

COURSE GUIDE – short form

Academic year 2017-2018

Course name ¹	FLUID POWER SYSTEMS					Course code	2EPI-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	Mechanical Engineering	Total	L	T	LB	P	IS
Specialization	Industrial Processes Equipment	56	14	-	14	-	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	<p>Knowledge, understanding and ability to use:</p> <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. Displacement pumps. Displacement motors. Pressure valves. Flow control valves. Directional control valves. Check valves. Auxiliary equipment. 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 period	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 assistant	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