

COURSE GUIDE – short form

Academic year 2024-2025

Course name ¹	Techniques of Analysis and Characterization of Materials					Course code		2.IMat.06.DD	
Course type ²	DID	Category ³	DI	Year of study	2	Semester	3	Number of credit points	4

Faculty	Materials Science and Engineering			Number of teaching and learning hours ⁴					
Field	Materials Engineering			Total	L	T	LB	P	IS
Specialization	Materials science			100	28		14		58

Pre-requisites from the curriculum ⁵	Compulsory	It is not necessary
	Recommended	It is not necessary

General objective ⁶	Knowledge, identification and use of the main procedures and equipment necessary for the analysis and characterization of materials.
Specific objectives ⁷	Knowledge of materials analysis methods in order to achieve the correlations between composition, structure, properties and uses of materials. Rational choice of materials for various industrial and scientific applications and for the correct operation in service of parts or assemblies depending on the data obtained by various analysis techniques.
Course description ⁸	Properties of materials. Methods and equipment for the physical and chemical characterization of materials. Methods and equipment for mechanical and technological characterization.

Assesment			Schedule ⁹	Percentage in the final grade (minimum grade) ¹⁰
A. Final assessment form ¹¹ : Colloquium	Class tests along the semester	%		60 % (minimum 5)
	Home works	%		
	Other activities	%		
	Examination procedures and conditions: 1. theoretical question; open questions of course, working conditions: oral; percent of the final grade: 50% 2. theoretical question; open questions of course, working conditions: oral; percent of the final grade: 50%	100 % (minimum 5)	Week 14	
B. Seminar	Activity during seminar			
C. Laboratory	Activity during laboratory			40% (minimum 5)
D. Project	Activity during project			

Course organizer	Assist. prof. phd. eng. Nicoleta-Monica LOHAN	
Teaching assistants	Assist. prof. phd. eng. Nicoleta-Monica LOHAN	

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