

COURSE GUIDE – short form

Academic year 2017-2018

Course name ¹	Automation applied in industrial processes					Course code		2EPI17DID	
Course type ²	DID	Category ³	DO	Year of study	2	Semester	4	Number of credit points	3

Faculty	Materials Science and Engineering	Number of teaching and learning hours ⁴						
Field	Industrial Engineering	Total	L	T	LB	P	IS	
Specialization	SafetyEngineering in Industry	72	28	-	28	-	16	

Pre-requisites from the curriculum ⁵	Compulsory	Not the case	-
	Recommended	Physics	

General objective ⁶	Development and completing of knowledge, theoretical and practical technical thinking and preparation in the field of mechanical processing technologies.
Specific objectives ⁷	Completion of technical language with elements specific for mechanical processing technologies with accent on finishing and nonconventional procedures.
Course description ⁸	Surface smoothing technologies: the quality of machined surfaces; abrasive materials and bodies; the structure of the abrasive discs, binders, marking and symbolisation; surface correction: rectification technologies, dimensional correction characteristics; disc wear; surface honing: the bases of honing processes; honing technologies; characteristic sizes and results of the honing process; bonding of surfaces: the basis of the process of gluing; adhesive technologies; the results of the gluing process; surface finishing: bases of over-finishing processes; overfill technologies; unconventional processing technologies in machine building; areas of use of unconventional processing technologies; processing technologies based on physical effects of electric current; electrical erosion; electrochemical erosion; chemical processing technologies: chemical erosion; ultrasonic processing technologies; laser processing technologies; electron beam processing technologies; moving fluid processing technologies: water jet and abrasive water jet; jet electroerosion.

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 – open questions	continuous	50%
	Assignments	-	-%
Final assessment	Final assessment form ¹¹	Colloquy	Wk 14
	Oral Examination: 1. Closed question, oral response - 50%; 2. Open question, oral response - 50%;		50%

Course organizer	Assoc.Prof.Ph.D.Eng. Gheorghe BĂDĂRĂU
Teaching assistants	Assoc.Prof.Ph.D.Eng. Gheorghe BĂDĂRĂU

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)

⁴Points 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)

⁵According to 4.1 –Pre-requisites - from the Course guide – extended form

⁶According to 7.1 from the Course guide – extended form

⁷According 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

¹⁰A minimum grade might be imposed for some assessment stages

¹¹ Exam or colloquium