

COURSE DESCRIPTION

Name of the Course:		Special Technologies for Transport Infrastructure					
Specialization Code:		U02.07.ICV.IZ.M24.		Course Code:		3.DS.OP16	
Year of study:	2	Semester:	3	Examination form: (E-Exam; Co- Colloquy; P-Project; P/F-Passed/Failed)	E	ECTS credits granted (CR):	E (Co) 6
							P (P/F)
Course Category: (DF- Fundamental; DD- General engineering; DS-Specialty engineering; DC-Complementary; PR-Practical stage)							DD
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. Florian BURTESCU Prof. Teodor IFTIMIE</i> <i>Assoc.Prof. Ionuț Radu RĂCĂNEL</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: Teaching of the main methods and procedures for building bridges and tunnels

Content description:

1. COURSE	1. Special technologies for BRIDGES and TUNNELS –28 hours - Execution technologies for bridge substructure – 3 hours - Execution technologies for reinforced and prestressed concrete bridges – 4 hours - Execution technologies for steel and composite bridges – 4 hours - Bridge erection technologies – 3 hours - Tunnels erection technologies – 14 hours
2. Seminar / Laboratory / Project / Practical stage	The project is solved by groups consisting each in 4 students and refers to: - writing a technological project for the erection of a bridge/tunnel – 14 hours.
3. Bibliography	1. MAN-CHUNG TANG, EVOLUTION OF BRIDGE TECHNOLOGY http://www.seinstitute.org/files/pdf/Ho_Final_Presentation_Evolution_of_Bridge_Technology.pdf 2. W. Jay Rohleder, Segmental Bridge Technology – Established and Evolving, http://mceer.buffalo.edu/education/bridge_speaker_series/2010-2011/presentations/Rohleder_presentation.pdf

Criteria to be considered for the final mark	Weight of each criterion in the final mark (%)
1. Exam defence (final examination)	50%
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)	50%
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:

For the course the students will write a grid test. The mark represents 50% form the final mark.

For the project the mark are obtained through periodical testing during semester. The mark represents 50% form the final mark.

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	16	8. Preparation of the final examination	10
2. Study of the compulsory bibliography	8	9. Advisory class participation	
3. Study of the supplementary bibliography	8	10. Practical documentation on site	
4. Preparation of specific activities		11. Additional documentation on library	
5. Preparation of home works	12	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

Signature of the Academic Staff member in charge:

Date: April 2013

Florian BURTESCU

Prof. Teodor IFTIMIE

Assoc.Prof. Ionuț Radu RĂCĂNEL