

COURSE GUIDE – short form

Academic year 2024-2025

Course name ¹	PROFESSIONAL PRACTICE					Course code		TAIPM IA 112	
Course type ²	DI	Category ³	DS	Year of study	1	Semester	2	Number of credit points	7

Faculty	Materials Science and Engineering	Number of teaching and learning hours ⁴					
Field	Materials Engineering	Total	L	T	LB	P	IS
Specialization	TAIPM	175					28

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>Adequate and efficient use of foundational knowledge, criteria, and methods specific to the field of Materials Science.</p> <p>Cognitive (knowledge and appropriate use of concepts specific to the field):</p> <ul style="list-style-type: none"> • Understanding the design and manufacturing processes for thermal and mechanical elements in materials engineering; • Knowledge of terms and concepts specific to thermal and mechanical systems in materials engineering; • Principles underlying the manufacturing and functioning of thermal and mechanical systems in materials engineering; • Criteria for selecting thermal and mechanical systems in materials engineering; • Performance and reliability of thermal and mechanical systems in materials engineering. <p>Explanation and Interpretation (explanation and interpretation of ideas, projects, processes, and theoretical and practical content of the discipline):</p> <ul style="list-style-type: none"> • Interdisciplinary phenomena involved in thermal and mechanical systems in materials engineering; • Developing the ability to use and apply interdisciplinary knowledge; • Performance of thermal and mechanical systems in materials engineering based on functional-constructive solutions. <p>Technical/Professional (design and evaluation of specific practical activities; use of investigation and application methods, techniques, and tools):</p> <ul style="list-style-type: none"> • Ability to relate theoretical knowledge to practice; • Capability to compare and select thermal and mechanical systems in materials engineering; • Ability to maintain and repair devices containing thermal and mechanical systems in materials engineering. <p>Attitudinal/Values (demonstrating a positive attitude toward the field):</p> <ul style="list-style-type: none"> • Development of an ethical, responsible professional attitude; • Understanding the need for interdisciplinary collaboration with specialists in related fields; • Fostering a team spirit.
	Course description ⁸

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: Practical Work (VP)	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