

COURSE GUIDE – short form

Academic year 2024-2025

Course name ¹	UNCONVENTIONAL MATERIALS TECHNIQUES FOR PROCESSING PLASTIC DEFORMATION					Course code	TAIPM IA 108		
Course type ²	DA	Category ³	DI	Year of study	1	Semester	2	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	TAIPM	100	28	-	14	-	58

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

General objective ⁶	Presenting and deepening so-called cutting-edge techniques or advanced techniques of plastic deformation materials worldwide, some of which are currently going beyond the experimental stage at the laboratory level, others being already applied in industrial practice. in highly developed countries.
Specific objectives ⁷	Presentation and knowledge of plastic processing with ultraacoustic activation, plastic processing by electroreflection, high speed molding, plastic processing by magnetofforming, by orbital forging, by electrohydraulic deformation, by incremental deformation.
Course description ⁸	Introduction. Processing by plastic deformation of metallic materials with ultrasonic vibrations, by electrorefulare, by high speed molding, by magnetofmare, by plastic deformation by forging orbital, by plastic deformation electropressing, by plastic deformation incremental sheet metal.

Assesment			Schedule ⁹	Percentage of the final grade (minimum grade) ¹⁰
A. Final assessment form ¹¹ :	Class tests along the semester	%		60% (minimum 5)
	Home works 1	40%		
	Other activities	%		
	Examination procedures and conditions: Probe 1: working conditions - oral; percent of the final grade 100%;	60% (minimum grade 5)	Week 14	
B. Seminar	Activity during seminar			% (minimum 5)
C. Laboratory	Attvity during laboratory			40% (minimum 5)
D. Project	Activity during project			% (minimum 5)

Course organizer	Lecturer Ph.D. Eng. Manuela-Cristina PERJU	
Teaching assistants	Lecturer Ph.D. Eng. Manuela-Cristina PERJU	

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