

COURSE OUTLINE

(1) GENERAL

SCHOOL	SCHOOL OF ENGINEERING		
DEPARTMENT	DEPARTMENT OF CIVIL ENGINEERING		
LEVEL OF STUDIES	UNDER GRADUATE		
COURSE CODE	2306536	SEMESTER	6th
COURSE TITLE	DESIGN OF STEEL STRUCTURES		
INDEPENDENT TEACHING ACTIVITIES <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>	WEEKLY TEACHING HOURS	CREDITS	
Lectures	2	7 (total)	
Design applications	3		
	5 (total)		
<i>Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).</i>			
COURSE TYPE <i>general background, special background, specialised general knowledge, skills development</i>	Specialized Knowledge, skills development		
PREREQUISITE COURSES:			
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek (official) (for the Erasmus Students in English)		
IS THE COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE WEBSITE (URL)	http://vplace.teipir.gr/2306536		

(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 be able to :

1. Deeply understand the design of steel structures.
2. Study and suggest solutions in problems of steel design.
3. Develop personal responsibility and offer scientific opinion.
4. Manage time in an appropriate manner.
5. Develop analytical and synthetic abilities as well as critical evaluation.
6. Present ideas verbally or in written.

Specifically, students will be able to:
 Design steel structures according to current standards but also to any new ones

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?

<i>Search for, analysis and synthesis of data and information, with the use of the necessary technology</i>	<i>Project planning and management</i>
<i>Adapting to new situations</i>	<i>Respect for difference and multiculturalism</i>
<i>Decision-making</i>	<i>Respect for the natural environment</i>
<i>Working independently</i>	<i>Showing social, professional and ethical responsibility and sensitivity to gender issues</i>
<i>Team work</i>	<i>Criticism and self-criticism</i>
<i>Working in an international environment</i>	<i>Production of free, creative and inductive thinking</i>
<i>Working in an interdisciplinary environment</i>	<i>.....</i>
<i>Production of new research ideas</i>	<i>Others...</i>
	<i>.....</i>

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
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(3) SYLLABUS

Design of steel structures by the use of the relevant codes considering ultimate limit state design, and serviceability design. Capacity design of sections in steel structures under tension, compression, buckling shear and in combination of them. Design of :threaded connections of links gibs of friction connections and of welded connection. Design under uniform and variable torsion.

(1) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY <i>Face-to-face, Distance learning, etc.</i>	Lectures
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY <i>Use of ICT in teaching, laboratory education, communication with students</i>	Teaching using ICT, Laboratory Education using ICT, Communication and Electronic Submission

TEACHING METHODS	Activity	Semester workload
<p>The manner and methods of teaching are described in detail.</p> <p>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.</p> <p>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</p>	Lectures	26
	Design applications (assignments)	39
	Study	110
	Course total	175
<p>STUDENT PERFORMANCE EVALUATION</p> <p>Description of the evaluation procedure</p> <p>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</p> <p>Specifically-defined evaluation criteria are given, and if and where they are accessible to students.</p>	<p>Written examination: 80%</p> <p>Design applications (assignments): 20%</p>	

(2) ATTACHED BIBLIOGRAPHY

<ol style="list-style-type: none"> 1. ΣΧΕΔΙΑΣΜΟΣ ΔΟΜΙΚΩΝ ΕΡΓΩΝ ΑΠΟ ΧΑΛΥΒΑ ΜΕ ΠΑΡΑΔΕΙΓΜΑΤΑ ΕΦΑΡΜΟΓΗΣ, ΙΩΑΝΝΗΣ Κ. ΒΑΓΙΑΣ, ΙΩΑΝΝΗΣ Χ. ΕΡΜΟΠΟΥΛΟΣ, ΓΕΩΡΓΙΟΣ Ι. ΙΩΑΝΝΙΔΗΣ # 2. ΚΑΤΑΣΚΕΥΕΣ ΑΠΟ ΧΑΛΥΒΑ ΠΑΡΑΔΕΙΓΜΑΤΑ ΣΧΕΔΙΑΣΜΟΥ ΣΤΑ ΠΛΑΙΣΙΟ ΤΟΥ ΕΥΡΥΚΩΔΙΚΑ, Χ.Κ.ΜΠΑΝΙΩΤΟΠΟΥΛΟΣ, Θ.Ν. ΝΙΚΟΛΑΙΔΗΣ #
