C O U R S E G U I D E – s h o r t f o r m

Academic year 2014-2015

Course name[1]	**Experimental Stress Analysis**					Course code		MDET.DI. DA.107	
Course type[2]	DA	Category[3]	DI	Year of study	1	Semester	1	Number of credit points	8

Faculty	Mechanical Engineering	Number of teaching and learning hours[4]					
Field	Mechanical Engineering	Total	L	T	LB	P	IS
Specialization	DETIM	196	28	-	28	-	140

Pre-requisites from the curriculum[5]		
	Compulsory	-
	Recommended	Strength of Materials 1, 2

General objective [6]	Learning the basic concepts of experimental stress analysis. Presentation of the basic methods, measurement errors and methods of mitigate them.
Specific objectives[7]	• Skills in the use of techniques: electrical strain gauges, PhotoStress etc. • Notions of experimental data processing; • Error mitigation techniques.
Course description[8]	Elasticity, measurement, measurement errors in experimental stress analysis, error mitigation techniques, photoelasticity, moire method, electrical strain gauges; Sensors: load cells, displacement sensors, accelerometers etc.

Assessment			Schedule[9]	Percentage of the final grade (minimum grade)[10]
Continuous assessment	Class tests along the semester		-	-
	Activity during tutorials/laboratory works/projects/practical work		Week 1-14	20%
	Assignments		Week 1-14	30%
Final assessment	Final assessment form[11]	Exam	Exam session	50%
	Examination procedures and conditions: 1. Oral presentation of a case; 2 Tasks: development of topic, followed by questions; 3. Working conditions: duration of approx. 20 min., access to the work developed during the semester; percent of the final grade 100%			

Course organizer	Prof.dr.ing. Barsanescu Paul	
Teaching assistants	S.l.dr.ing. Leitoiu Bogdan	

[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