

COURSE DESCRIPTION

Name of the Course:		STEEL STRUCTURES FOR SPECIAL BUILDINGS					
Specialization Code:		U02.07.ICV.IZ.M24.		Course Code:		2.DS.OP06	
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)
					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>Prof.dr.ing. Șerban DIMA</i>			

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

Course objectives - Description of the main competences:

Presenting to students the particularities of design, general concepts and details of special buildings

Content description:

1. COURSE	2 hours / week x 14 weeks = 28 hours 1. Steel plate structures: a. Tanks..... 4 hours b. Silos and bunkers..... 6 hours c. Large diameter pipes..... 4 hours 2. Industrial buildings with large bays..... 6 hours 3. Steel chimneys..... 2 hours 4. Electric lines supports..... 2 hours 5. Towers..... 2 hours 6. Anchored Piles..... 2 hours
2. Seminar / Laboratory / Project / Practical stage	2 hours / week x 14 weeks = 28 hours 1. Calculation for a tower supporting communication antennas a. Assembly. Loads..... 2 hours b. Sectional efforts..... 2 hours c. Element design..... 2 hours d. Connection design..... 2 hours e. Foundation design..... 2 hours f. General assembly drawings and specific details..... 4 hours 2. Calculation for a steel silo a. Assembly. Loads..... 2 hours b. Silo design..... 2 hours c. Funnel design..... 2 hours d. Column support design..... 2 hours e. Connection design..... 2 hours f. General assembly drawings and specific details..... 4 hours

3. Bibliography	<ol style="list-style-type: none"> 1. Eurocode 3 2. Yang, T.Y., Moehle, J., Stojadinovic, B. (2009). Performance evaluation of innovative steel-braced frames. PEER report 2009/103. http://peer.berkeley.edu/publications/peer_reports/reports_2009/web_PEER9103_YANG_et_al.pdf 3. Uriz, P., Mahin, S. (2008). Toward earthquake-resistant design of concentrically braced steel-frame structures. PEER report 2008/08. http://peer.berkeley.edu/publications/peer_reports/reports_2008/web_PEER808_URIZMahin.pdf
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Criteria to be considered for the final mark	Weight of each criterion in the final mark (%)
1. Exam defence (final examination)	100
2. Appreciation during the entirely semester	
2.1 Seminar activity	
2.1 Laboratory activity	
2.2 Project activity (the project has not a distinct final mark)	
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: Written paper wiyh 2...3 subjects, mark as a mean of the subject marks	

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	6	9. Advisory class participation	4
3. Study of the supplementary bibliography	8	10. Practical documentation on site	-
4. Preparation of specific activities	14	11. Additional documentation on library	-
5. Preparation of home works	-	12. Internet network documentation	-
6. Preparation of periodical written examinations	-	13. Others (to be specified)	-
7. Preparation of periodical oral examinations	-	TOTAL number of hours	56

Date:
March 2013

Signature of the Academic Staff member in charge:
Şerban DIMA