

COURSE GUIDE – short form

Academic year 2021-2022

Course name ¹	MATERIALS FOR SPECIAL APPLICATIONS				Course code	4SM13DS			
Course type ²	DS	Category ³	DO	Year of study	iv	Semester	7	Number of credit points	3

Faculty	Materials Science and Engineering	Number of teaching and learning hours ⁴					
Field	Materials engineering	Total	L	T	LB	P	IS
Specialization	Materials science	75	28	-	14	-	33

Pre-requisites from the curriculum ⁵	Compulsory	not necessary
	Recommended	Physical Metallurgy

General objective ⁶	Understanding the science of shape memory materials properties and the technology of obtaining them.
Specific objectives ⁷	<ul style="list-style-type: none"> Learning theoretical knowledge related to physical and chemical phenomena, based on intelligent materials proprieties. Achieving the ability to research and analyze intelligent materials using a variety of research methods.
Course description ⁸	Phase transformations in shape memory alloys Characteristics and properties of shape memory alloys Obtaining shape memory alloys Applications of shape memory alloys

Assesment			Schedule ⁹	Percentage in the final grade (minimum grade) ¹⁰
A. Final assessment form ¹¹ :	Class tests along the semester	%		50%
	Home works	%		
	Other activities	%		
	Examination procedures and conditions: Probe 1: Oral Examination. The Exam Question papers contains two questions, with a closed answer, equal weight.	100%		
B. Seminar	Activity during seminar			0%
C. Laboratory	Activity during laboratory			50 %
D. Project	Activity during project			0%

Course organizer	Prof. dr. eng. Sergiu STANCIU	
Teaching assistants	Prof. dr. eng. Sergiu STANCIU	

¹Course 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