C O U R S E G U I D E – s h o r t f o r m

Academic year **2024-2025**

Course name[1]	**Electrical Engineering**					Course code		**2.ISI.10.DD**	
Course type[2]	**DD**	Category[3]	**DI**	Year of study	**II**	Semester	**4**	Number of credit points	**3**

Faculty	**Material Science and Engineering**	Number of teaching and learning hours[4]					
Field	**Industrial Engineering**	Total	L	T	LB	P	IS
Specialization	**Safety Engineering in Industry**	**75**	**28**	-	**14**	-	**33**

Pre-requisites from the curriculum[5]		
	Compulsory	**Mathematics, Physics**
	Recommended	**Using computer programs**

General objective[6]	Discipline "Electrical Engineering" aims to familiarize the SIM engineer with specific electrical engineering sizes, mathematical models used to study electric and magnetic circuits and methods for measuring electrical quantities.
Specific objectives[7]	• The enunciation of concepts, theories and methods for carrying out basic work processes in conditions of safety and health at work, by identifying and assessing risks. • Use basic knowledge (concepts, theories, methods) for carrying out the work processes in conditions of safety and health at work, by identifying and assessing risks. • Following the discipline of Electrical Engineering SM students specialization acquire their skills on: proper and efficient use and operation of various electrical installation of transformers and electrical machines.
Course description[8]	Self evaluation of safety in the industry. DC circuits, AC circuits of single-phase and three-phase circuits, magnetic, electrical, transformers and electrical machines.

Assesment		Schedule[9]	Percentage in the final grade(minimum grade)[10]
A. Final assessment form[11]: Colloquium	Examination procedures and conditions: 1. Theoretical knowledge, tasks, share 70%; 2. Solving a problem, tasks, working conditions argumentation, share 30%.	The last week of the 2nd semester (week 14)	**50%** (minimum 5)
C. Laboratory	Activity during laboratory: The mandatory presence at the laboratory, active participation to experimental work (montages, calculations, graphics).		**50%** (minimum 5)

Course organizer	Lecturer Ph.D. Eng. Ursan Maria	
Teaching assistants	Lecturer Ph.D. Eng. Ursan Maria	

[1]Course 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