

# COURSE GUIDE – short form

Academic year 2024-2025

Course name	<b>TECHNOLOGICAL PROCESSES IN MATERIAL ENGINEERING 2</b>				Course code	3.SM.05.DD			
Course type	DD	Category	DI	Year of study	3	Semester	5	Number of credit points	4

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

Pre-requisites from the curriculum	Compulsory	
	Recommended	

General objective	Formation of the ability of applying some principles and basic methods for solving well defined situations in the field under qualified assistance supervision in view of formation of an essential stock of technical knowledge in the field of materials science and engineering.
Specific objectives	Use of knowledge and ability formation in applying basic elements, general and introductory, focusing on a series of major class of materials.
Course description	Energy sources used for welding. Thermal flux - welding material interaction: thermal field. Changes induced by the fusion welding process on materials. Discontinuities (defects) in welded joints. Control and qualification of welded joints. Peculiarities of welding behavior of some metal alloys.

Assessment			Schedule	Percentage in the final grade (minimum grade)
A. Final assessment form:	Class tests along the semester	%		50% (minimum 5)
	Home works	%		
	Other activities	%		
	Examination procedures and conditions: Oral exam with 2 subjects	100% (minimum 5)	Week 14	
B. Seminar	Activity during seminar			
C. Laboratory	Activity during laboratory			50% (minimum 5)
D. Project	Activity during project			

Course organizer	Lecturer EngD. Mihai POPA	
Teaching assistants	Lecturer EngD. Mihai POPA	