

COURSE DESCRIPTION

Name of the Course:		HYDRAULIC STEEL STRUCTURES						
Specialization Code:		U02.07.ICV.IZ.M24.		Course Code:		2.DS.OP08		
Year of study:	1	Semester:	2	Examination form: (E-Exam; Co- Colloquy; P-Project; P/F-Passed/Failed)	E	ECTS credits granted (CR):	E (Co)	6
					p		P (P/F)	
Course Category: (DF- Fundamental; DD- General engineering; DS-Specialty engineering; DC-Complementary; PR-Practical stage)								DS
Course Type: (OB-Compulsory; OP-Elective; FC-Facultative)								OP
Number of hours per semester: Total of hours per week (TH) x Number of weeks per semester								
TOTAL :	112	Individual study (IS):		56	Contact hours (C + S;L;P):			56
Academic staff member in charge: (Full name, Academic position and Department)				<i>Adrian Prodescu, Assistant Profesor</i>				

Faculty	Engineering in foreign languages Master study programme	Number of contact hours per semester				
		Total	Course	Seminar	Laboratory	Project
Field	Civil Engineering					
Specialization	Structural Engineering	56	28	-	-	28

Course objectives - Description of the main competences: Computing the structural components of the most encountered hydraulic steel structures

Content description:

1. COURSE	1. Specific problems regarding the slide gates. 2 hours 2. Specific problems regarding the segment gates 2 hours 3. Specific problems regarding the sluice gates 6 hours 4. Sector, cylinder and bear trap gates - structural components and computation 4 hours 5. Structures for the retention of the floating debris (floating barriers, grates) 2 hours 6. Tide barriers 4 hours 7. Examples of issues occurred in the operation of the hydraulic steel structures 4 hours 8. On site visit to hydraulic steel structures 4 hours
2. Seminar / Laboratory / Project / Practical stage	Project of a sluice gate 28 hours
3. Bibliography	1. Davis, A., Beck, E. Evaluation, design and fabrication of hydraulic steel structures. http://www.usace-isc.org/presentation/Structural%20-%20Hydraulic%20Steel%20Structures/Evaluation%20Design%20and%20Fabrication%20of%20HSS E.%20Beck%20and%20A.%20Davis.pdf

Criteria to be considered for the final mark	Weight of each criterion in the final mark (%)
1. Exam defence (final examination)	80%
2. Appreciation during the entire semester	
2.1 Seminar activity	
2.1 Laboratory activity	
2.2 Project activity (the project has not a distinct final mark)	20%
3. Periodical examinations	
3.1 Written / oral examination	

3.2 Home works, reports, essays etc.	
4. Other criteria (to be specified)	
Short description of the final evaluation procedure: Paper test, with all the bibliography at hand; Requirement: dimensioning of a structural element. Maximum mark: 8; For marks 9 and 10, questioning from the student's complete written course notes.	

Estimation of the total number of hours per semester requested for the individual study (IS)			
Type of individual activity	No. of hours	Type of individual activity	No. of hours
1. Study of the course notes	10	8. Preparation of the final examination	14
2. Study of the compulsory bibliography	5	9. Advisory class participation	
3. Study of the supplementary bibliography	2	10. Practical documentation on site	3
4. Preparation of specific activities		11. Additional documentation on library	2
5. Preparation of home works	18	12. Internet network documentation	2
6. Preparation of periodical written examinations		13. Others (to be specified)	
7. Preparation of periodical oral examinations		TOTAL number of hours	56

Date:
April 4th 2013

Signature of the Academic Staff member in charge:
Assistant Professor **Adrian Prodescu**