

1.1.1 Architectural Design

GENERAL

SCHOOL	Engineering		
ACADEMIC UNIT	CIVIL ENGINEERING		
LEVEL OF STUDIES	Undergraduate		
COURSE CODE	ΔOM027	SEMESTER	8th
COURSE TITLE	Architectural Design		
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	
	4	5	
<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:			
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek		
IS THE COURSE OFFERED TO ERASMUS STUDENTS	No		
COURSE WEBSITE (URL)	https://elearning.cm.ihu.gr/		

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"> • <i>Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area</i> • <i>Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B</i> • <i>Guidelines for writing Learning Outcomes</i> <ul style="list-style-type: none"> • Recognize and define the concepts of Space, Architecture and Architectural Design - understand and use of the relevant terminology. Analyze small scale architectural projects. • Understand the purpose of Architectural Design (historically, socially, culturally, environmentally, technologically) and review its methodology. Define and distinguish the role and responsibilities of the head designer within a group of engineers having to produce a building project. • Evaluate the specificities of the designing of a medium architectural complexity project (i.e. suburban detached house), distinguish and prioritize parameters which determine architectural and constructional aspects of the project, classify and illustrate design principles. Create and present the synthetic concept (main design idea). • Understand and apply the constantly needed modifications in the designing process, become able to adopt this kind of flexibility, apply methods and tools that support an adaptability process. • Create (design) small to medium scale building projects of simple functional requirements and simple but well-defined morphological identity. Organize and present these proposals with a maximum level of quality and completeness. • Evaluate in comparison different designed or constructed building-project proposals and decide for interventions or final options which will support the projects' sustainability and bring the optimal
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conditions for the final occupants.

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>Production of new research ideas</i>	<i>Others...</i>

The course 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 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
- _ Criticism and self-criticism
- _ Production of free, creative and inductive thinking

SYLLABUS

The course introduces students to basic concepts of Space, Architecture and Architectural Design with the aim of understanding the importance of architectural projects and mastering an established scientific language that is used internationally, in the context of the interdisciplinarity required when different Engineers specialties collaborate for Construction. Emphasis is placed on the methodological, analytical and synthetic character of Architectural Design with the aim of familiarizing and acquiring basic knowledge about concepts such as spatial Form and Function, the integration of the building into its environment (context), the central synthetic idea (concept) and its transformations, the publicization and communication of the architectural projects, the dialogue of the composer (Architect/ Engineer) with the scientific and technical world, as well as with the final recipients of his work (inhabitants).

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>	Powerpoint presentations, e-learning platform for educational material	
TEACHING METHODS <i>The manner and methods of teaching are described in detail. Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography,</i>	Activity	Semester workload
	Lectures	26
	Practice/exercises	26
	Project(s)	38

<p>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>	Individual study	40
	Course total (26 hours workload per ECTS credit)	130
<p>STUDENT PERFORMANCE EVALUATION</p> <p><i>Description of the evaluation procedure</i></p> <p><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></p> <p><i>Specifically-defined evaluation criteria are given, and if and where they are accessible to students.</i></p>	<p>The final evaluation is composed of marks collected from different parts of the teaching process, as follows:</p> <p>_ Written or oral examination (end of semester): 50% of the final grade</p> <p>_ Quality of exercises, assignments, and design projects (developed during the semester): 40% of the final grade</p> <p>_ Participation in the course procedures (i.e. oral participation, meeting deadlines for handing in written work): 10% of the final grade.</p> <p>The evaluation criteria are listed in the introductory handout of the course, which is posted on the e-learning platform in the beginning of the semester and is also distributed and presented to the students during the 1st class meeting.</p>	

ATTACHED BIBLIOGRAPHY

- _ Francis D. K. Ching, 2014 (4th edition). Architecture: Form, Space, and Order. John Wiley Sons.
- _ Kenneth Frampton, 2007 (4th edition). Modern Architecture: A Critical History. Thames Hudson.
- _ Jordan, R. Furneaux, 1970. A concise history of Western architecture. New York: Harcourt, Brace World.
- _ Kleine, G. Quibe, J., 1997. Houses: typology and form. Athens: Giourdas Editions [in Greek].
- _ Petridou, Vasiliki Ziro, Olga, 2015. Arts and Architecture from renaissance to the 21st century. [e-book]. Athens: Association of Greek Academic Libraries (Kallipos). Available at: <http://hdl.handle.net/11419/3541> [in Greek].