

COURSE GUIDE – short form

Academic year 2017-2018

Course name ¹	ELECTRIC MACHINES AND DRIVES					Course code	3ISI07			
Course type ²	DS	Category ³	D O	Year of study	III	Semester	II	Number of credit points	4	

Faculty	Material Science and Engineering	Number of teaching and learning hours ⁴					
Field	Industrial engineering	Total	L	T	LB	P	IS
Specialization	Industrial safety engineering	56	28	-	28	-	-

Pre-requisites from the curriculum ⁵	Compulsory	-
	Recommended	Mathematical analysis, physics, electrotechnics

General objective ⁶	During the course students will acquire the technical knowledge necessary for the efficient use of the electric driving components in making the best driving diagram for the requirements of the driven equipment, in accordance with the costs afferent to its execution and efficient use
Specific objectives ⁷	<ul style="list-style-type: none"> • Basic laws of electrotechnics and mechanics applied in the study of the phenomena related to the electric driving machines and systems • General issues regarding the elements of the electric drive systems • Fundamental phenomena regarding the electric machines used in the positioning systems
Course description ⁸	The electric charge conservation law, the law of electromagnetic induction, choice of electric machines depending on the use conditions, basic constructive elements of the continuous current machines, basic constructive elements of the electrical transformers, basic constructive elements of the three-phase asynchronous machines

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	Continuous assessment	40%
	Assignments	-	%
Final assessment	Final assessment form ¹¹	Colloquium	60%
	Examination procedures and conditions: 1. Assessment : colloquium; tasks: solving of exam tickets; working conditions: written test percent of the final grade %		

Course organizer	Lecturer PhD Eng. Diana Antonia GHEORGHIU
Teaching assistants	Lecturer PhD Eng. Diana Antonia GHEORGHIU

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