

COURSE GUIDE – short form

Academic year 2024-2025

Course name	Materials science and engineering (2)					Course code		1.ISI.11.DD	
Course type	DD	Category	DI	Year of study	1	Semester	2	Number of credit points	5

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

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	Metallic materials. Ceramic materials. Notions regarding composite materials. Semiconductors. Notions regarding smart materials. Amorphous materials. Notions regarding some special destination metallic materials. Service behavior of the metallic materials.

Assessment			Schedule	Percentage in the final grade (minimum grade)
A. Final assessment form: Exam	Class tests along the semester	%		70% (minimum 5)
	Home works	%		
	Other activities	%		
	Examination procedures and conditions: 1. Category: theoretical; subject with open questions; conditions: oral; weight in final grade: 20%; 2. Category: theoretical; subject with open questions; conditions: oral; weight in final grade: 20%; 3. Category: theoretical; solving problem; conditions: oral; weight in final grade: 30%; 4. Category: theoretical; solving problem; conditions: oral; weight in final grade: 30%.	100% (minimum 5)	Session	
	B. Seminar	Activity during seminar		
C. Laboratory	Activity during laboratory		30% (minimum 5)	
D. Project	Activity during project		% (minimum 5)	

Course organizer	Lecturer PhD. Eng. Alin Marian CAZAC
Teaching assistant	Assist. univ. PhD student. Eng Ștefana AGOP-DOCHIȚA