

COURSE GUIDE – short form

Academic year 2024-2025

Course name ¹	Processing of Cast Art Parts					Course code	TAIPM IA 101			
Course type ²	DA	Category ³	DI	Year of study	1	Semester	1	Number of credit points	5	

Faculty	Materials Science and Engineering	Number of teaching and learning hours ⁴					
Field	Materials Engineering	Total	L	T	LB	P	IS
Specialization	TAIPM	125	28	-	14	-	83

Pre-requisites from the curriculum ⁵	Compulsory	Chemistry; Physics
	Recommended	Casting Technologies

General objective ⁶	Application of the criteria and methods of fundamental assessment to identify, to modeling, analysis and assessment of qualitative and quantitative phenomena, as well as characteristic processes and theories, and to process and interpret the results of specific processes in order to obtain casting art parts.
Specific objectives ⁷	The discipline "Processing of Cast Art Parts" allows the student to develop skills on: <ul style="list-style-type: none"> - solving and explaining problems with average complexity specific to realization by casting techniques of works of art; - acquiring the most advanced knowledge concerning the phenomena and processes occurring in the manufacture of casting art part; - identification of the solutions for harmonizing the aesthetic requirements with the technology.
Course description ⁸	<p>Course:</p> <p>Chapter 1. Evolutionary milestones of recovery techniques of metals and alloys by casting;</p> <p>Chapter 2. Precision casting with easily fusible patterns;</p> <p>Chapter 3. Obtaining of jewelry by casting;</p> <p>Chapter 4. Obtaining the objects of worship through casting technique;</p> <p>Chapter 5. Techniques for obtaining bronze statues.</p> <p>Applications:</p> <ol style="list-style-type: none"> 1. Notions of labor protection; 2. Establishment of specific technical parameters of art parts from alloys; 3. Setting the dimensions of the matrices used in execution of the easily fusible models. 4. Establishment of technological parameters of molding easily fusible patterns for case power supply through the thick section; 5. Sprocket production and realization of ceramic crusts; 6. Practical execution of a bell or a chandelier. 7. Recoveries.

Assesment			Schedule ⁹	Percentage of the final grade (minimum grade) ¹⁰
A. Final assessment form ¹¹ :	Class tests along the semester	%		70% (minimum 5)
	Home works	%		
	Other activities	%		
	Examination procedures and conditions: 1. exam tickets; task: subject 1; conditions: oral; weight in final grade: 50%;	100% (minimum grade 5)	Exam period	

	2. exam tickets; task: subject 1; conditions: oral; weight in final grade: 50%;			
B. Seminar	Activity during seminar			% (minimum 5)
C. Laboratory	Activity during laboratory			30% (minimum 5)
D. Project	Activity during project			% (minimum 5)

Course organizer	Lecturer Ph.D. Eng. Raluca-Maria Blanariu	
Teaching assistants	Lecturer Ph.D. Eng. Oana Rusu	

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