

# COURSE GUIDE – short form

Academic year 2016-2017

Course name <sup>1</sup>	<b>Electrical Engineering and electrical systems</b>					Course code	2IPM10DID		
Course type <sup>2</sup>	DID	Category <sup>3</sup>	DI	Year of study	II	Semester	4	Number of credit points	3

Faculty	Material Science and Engineering	Number of teaching and learning hours <sup>4</sup>					
Field	Material Engineering	Total	L	T	LB	P	IS
Specialization	Materials Process Engineering	72	28	-	14	-	30

Pre-requisites from the curriculum <sup>5</sup>	Compulsory	Mathematics, Physics
	Recommended	

General objective <sup>6</sup>	Discipline “Electrical Engineering and Electric drivers” 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 <sup>7</sup>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• Following the discipline of Electrical Engineering ISI students specialization acquire their skills on: proper and efficient use and operation of various electrical installation of transformers and electrical machines.</li> </ul>
Course description <sup>8</sup>	Self evaluation of safety in the industry. DC circuits, AC circuits of single-phase and three-phase circuits, magnetic, electrical, transformers and electrical machines.

Assessment		Schedule <sup>9</sup>	Percentage of the final grade (minimum grade) <sup>10</sup>
Continuous assessment	Class tests along the semester		
	Activity during tutorials/laboratory works/projects/practical work		Weekly
	Assignments		-
Final assessment	Final assessment form <sup>11</sup>	colloquium	Session
	Examination procedures and conditions: 1. Theoretical knowledge, tasks, share 70%; 2. Solving a problem, tasks, working conditions argumentation, share 30%.		60 %

Course organizer	Ass. Prof. Ph.D. Eng. Cociu Voinea Radu
Teaching assistants	Lecturer Ph.D. Eng. Sebastian Teodor ARĂDOAEI

<sup>1</sup>Course name from the curriculum

<sup>2</sup> DF – fundamental, DID – in the field, DS – specialty, DC – complementary (from the curriculum)

<sup>3</sup> DI – imposed, DO – optional, DL – facultative (from the curriculum)

<sup>4</sup> 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)

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<sup>5</sup> According to 4.1 – Pre-requisites - from the Course guide – extended form

<sup>6</sup> According to 7.1 from the Course guide – extended form

<sup>7</sup> According to 7.2 from the Course guide – extended form

<sup>8</sup> Short description of the course, according to point 8 from the Course guide – extended form

<sup>9</sup> For continuous assessment: weeks 1 – 14, for final assessment – colloquium: week 14, for final assessment-exam: exam period

<sup>10</sup> A minimum grade might be imposed for some assessment stages

<sup>11</sup> Exam or colloquium