

COURSE GUIDE – short form

Academic year 2024-2025

Course name ¹	THERMAL AND THERMOCHEMICAL TREATMENTS (1)				Discipline code		4 IPM 03		
Course type ²	DS	Category ³	DI	Year of study	4	Semester	7	Number of credit points	4

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

Pre-requisites from the curriculum ⁵	Compulsory	-
	Recommended	-

General objective ⁶	Methods to improve the properties of metallic parts used in industrial applications
Specific objectives ⁷	Techniques and equipments for thermochemical treatments of metallic parts
Course description ⁸	<ol style="list-style-type: none"> 1. Theoretical bases of thermochemical treatments 2. Steels carburizing 3. Steels nitriding 4. Steels carbo-nitriding 5. Steels borized

Assessment		Schedule ⁹		Percentage of the final grade (minimum grade) ¹⁰
A. Final assessment form ¹¹ exam	Class tests along the semester	%	week	50 % (minimum 5)
	Home works	%		
	Other activities	%	week	
	Examination procedures and conditions: 1. Subject with open questions, working conditions oral, percent 100 %; 2. -, working conditions -, percent %; 3. -, working conditions -, percent %	100 % (minimum 5)	exam period	
B. Seminar	Activity during seminar			% (minimum 5)
C. Laboratory	Activity during laboratory			50 % (minimum 5)
D. Project	Activity during project			% (minimum 5)
Course organizer	Lecturer Ph.D. Eng. Achitei Dragoş			
Teaching assistants	Lecturer Ph.D. Eng. Achitei Dragoş			

¹Course name from the curriculum

² DF – fundamental, DD – 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