Subject Title: Mathematical Methods in Engine

Course Basic Information					
Academic Unit:	Faculty of Civil Er	ngineering			
Course Name:	Mathematical Met	hods in Engineering			
Level:	MSc				
Course Status:	Elective				
Year of Study:	I / I semester				
Number of Hours per Week:	2+2				
ECTS Credits:	6				
Time /Venue:	According to the Timetable				
Course Teacher:	Prof. Dr. Abdullah Zeinullahu				
Contact Details:	<i>e</i> -mail: abdullah.zejnullahu@uni-pr.edu				
Course Description	In the framework of	f this subject will be a	addressed:		
	order, differential equation emphasis on linear coefficients and the	equations of higher r differential equation ir numerical solution.	orders with special ons with constant		
	<i>Infinite series</i> : infin functional, polynon application of the se	ite series of number nial series and Fou eries in solving differ	s. Endless series of rier series and the ential equations.		
	<i>Multiple integrals</i> : application of dou building construction	double integrals, tr ble and triple integr on.	riple integrals, and cals in the field of		
	<i>Bend lined and surface integrals:</i> bend integrals, surface integrals and application of these types of integrals in the field of building construction.				
Course Objectives:	 to enable students to solve tasks from the contents of the file, for students to expand their professional competence by using materials elaborated, to provide students with knowledge of the case the extent that they should be able to apply the knowledge in the construction industry, to develop skills extent that students can make mathematical models to practical problems and thereafter to solve. 				
Learning Outcomes:	 After completing this course students can: to draw up mathematical models of practical problems, to solve mathematical models, to interpret in practice solutions results from mathematical models. 				
Student Workload (Consistent with the Learning Outcomes)					
Activity	Hours	Day/Wook	Total		
Activity	110015	Day/ WCCK	Iutai		

Lectures		2	15	30	
Theory/ Lab Work		2	15	30	
Practical Work					
Contact Hours with Teache	Contact Hours with Teacher		~	~	
/Consultations during Office Hours		1	5	5	
Field Work					
Colloquium, Seminars		10	2	20	
Homework		1	15	15	
Self-study Time		2	15	30	
(in the Library or at Home)		2	15	50	
Final Exam Preparation		7	3	21	
Evaluations (Tests, Quiz, Final		4	1	4	
exam)		•	1	•	
Projects, Presentations, etc	•				
Total				150	
Teaching Methodology:		The lessons are taught through lecture material provided and			
		been properly follow	wed by exercises, the	exercise of practical	
		tasks as well as con	tinuous duty at home	•	
Evaluation Methods:		Activity: 10%			
		First test. 50 %			
		Einel avers: 200/			
		FIIIALEXAIII. 50%			
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Basic Literature:		- A. Zejnulla	hu, F. Berisha: Ma	tematika III, 1997,	
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Basic Literature:		- A. Zejnulla UP-FNA.	hu, F. Berisha: Ma	tematika III, 1997,	
Basic Literature: Additional Literature:		- A. Zejnulla UP-FNA. - Richard L.	hu, F. Berisha: Ma Burden, J.Douglas	tematika III, 1997, Faires: Numerical	
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Basic Literature: Additional Literature: Course Plan: Week Week 1: Week 2: Week 3:	Title of Introduc Equation Equation	 A. Zejnulla UP-FNA. Richard L. Analysis, 19 USA. Margarita (2004, Unive the Lecture tion to the content, a n of first level n of high levels	hu, F. Berisha: Ma Burden, J.Douglas 997, Brooks/Cole Pu Qirko, Syti Hysko: ersiteti Politeknik i Ti	tematika III, 1997, Faires: Numerical Iblishing Company, Analiza Numerike, ranes.	
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Basic Literature:Additional Literature:Additional Literature:Week 1:Week 1:Week 2:Week 3:Week 4:Week 5:Week 5:Week 6:Week 7:Week 8:Week 9:Week 10:	Title of Introduc Equation Equation Liner di Numeric Unlimite First tess Function Applicat	 A. Zejnulla UP-FNA. Richard L. Analysis, 19 USA. Margarita (2004, Unive the Lecture tion to the content, a n of first level n of high levels fferential equation ar cal solution of differe ed numerical serials t nal series, Fourie Series integrals	hu, F. Berisha: Mat Burden, J.Douglas 997, Brooks/Cole Pu Qirko, Syti Hysko: ersiteti Politeknik i Ti im and division of th ad constant coefficien ential equation	tematika III, 1997, Faires: Numerical iblishing Company, Analiza Numerike, ranes. e subject t	
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Week 12:	Bend lined integrals
Week 13:	Surface integrals
Week 14:	Application of bend lined and surface integrals
Week 15:	Second test

Academic Policies and Rules of Civility:

The student is obliged to attend at least 80% of the lectures and tutorials. Plagiarism is considered to be the greatest academic crime. Anyone caught having plagiarized (whether coping, paraphrasing from different kinds of materials without acknowledging sources, presenting other people's work/ideas as their own and so forth) will receive a failing grade and might be subject to disciplinary measures. Students and teachers have to confine to ethical conducts.