

## COURSE OUTLINE

### (1) GENERAL

<b>SCHOOL</b>	ENGINEERING SCHOOL		
<b>DEPARTMENT</b>	CIVIL ENGINEERING DEPARTMENT		
<b>LEVEL OF STUDIES</b>	UNDER GRADUATE		
<b>COURSE CODE</b>	2303532	<b>SEMESTER</b>	3rd
<b>COURSE TITLE</b>	CONSTRUCTION DETAILS I		
<b>INDEPENDENT TEACHING ACTIVITIES</b> <i>if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits</i>	<b>WEEKLY TEACHING HOURS</b>	<b>CREDITS</b>	
Lectures	2		
Laboratory	4		
		6 (total)	
<i>Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).</i>			
<b>COURSE TYPE</b> <i>general background, special background, specialised general knowledge, skills development</i>	<b>General Background Course</b>		
<b>PREREQUISITE COURSES:</b>			
<b>LANGUAGE OF INSTRUCTION and EXAMINATIONS:</b>	Greek (official)- English (optional)		
<b>IS THE COURSE OFFERED TO ERASMUS STUDENTS</b>	YES		
<b>COURSE WEBSITE (URL)</b>	<a href="http://civil.teipir.gr/web/index.php?page=alias-37">http://civil.teipir.gr/web/index.php?page=alias-37</a>		

## (2) LEARNING OUTCOMES

### Learning outcomes

The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described.

Consult Appendix A

- Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area
- Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B
- Guidelines for writing Learning Outcomes

Upon completion of the course, students will have:

1. In-depth knowledge and critical understanding of the technological methods to be applied,
2. Knowledge and skills in understanding the constructional techniques, as well as applying them in different projects,
3. Knowledge and synthesis skills in regards to the engineering part, as well as the design procedure of each construction,
4. Ability to programming and supervision of the working phases that each project undergoes.

Specifically, students will be able to:

1. To choose the particular construction techniques and to be able to focus on the specifications as given by the engineering industry.
2. To develop their personal criteria in regards to choosing the specialized materials and their applications in constructions.
3. To proceed in suggesting quality improvement techniques.
4. To know and apply the rules and recommendations related to environmental protection, as related to new constructions.

### General Competences

Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following does the course aim?

Search for, analysis and synthesis of data and information, with the use of the necessary technology

Adapting to new situations

Decision-making

Working independently

Team work

Working in an international environment

Working in an interdisciplinary environment

Production of new research ideas

Project planning and management

Respect for difference and multiculturalism

Respect for the natural environment

Showing social, professional and ethical responsibility and sensitivity to gender issues

Criticism and self-criticism

Production of free, creative and inductive thinking

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Others...

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Analysis and synthesis of information regarding the use of applied construction technology.

Adaptation to new possibilities offered: evaluation of the techniques, as well of new materials applied.

Decision Making: development of personal criteria in regards to the economy of structural decisions.

Autonomous work: Knowledge of regulations, protocols and ethical issues when developing innovation.

Teamwork: Ability for dialog, self- esteem and commitment to reach an agreement.

### (3) SYLLABUS

<ol style="list-style-type: none"> <li>1. Introduction to general constructions using new technologies</li> <li>2. Control and optimization of structural proposals</li> <li>3. Principles in regards to the environment surrounding the construction</li> <li>4. Methodology regarding the site preparation</li> <li>5. General planning of the construction field and its safety measurements</li> <li>6. Design, Operation and Management of Construction sites.</li> </ol>
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### (4) TEACHING and LEARNING METHODS - EVALUATION

<b>DELIVERY</b> <i>Face-to-face, Distance learning, etc.</i>	Lectures, laboratories	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b> <i>Use of ICT in teaching, laboratory education, communication with students</i>	Teaching using ICT, Laboratory Education using ICT, Communication and Electronic Submission	
<b>TEACHING METHODS</b> <i>The manner and methods of teaching are described in detail.</i> <i>Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc.</i>  <i>The student's study hours for each learning activity are given as well as the hours of non-directed study according to the principles of the ECTS</i>	<b>Activity</b>	<b>Semester workload</b>
	Lectures	2X13
	Laboratories	4X13
	Course total	78
<b>STUDENT PERFORMANCE EVALUATION</b> <i>Description of the evaluation procedure</i>  <i>Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-answer questions, open-ended questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other</i>  <i>Specifically-defined evaluation criteria are given, and if and where they are accessible to students.</i>	<b>Written examination: 60%</b> <b>Laboratory exercise: 40%</b>	

### (5) ATTACHED BIBLIOGRAPHY

1. Αθανασόπουλος Χρήστος Γ., *Κατασκευή Κτιρίων, Σύνθεση και Τεχνολογία*, ιδιωτική έκδοση, Αθήνα 1997.
2. Schmitt Heinrich, Heene Andreas, *Κτιριακές κατασκευές*, εκδόσεις Γκιούρδας, Αθήνα, 1994.