

COURSE GUIDE – short form

Academic year 2024-2025

Course name ¹	Materials with special applications 4					Course code		4.SM.15.DS-2		
Course type ²	DS	Category ³	DO	Year of study	4	Semester	8	Number of credit points		5

Faculty	Materials Science and Engineering					Number of teaching and learning hours ⁴					
Field	Materials Engineering					Total	L	T	LB	P	IS
Specialization	Materials Science					125	28	-	28	-	69

Pre-requisites from the curriculum ⁵	Compulsory	-
	Recommended	-

General objective ⁶	Optimal evaluation and resolution of technical issues related to materials for the aeronautical industry by applying concepts, theories and experimental methods.
Specific objectives ⁷	<ul style="list-style-type: none"> •General classification of materials for the aeronautical industry according to specific properties and fields of use. •Description of the main materials processing processes for the aeronautical industry. •Analysis of the processing-property-use relationship.
Course description ⁸	Introduction. Aluminum alloys. Titanium alloys. Superalloys. Composites.

Assesment			Schedule ⁹	Percentage in the final grade (minimum grade) ¹⁰
A. Final assessment form ¹¹ :	Class tests along the semester	-		70 % (minimum 5)
	Home works	20%		
	Other activities	-		
	Examination procedures and conditions: Two subjects with open questions; tasks: answers to open questions; working conditions: oral;	80 % (minimum 5)	Exam period	
B. Seminar	Activity during seminar			-
C. Laboratory	Activity during laboratory			30 % (minimum 5)
D. Project	Activity during project			-

Course organizer	Assoc.Prof. Phd.Eng. Ramona Cimpoesu	
Teaching assistants	Assoc.Prof. Phd.Eng. Ramona Cimpoesu	

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