

COURSE GUIDE – short form

Academic year 2017 - 2018

Course name ¹	FLUID POWER EQUIPMENTS					Course code	2ISI-11-DID		
Course type ²	DID	Category ³	DI	Year of study	II	Semester	4	Number of credit points	4

Faculty	Materials Science and Engineering				Number of teaching and learning hours ⁴					
Field	Industrial Engineering				Total	L	T	LB	P	IS
Specialization	Safety Engineering in Industry				70	14	-	28	-	28

Pre-requisites from the curriculum ⁵	Compulsory	-
	Recommended	-

General objective ⁶	Ability to use the main knowledge of this course, especially usual analytical methods and algorithms for design and maintenance of medium complexity fluid power systems.
Specific objectives ⁷	Knowledge, understanding and ability to use: <ul style="list-style-type: none"> - Graphic symbols used for fluid power systems; - Construction and functioning of fluid power equipment; - Design rules for a medium complexity equipment; - Procedure and testing methods for fluid power equipment.
Course description ⁸	Theoretical bases for fluid power systems. Fluid properties. Variable hydraulic restrictors and their possible combinations. Flow control valves. Directional control valves. Check valves. Pressure valves. Pressure switch. Pneumatic equipments. Procedure and testing methods for fluid power equipment

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	Weeks 1-14	40 %
	Assignments: 1 written assignment	Week 12	10 %
Final assessment	Final assessment form ¹¹	Exam	50 %
	Examination procedures and conditions: Oral examination. Two subjects; 30 minutes for preparing answers; verbal presentation. Final mark is mean of the two marks.		

Course organizer	Associate Professor PhD Eng. Irina TIȚA
Teaching assistants	Assist. PhD Eng. Eugen Vlad NĂSTASE

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