

COURSE GUIDE – short form

Academic year 2021 - 2022

Course name ¹	UNCONVENTIONAL TECHNOLOGIES FOR PLASTIC DEFORMATION (1)					Discipline code	SITM IA 102		
Course type ²	DA	Category ³	DI	Year of study	1	Semester	1	Number of credit points	4

Faculty	Material Science and Engineering					Number of teaching and learning hours ⁴					
Field	Mechanical Engineering					Total	L	T	LB	P	IS
Specialization	SITM					28	14	-	14	-	68

Pre-requisites from the curriculum ⁵	Compulsory	
	Recommended	

General objective ⁶	Developing professional and transversal competences required for the application and proper use of unconventional technologies of plastic deformation.
Specific objectives ⁷	Unconventional technologies of plastic deformation with pressure mediums, high speeds, magnetic energy, thermal activation, by electro-hydraulic effect and gas expansion; Unconventional technologies of plastic deformation for advanced materials.
Course description ⁸	Deep-drawing with liquid and gaseous medium pressure, hydrostatic extrusion, plastic deformation with explosives, plastic processing by expanding gases, processing by electromagnetic forming, deep-drawing by heating or cryogenic cooling the workpiece.

Assessment		Schedule ⁹		Percentage of the final grade (minimum grade) ¹⁰
A. Final assessment form ¹¹ colloquium	Class tests along the semester	20 %	week 9	80 % (minimum 5)
	Home works	%		
	Other activities	%	week	
	Examination procedures and conditions: 1. Subject with closed questions, working conditions computer, percent 100 %; 2. -, working conditions -, percent %; 3. -, working conditions -, percent %	80 % (minimum 5)	week 14	
B. Seminar	Activity during seminar			% (minimum 5)
C. Laboratory	Activity during laboratory			20 % (minimum 5)
D. Project	Activity during project			% (minimum 5)
Course organizer	Professor, Ph.D., Eng. Dorin LUCA			
Teaching assistants	Professor, Ph.D., Eng. Dorin LUCA			

¹Course name from the curriculum

² DF – fundamental, DD – 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