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.IMAT.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	**Materials Engineering**	Total	L	T	LB	P	IS
Specialization	**Materials science and Materials processing engineering**	**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]: Exam	Examination procedures and conditions: 1. Theoretical knowledge, tasks, share 70%; 2. Solving a problem, tasks, working conditions argumentation, share 30%.	Exam session of the 2nd semester	**50%** (minimum 5)
C. Laboratory	Acttivity 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