

C O U R S E G U I D E – s h o r t f o r m

Academic year 2017-2018

Course name ¹	Fluid Mechanics					Course code	2ISI02DID		
Course type ²	DID	Category ³	DI	Year of study	2	Semester	3	Number of credit points	3

Faculty	Material Science and Engineering	Number of teaching and learning hours ⁴					
Field	Industrial Engineering	Total	L	T	LB	P	IS
Specialization	Safety Engineering in Industry	56	14	-	14	-	28

Pre-requisites from the curriculum ⁵	Compulsory	Physics, Mathematics
	Recommended	-

General objective ⁶	Knowledge of methods for the characterization of fluid motion, the mechanical interaction between the fluid and the external systems and the links between them.
Specific objectives ⁷	The aim of course is the qualitative and quantitative study of fluid movement for the "control" current flows encountered in practice: 1. Knowing the movement of fluid characterization processes, the mechanical interaction between the fluid and external systems and links between them. 2. Direct the laws of fluid mechanics applications for the preparation in the engineer specialty of <i>Security Engineering in Industry</i> . 3. Addressing general fluid motion and rest which can be solved by the methods of fluid mechanics (absolute and relative rest, fluid action to stand on solid walls, floating bodies, rolling movements). 4. Detailed study of miscarriages and local distribution.
Course description ⁸	1. The physical properties of the fluid (2 hours); 2. General equations of fluid mechanics (4 hours); 3. Movement of the effluent (2 hours); 4. Calculation of the pipes (2 hours); 5. Problems solved by methods specific specialty fluid mechanics of <i>Security Engineering in Industry</i> (4 hours).

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	50 %
	Assignments	-	%
Final assessment	Final assessment form ¹¹	Colloquium	Week 14
	Examination procedures and conditions: 1. First subject; T; percent of the colloquium grade 50% 2. Second subject; T; percent of the colloquium grade 25% 3. Third subject; T; percent of the colloquium grade 25%		50 %

Course organizer	Lecturer dr.eng. Monica LOHAN
Teaching assistants	Lecturer dr.eng. Monica LOHAN

¹Course 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)

⁵According 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

¹⁰A minimum grade might be imposed for some assessment stages

¹¹ Exam or colloquium