

COURSE GUIDE – short form

Academic year 2024-2025

Course name ¹	TRANSDUCERS AND MEASURING TECHNIQUES					Discipline code		3 EPI 13		
Course type ²	DS	Category ³	DO	Year of study	3	Semester	5	Number of credit points	5	

Faculty	Material Science and Engineering					Number of teaching and learning hours ⁴					
Field	Mechanical Engineering					Total	L	T	LB	P	IS
Specialization	EPI					125	28	-	14	-	83

Pre-requisites from the curriculum ⁵	Compulsory	-
	Recommended	-

General objective ⁶	Knowing of the modern techniques of the automatic measurements of the hot processes parameters and of the constructive-functional principles of different types of transducers.
Specific objectives ⁷	Knowing of information about the role and the placement of the transducers in the automatic systems; the general structure of the transducer; characteristics and general performances, constructive parts; sensitive elements and adaptors; transducers for different kinds of measurements.
Course description ⁸	Sensitive elements and adaptors; general principles used for the selection of the transducers. Transducers for electric variables; radiation receiver; temperature detector; pressure detector; force and moment detectors; vibration and speed detectors.

Assessment		Schedule ⁹		Percentage of the final grade (minimum grade) ¹⁰
A. Final assessment form ¹¹ colloquium	Class tests along the semester	- %	week	80 % (minimum 5)
	Home works	- %		
	Other activities	- %	week	
	Examination procedures and conditions: 1. Subject with open questions, working conditions oral, percent 100 %; 2. -, working conditions -, percent %; 3. -, working conditions -, percent %	100 % (minimum 5)	week 14	
B. Seminar	Activity during seminar			- % (minimum 5)
C. Laboratory	Activity during laboratory			20 % (minimum 5)
D. Project	Activity during project			- % (minimum 5)
Course organizer	Lecturer.PhD.Eng.Elena CHIRILĂ			
Teaching assistants	Lecturer.PhD.Eng.Elena CHIRILĂ			

¹Course name from the curriculum

² DF – fundamental, DD – 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