

Course unit title:	Transportation Engineering		
Course unit code:	CE320		
Type of course unit:	Compulsory		
Level of course unit:	Bachelor (1st Cycle)		
Year of study:	3		
Semester when the unit is delivered:	6 (Spring)		
Number of ECTS credits allocated :	6		
Name of lecturer(s):	Dr. George Michaelides		
Learning outcomes of the course unit:	<ol style="list-style-type: none"> 1. Understand general concepts related to transport engineering. 2. Analyse the engineering, economic, environmental and social factors in locating roads. 3. Describe the types of pavements, identify the modes of their failure and the design problem. 4. Identify the characteristics of air transport and describe factors affecting the selection of location and layout of an airport. 5. Discuss the suitability and viability of railways for transport of passengers and freight. 6. Identify the advantages of the use of inland water transport nowadays. 		
Mode of delivery:	Face-to-face		
Prerequisites:	None	Co-requisites:	None
Recommended optional program components:			
Course contents:	<ol style="list-style-type: none"> 1. Principles of Transport and the place of transport in society 2. The physical components of transport 3. Road location 4. Pavement design 5. Air transport 6. Railway transport 7. Inland water transport 		
Recommended and/or required reading:			
Textbooks:	"Handbook of Transportation Engineering" Myer Kutz, McGraw-Hill Professional, 2003.		
References:	<p>"Transportation Engineering and Planning" C. S. Papacostas and P.D. Prevedouros, 3rd Edition, Prentice Hall, 2000.</p> <p>" Introduction to Transportation Engineering" James H. Banks, McGraw Hill Higher Education, 2001</p> <p>"Traffic Engineering" Roger P. Roess, Elena S. Prassas and William R. McShane, 3rd Edition, 2004.</p>		
Planned learning activities and teaching methods:	The course will be presented through formal theoretical lectures, practical problems and tutorial sessions in class. The lectures will present to the student the course content and allow time for questions and discussion. Practical exercises in lecture periods are submitted as assignments by the students. Notes shall be taken by the students in class during lectures. In addition, all of the course material will be made available through the class website and also through the university's own e-learning platform. Finally, the instructor will be available to students during office hours or by		

	appointment in order to provide any necessary tutoring.
Assessment methods and criteria:	<ul style="list-style-type: none"> • Coursework 50% • Final Exam 50%
Language of instruction:	English
Work placement(s):	No