

COURSE GUIDE – short form

Academic year 2018-2019

Course name ¹	Elements of industrial electronics					Course code	4ISI01DID			
Course type ²	DID	Category ³	DI	Year of study	4	Semester	7	Number of credit points	5	

Faculty	Materials Science and Engineering	Number of teaching and learning hours ⁴					
Field	Industrial Engineering	Total	L	T	LB	P	IS
Specialization	Security Engineering in Industry	70	28		14		28

Pre-requisites from the curriculum ⁵	Compulsory	
	Recommended	Physics 2, Materials Science and Engineering

General objective ⁶	Acknowledgement and appropriate use of theoretical concepts and practical elements of industrial electronics
Specific objectives ⁷	Acquiring theoretical knowledge on semiconductors and conductors and the main types of circuit elements; Calculation of parameters of electronic circuits; Know the implications of electronics in modern techniques of analysis and measurement and control devices
Course description ⁸	Getting solidphysics, conductors and semiconductors; Real and ideal circuit elements, circuit analysis, measurement parameters, power supplies; Recovery and stabilization, power amplifiers, digital circuits. Specific electronic elements of modern techniques of analysis and measurement and control devices.

Assesment			Sche- dule ⁹	Percentage in the final grade (minimum grade) ¹⁰
A. Final assessment form ¹¹ :	Class tests along the semester	20%	Week 10	70% (minimum 5)
	Home works	%	-	
	Other activities	%	-	
	Examination procedures and conditions: Probe 1: Oral examination with 2 subjects; Probe 2: Probe 3:	50% (mini- mum 5)		
B. Seminar	Activity during seminar			% (minimum 5)
C. Laboratory	Attvity during laboratory			30% (minimum 5)
D. Project	Activity during project			% (minimum 5)

Course organizer	Lecturer dr. eng. Ioan Gabriel SANDU	
Teaching assistants	Lecturer dr. eng. Ioan Gabriel SANDU	

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