COURSE GUIDE MATHEMATICAL ANALYSIS– short form

Academic year 2017-2018

Course name[1]	**Mathematical Analysis**					Course code		1EPI01DF	
Course type[2]	DF	Category[3]	DI	Year of study	1	Semester	1	Number of credit points	4

Faculty	Material Science and Engineering	Number of teaching and learning hours[4]					
Field	Mechanical Engineering	Total	L	T	LB	P	IS
Specialization	Equipments for Industrial Processes	84	28	28	-	-	28

Pre-requisites from the curriculum[5]		
	Compulsory	Algebra, Mathematical Analysis, high-school level (M2 Mathematics)
	Recommended	-

General objective [6]	The main objective is that the student becomes familiar with mathematical thinking and is able to solve practical problems
Specific objectives[7]	• This course is intended to introduce the students of engineering to those areas of mathematical analysis, which will be used in technical specific fields of study.
Course description[8]	I. Sequences and series of real numbers. II. Real functions of one real variable. Limit, continuity, differentiability, Taylor formula. III. Real and vectorial functions of several variables. Limit, continuity, partial derivatives, differentiability, Taylor formula, extrema. IV. Integral calculus. Indefinite and definite integrals, improper Integrals, line integrals, multiple integrals, Green's formula.

Assessment			Schedule[9]	Percentage of the final grade (minimum grade)[10]
Continuous assessment	Class tests along the semester		Week 8	30%
	Activity during tutorials/laboratory works/projects/practical work		Weekly	20 %
	Assignments		-	
Final assessment	Final assessment form[11]	Exam	Session	50 %
	Examination procedures and conditions: Test paper, 5 problems			

Course organizer	Lecturer Ph.D. Daniela Roșu	
Teaching assistants	Lecturer Ph.D. Daniela Roșu	

[1]Course name from the curriculum
[2] DF – fundamental, DID – in the field, DS – specialty, DC – complementary (from the curriculum)
[3] DI – imposed, DO –optional, DL – facultative (from the curriculum)
[4] Points 3.8, 3.5, 3.6a,b,c, 3.7 from the Course guide – extended form (L-lecture, T-tutorial, LB-laboratory works, P-project, IS-individual study)
[5] According to 4.1 – Pre-requisites - from the Course guide – extended form
[6] According to 7.1 from the Course guide – extended form
[7] According to 7.2 from the Course guide – extended form
[8] Short description of the course, according to point 8 from the Course guide – extended form
[9] For continuous assessment: weeks 1 – 14, for final assessment – colloquium: week 14, for final assessment-exam: exam period
[10] A minimum grade might be imposed for some assessment stages
[11] Exam or colloquium