

COURSE GUIDE – short form

Academic year 2024-2025

Course name ¹	Material casting procedures					Course code	3.IPM.08.DS			
Course type ²	DS	Category ³	DI	Year of study	III	Semester	6	Number of credit points	6	

Faculty	Materials Science and Engineering					Number of teaching and learning hours ⁴					
Field	Materials Engineering					Total	L	T	LB	P	IS
Specialization	Materials Processing Engineering					150	28	-	14	28	80

Pre-requisites from the curriculum ⁵	Compulsory	-
	Recommended	-

General objective ⁶	Completing the knowledge assimilated to other disciplines with specific elements regarding the design and use of casting technologies.
Specific objectives ⁷	Obtaining appropriate knowledge and skills in the field of designing technologies for casting parts by casting. Knowing the advantages of obtaining molded parts and the possibilities of using them in the industry.
Course description ⁸	Casting of metals and metal alloys; Designing castings; The technological process of obtaining parts by casting; Technology execution cores in mixed forms and moulding; Permanent and semi-permanent moulds; Special moulding metodes; Special casting metodes; Determination of the humidity of the sand and the leachable component; Granulometric analysis of foundry sands; Executing test specimens for testing blending and permeability determination; Determination of the mechanical properties of the raw and dry mixes; Manual training with unsorted model; Performing forms using volatile models.

Assessment				Schedule ⁹	Percentage of the final grade (minimum grade) ¹⁰
Continuous assessment	Class tests along the semester				%
	Activity during tutorials/laboratory works/projects/practical work			Wk 1-14	25%+25%
	Assignments				%
Final assessment	Final assessment form ¹¹		Colloquy	session	50%
	Examination procedures and conditions: 2. Closed-ended and open-ended questions; 100 %				

Course organizer	Oana RUSU. Lect. Ph.D. Eng.	
Teaching assistants	Oana RUSU. Lect. Ph.D. Eng.	

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