

COURSE GUIDE – short form

Academic year 2024-2025

Course name ¹	ADVANCED CERAMIC MATERIALS				Course code	MATAE IA 204			
Course type ²	DA	Category ³	DI	Year of study	2	Semester	3	Number of credit points	4

Faculty	Faculty of Materials Science and Engineering				Number of teaching and learning hours ⁴							
Field	Materials Engineering				Total	L	T	LB	P	IS		
Specialization	Advanced Materials and Experimental Analyze Techniques				100	28	-	14	-	58		
Pre-requisites from the curriculum ⁵	Compulsory											
	Recommended		Non-metallic materials, Special Metallic Materials Science									
General objective ⁶	Assimilating theoretical and practical knowledge to students of methods of producing ceramic materials, characterization, properties and application areas.											
Specific objectives ⁷	<ul style="list-style-type: none"> • Understanding the concept of advanced ceramic materials. • Characterization of the main advanced ceramic materials with applications in transports, electronics, tribology, cutting processes, nuclear electro-magnetic materials. 											
Course description ⁸	Advanced ceramic materials used to transport, in electronics and in the cutting process Advanced ceramic materials for nuclear techniques and with electro-magnetic properties											
Assesment						Schedule ⁹	Percentage in the final grade (minimum grade) ¹⁰					
A. Final assessment form ¹¹ :	Class tests along the semester				20%	VII-th week		70% (minimum 5)				
	Home works				20%	XIV-th week						
	Other activities				%							
Colloquium	Examination procedures and conditions: One subject in the course topics; oral presentation and answers to course specialty questions.				60% (minimum 5)	XIV-th week						
B. Seminar	Activity during seminar								% (minimum 5)			
C. Laboratory	Activity during laboratory								30 % (minimum 5)			
D. Project	Activity during project								% (minimum 5)			

Course organizer	Prof. phd. eng. Nicanor CIMPOEȘU			
Teaching assistants	Prof. phd. eng. Nicanor CIMPOEȘU			

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