

Course information in english

General course information:

Course title:	Special Topics in Highway Engineering	Course code:	CE09-T08
Credits:	5	Work load (hours):	125
Course level:	Undergraduate <input checked="" type="checkbox"/>	Graduate <input type="checkbox"/>	
Course type:	Mandatory <input type="checkbox"/>	Selective <input checked="" type="checkbox"/>	
Course category:	Basic <input type="checkbox"/>	Orientation <input checked="" type="checkbox"/>	
Semester:	9	Hours per week:	4
Course objectives (capabilities pursued and learning results):			
Computer Aided Road Design Principles of Intersections at Grade and Interchanges. Road Signing Infrastructure. Road Restraint Systems. Principles of Road Safety Audits			
Prerequisites:			
Highway Engineering I & II CAD. Computer Aided Design. Surveying			

Instructor's data:

Name:	Eleni Misokefalou
Level:	
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Other tutors:	Kaliabetsos G., Scientific Assistant

Specific course information:

Week No.	Course contents	Hours	
		Course attendance	Preparation
1	The Use of Computers in Road Project Design.	4	1
2	C.A.D. and G.I.S. applications in design.	4	1
3	Digital Terrain Models.	4	1
4	Road Projects Design Software	4	3
5	Road Projects Design Software	4	3
6	Road Projects Design Software	4	3
7	Road Projects Design Software	4	1
8	Basics on Junctions Design	4	1
9	Basics on Interchanges Design.	4	1
10	Special topics of Road Infrastructure Design.	4	1
11	Road Restraint Systems.	4	1
12	Road Infrastructure Design at Work zones.	4	1
13	Road Safety Audit Procedures	4	1
14	Road Safety Audit Procedures	4	1

Additional hours for:			
Class project	Examinations	Preparation for examinations	Educational visit
49		0	

Suggested literature:

- "Richtlinien für die Anlage von Strassen. Elemente der Linienführung" RAS-L-1, 1984.
- AASHTO "Geometric Design of Highways and Streets" 2004
- OMOE (National Road Design Guidelines)
- HIGHWAY DESIGN, Theory & Practice (A. Apostoleris)
- Highway Design & Construction Henning Natzschka

- Handbook of Road Technology, Fourth Edition M. G. Lay, 2009
- Handbook of Road Safety Measures 2nd Edition Rune Elvik et al.
- Roundabouts. An informational Guide 2nd Edition 2010 NCHRP rep. 672

Teaching method (select and describe if necessary - weight):		
Teaching	<input checked="" type="checkbox"/>	50 %
Seminars	<input type="checkbox"/>%
Demonstrations	<input type="checkbox"/>%
Laboratory	<input checked="" type="checkbox"/>	30 %
Exercises	<input checked="" type="checkbox"/>	20 %
Visits at facilities	<input type="checkbox"/>%
Other (describe):	<input type="checkbox"/>%
Total		100%

Evaluation method (select)- weight :				
	<u>written</u>	<u>%</u>	<u>Oral</u>	<u>%</u>
Homework	<input checked="" type="checkbox"/>	30	<input checked="" type="checkbox"/>	10
Class project	<input type="checkbox"/>		<input checked="" type="checkbox"/>	60
Interim examination	<input type="checkbox"/>		<input type="checkbox"/>	
Final examinations	<input type="checkbox"/>		<input type="checkbox"/>	
Other (describe):	<input type="checkbox"/>		<input type="checkbox"/>	