Studies

UNIVERSITAS STUDIORUM NEOPLANTENSIS		UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6			
Study Programme Accreditation				Civil Engineering	
MASTER ACADEMIC STUDIES					
List of courses being held by the teacher in the accredited study programmes					
ID	Course name	Study programme name, study type			
24.	SZD042	Models of economic evaluation of environmental projects	(Z00) Environmental Engineering, Specialised Academic Studies		
25.	SZD051	Applications of optimal control theory in living environment protection	(Z00) Environmental Engineering, Specialised Academic Studies		
26.	SZDI23	Material Flow Analysis in Urban Systems	(Z00) Environmental Engineering, Specialised Academic Studies		
27.	SZSP21	Design and Planning Processes to Minimize Waste and Hazardous Materials	(Z00) Environmental Engineering, Specialised Academic Studies		
28.	ZCM06	Security of strategic energy facilities	(ZC0) Clean Energy Technologies, Master Academic Studies		
29.	ZD051	Applications of optimal control theory in living environment protection	(Z00) Environmental Engineering, Doctoral Academic Studies		
30.	ZDI23	Material Flow Analysis in Urban Systems	(Z00) Environmental Engineering, Doctoral Academic Studies		
31.	ZDO42	Models of Economic Evaluation of Projects for Environment Protection	(OM1) Mathematics in Engineering, Doctoral Academic Studies (Z00) Environmental Engineering, Doctoral Academic Studies		
32.	ZSP20	Systemic Regulation of Environment	(G00) Civil Engineering, Doctoral Academic Studies		
33.	ZSP21	Design and Planning Processes to Minimize Waste and Hazardous Materials	(OM1) Mathematics in Engineering, Doctoral Academic Studies (Z00) Environmental Engineering, Doctoral Academic Studies (Z01) Safety at Work, Doctoral Academic Studies		
Representative references (minimum 5, not more than 10)					
1.	Vujić, G., Pešenjanski, I.: Combustion chamber for stawn bals, Fifth International Symposium and Exhibition on Environmental Contamination in central and Eastern Europe, Prague 2000.				
2.	Vujić, G., Marinić, I., Bašić, Đ.: Waste Separation and Recycling Methods, Which Are The Most Suitable For City of Novi Sad, Sixth International Symposium and Exhibition on Environmental Contamination in central and Eastern Europe, Prague 2003.				
3.	Vujić, B., Vujić, G.: Environmental due diligence and its appliance in specific national environmental condition in Serbia&Montenegro, Sixth International Symposium and Exhibition on Environmental Contamination in central and Eastern Europe, Prague 2003.				
4.	Jezdimirovic.I.A., Vujic,G., Mudric, J.: Special Conditions of Raw and Drinking Water management, Sixth International Symposium and Exhibition on Environmental Contamination in central and Eastern Europe, Prague 2003.				
5.	Vujić, G., Bašić, Đ. Mihajlov, A.: Process of privatisation and environment in Serbia and Montenegro, PSU-UNS conference, HAT-YAI, Thailand, 16-18 december. 2003.				
6.	Vujić, G., Vojinović-Miloradov M., Bašić, Đ., Vujić,B., Čabradi, G., Tomašević, B.: Landfill gas modelling and risk assessment in the purpose of the good managing in municipal landfill of Novi Sad, CHISA 2004, 22-26,08.2004.Prague, Czech Republic.				
7.	Ubavin, D., Vujić, G., Bašić, Đ.:Landfill gas extraction and collection systems; PSU-UNS International Conference On Engineering And Environment - ICEE-2005, Novi Sad 19-21 May, 2005.				
8.	Ubavin, D., Vujić, G., Mihajlov, A., Bašić, Đ.: Gas to energy opportunity on landfill in city of Novi Sad – Serbia and Montenegro D. Faculty of Technical Sciences, Novi Sad, Serbia and Montenegro, World Congress and Exhibition "ISWA 2005", November 6.-10. 2005. Buenos Aires, Argentina Ref No 194, Proceedings p.82				
9.	Marjanović, D., Vujić, G , Mihajlović, V., Ubavin, D.: Selection of Technology and Public Opinion as Key Factors in Regional Landfill Location Selection, PSU-UNS International Conference on Engineering and Environment - ICEE-2007, Phuket May10-11, 2007. Proceedings CD ICCEE2007149				
10.	Vujić, G , Mihajlović, V., Ubavin, D.: Possibilities for Landfill Gas Usage at Novi Sad Landfill, PSU-UNS International Conference on Engineering and Environment - ICEE-2007, Phuket May10-11, 2007. Proceedings CD ICEE2007150				
Summary data for teacher's scientific or art and professional activity:					
Quotation total :		0			
Total of SCI(SSCI) list papers :		0			
Current projects :		Domestic :	1	International :	1



UNIVERSITY OF NOVI SAD

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



Study Programme Accreditation

MASTER ACADEMIC STUDIES

Civil Engineering

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. Teaching at the study programme Civil Engineering is performed in 2 shifts so each student is provided with a minimum of 2 m² of space.

Lectures are held in amphitheatres, classrooms and specialized laboratories. The library possesses more than 100 library units relevant for the performance of the study programme. All courses from the study programme Civil Engineering have adequate textbooks, devices and supplementary equipment available on time and in a satisfactory number for the normal teaching process. There is also adequate information support.

Faculty has the library and the study room and provides a seat for each student in amphitheatres, classrooms and laboratories.



Study Programme Accreditation

MASTER ACADEMIC STUDIES

Civil Engineering

Standard 11. Quality Control

The quality control of the study programme is performed regularly and systematically through self-evaluation and external quality control. One should place an emphasis on the multi-decade practice of students' surveys.

Study programme quality control is elaborated in the following manners:

- Surveying students at final lecture from the given course.
- Surveying students on the quality of the study programme and logistic support to the studies in the event of awarding the Diploma. Also, the studying comfort (classroom cleanness and tidiness) is evaluated there.
- Surveying the teaching and non-teaching staff on the quality of the study programme and the logistic support to the studies. This survey evaluates the work of the Dean's office, Registrar's office, library, and other services at the Faculty. Furthermore, the studying comfort (classroom cleanness and tidiness) is also evaluated.

To monitor the quality of the study programme, there is also a committee comprising of the head of the study programme, all heads of all Departments participating in the realization of the study programme, together with a student from each study group.



Study Programme Accreditation

MASTER ACADEMIC STUDIES

Civil Engineering

Standard 12. Distance Education

Distance learning is not provided for.