

COURSE GUIDE – short form

Academic year 2024-2025

Course name ¹	PROFESSIONAL PRACTICE					Course code		SITM PA 205	
Course type ²	DI	Category ³	DS	Year of study	2	Semester	3	Number of credit points	7

Faculty	Materials Science and Engineering				Number of teaching and learning hours ⁴					
Field	Mechanical Engineering				Total	L	T	LB	P	IS
Specialization	SITM				175					

Pre-requisites from the curriculum ⁵	Compulsory	Not the case
	Recommended	Not the case

General objective ⁶	Development of professional skills in the field of materials investigation to support professional training.
Specific objectives ⁷	<p>Appropriate and efficient use of basic knowledge, criteria and methods specific to the field of Materials Science.</p> <p>Cognitive (knowledge and appropriate use of notions related to the field):</p> <p>Knowledge and understanding:</p> <ul style="list-style-type: none"> > the way of designing and manufacturing specific thermal and mechanical elements materials engineering; > notions and terms specific to specific thermal and mechanical systems materials engineering; > the technological principles underlying the manufacture and operation of the systems specific to materials engineering; > criteria for choosing thermal and mechanical systems specific to engineering Materials; > the performance and reliability of thermal and mechanical systems specific to engineering Materials. <p>Explanation and interpretation (the explanation and interpretation of ideas, projects, processes, such as and the theoretical and practical contents of the discipline):</p> <ul style="list-style-type: none"> > interdisciplinary phenomena involved in thermal and mechanical systems specific to materials engineering; > training the ability to use and apply interdisciplinary knowledge; > the performance of thermal and mechanical systems specific to materials engineering depending on the constructive functional solutions. <p>Technical/professional (design and evaluation of specific practical activities; use of methods, techniques and tools of investigation and application):</p> <ul style="list-style-type: none"> > ability to relate theoretical knowledge to practice; > Ability to compare and choose specific thermal and mechanical systems materials engineering; the ability to maintain and repair devices that have systems in their structure specific to materials engineering; <p>Attitudinal – values (manifestation of a positive attitude towards the field):</p> <ul style="list-style-type: none"> > the formation of an ethical and responsible professional attitude; > understanding the need for interdisciplinary collaboration with specialists in the fields Related; <ul style="list-style-type: none"> > team building.

Course description ⁸	Chapter I: Workplace Safety Training and Company Overview Chapter II: Mechanical Testing and Chemical Analysis Laboratories Chapter III: Monitoring and carrying out technological manufacturing processes. Technological processes of heat treatment and unconventional processing
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Assesment			Schedule ⁹	Percentage of the final grade (minimum grade) ¹⁰
A. Final assessment form ¹¹ :	Class tests along the semester	%		100% (minimum 5)
	Home works	%		
	Other activities	%		
	Examination procedures and conditions: Final Evaluation:	100% (minimum grade 5)		
B. Seminar	Activity during seminar			% (minimum 5)
C. Laboratory	Activity during laboratory			% (minimum 5)
D. Project	Activity during project			% (minimum 5)

Course organizer		
Teaching assistants	Professor Ph.D. Eng. Petrică VIZUREANU	

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