

1.1.1 Diploma Dissertation

GENERAL

SCHOOL	Engineering		
ACADEMIC UNIT	CIVIL ENGINEERING		
LEVEL OF STUDIES	Undergraduate		
COURSE CODE	ΔΠ001	SEMESTER	10th
COURSE TITLE	Diploma Dissertation		
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	
Diploma project		30	
<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>	Specialization Course		
PREREQUISITE COURSES:	Prerequisite ECTS: Yes (180 ECTS) Prerequisite knowledge: Yes (prerequisite courses vary according to the specialization field).		
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek		
IS THE COURSE OFFERED TO ERASMUS STUDENTS			
COURSE WEBSITE (URL)	http://civil.ihu.gr/pps.html		

LEARNING OUTCOMES

<p>Learning outcomes <i>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.</i></p> <p><i>Consult Appendix A</i></p> <ul style="list-style-type: none"> • 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 <p>Upon successful completion of the Diploma Thesis, the student is expected to be able to:</p> <ul style="list-style-type: none"> • Apply scientific knowledge acquired during his postgraduate studies in Civil Engineering, with an emphasis on a chosen specialization field/ direction. • Apply specialized scientific knowledge related to the Thesis' subject, studied experimentally / by research. • Be familiar with the tools and methodology of scientific research and be able to use them in the future. • Produce scientific papers and present them in public, aiming at disseminating knowledge and communicating with the scientific community.
<p>General Competences <i>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></p>

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

- _ 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 interdisciplinary environment
- _ Production of new research ideas
- _ Project planning and management
- _ Respect for the natural environment
- _ Criticism and self-criticism
- _ Production of free, creative and inductive thinking

SYLLABUS

The Diploma Thesis concerns the writing and public presentation of an extensive scientific paper that delves into specialized knowledge. The student studies bibliographically and experimentally or by research a specific topic that is part of one of the fields/ directions of Civil Engineering: Structural Engineering, Geotechnical Engineering, Transport Engineering or Hydraulics Engineering.

TEACHING and LEARNING METHODS - EVALUATION

DELIVERY <i>Face-to-face, Distance learning, etc.</i>	Face to face.	
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY <i>Use of ICT in teaching, laboratory education, communication with students</i>	Communication via e-mail and Zoom platform. Use of the e-learning platform if needed.	
TEACHING METHODS <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>	Activity	Semester workload
	Tutorials	60
	Individual study	470
	Project(s)	250
	Course total (26 hours workload per ECTS credit)	780
STUDENT PERFORMANCE EVALUATION <i>Description of the evaluation procedure</i> <i>Language of evaluation, methods of evaluation, summative or conclusive, multiple choice</i>	The evaluation of the diploma thesis is composed of the following: A. Quality of content and structure of the submitted scientific assignment (70%)	

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

Specifically-defined evaluation criteria are given, and if and where they are accessible to students.

B. Level of knowledge on the specific scientific topic and capability of answering the examination committee's questions during the public presentation of the thesis (20%)

C. Consistency regarding the whole procedure (meeting deadlines, handing in interim deliverables etc.) and level of cooperation with the Supervisor during the development of the assignment (10%).

The evaluation criteria of the diploma thesis are clearly mentioned in the DIPLOMA THESIS OUTLINE, posted on the Department's website, accessible to all students.

ATTACHED BIBLIOGRAPHY

_Bell, J. Waters, S., 2014. Doing Your Research Project. A Guide for First-time Researchers. McGraw-Hill Education Editions.

_Dimitropoulos, E., 2009 (3rd ed). Introduction to Scientific Research Methodology. Athens: G. Parikos Editions [in Greek].

_Eco, Umberto, 2015. How to Write a Thesis. Translated by C. Mongiat Farina and G.Farina. [E-book]. The MIT Press.