

Course unit title:	Architectural Technology II		
Course unit code:	APX133		
Type of course unit:	Compulsory		
Level of course unit:	Diploma Degree of Architect - Engineer		
Year of study:	1		
Semester when the unit is delivered:	2 (Spring)		
Number of ECTS credits allocated :	5		
Name of lecturer(s):	Marios Pelekanos		
Learning outcomes of the course unit:	<ol style="list-style-type: none"> 1. The understanding of the most common construction system in Cyprus, Greece and generally over the Eastern Mediterranean area the so called "Concrete Structures". This construction system uses reinforced concrete leaning components, brick wall construction and plaster finishes. 2. Deal with the requirements, selection criteria, specifications and individual characteristics of the main parts of a building: <ul style="list-style-type: none"> • the load bearing framework (from foundation to roofing) • the envelop (lower floor, exterior walls, Upper Floor) • the building skin (Interior partitions, floors, ceilings) • landscape (immediate exterior spaces of the building and the surroundings) 3. The complete understanding of the purpose of the requirements, selection criteria and principles of construction in relation to the overall protection, waterproofing and thermal insulation of buildings and their application to all parts of a concrete structure. 4. Understanding the role of building technology in architectural design process through the study of a simple construction 5. Understand the relationship of the form produced along with the construction options. 6. Get the experience of producing final plans with integrated construction details of a simple concrete structure. 		
Mode of delivery:	Face-to-face		
Prerequisites:	None	Co-requisites:	None
Recommended optional program components:	None		
Course contents:	Technology and Design of the reinforced concrete structure and its components:		

	<ul style="list-style-type: none"> • Framework • Walls (Internal- External) • Thermal Insulation • Waterproofing • Coatings and Finishes • Openings and Frames • Stairs
Recommended and/or required reading:	<p>J. Gordon, Structures of why things don't fall down, Da Capo Press, 1978</p> <p>N. Hawkes, MACmillan P.G., Structures the way things are built, Oxford, 1993</p>
Textbooks:	Hristos Athanasopoulos, Building construction, design and technology , Hristos Athanasopoulos Edition, 2003.
References:	<p>N.Kalogeras, Ch.Kirpotin, G.Makris, I.Papaioannou, S.Rautopoulos, M.Tzitzas, P.Touliatos, Architectural Technology, Symmetria Editions, Athens, 1999.</p> <p>Mario Salvadori, Why Buildings stand up- The strength of Architecture, Norton and Co, 1990.</p> <p>W.Huntington-R. Mickadelt, Building Construction Materials and Types of Construction, J. Viley and Sons, 1981.</p> <p>Mario Salvadori, The bearing structure in architecture, Themeli Editions, Athens, 1981.</p>
Planned learning activities and teaching methods:	<p>The taught part of the course is delivered to the students by means of lectures and computer-aided presentations. Lecture notes and presentations are available through the web for students to use in combination with the relevant textbooks.</p> <p>Lectures are supplemented with project work carried out on an individual basis. Students are requested to design and produce construction details for a demanding light structure such as bridge etc. During the semester, course instructors are making comments and corrections on the students' proposals, at every stage of the process.</p>
Assessment methods and criteria:	<ul style="list-style-type: none"> • Project 35% • Final Exams 65%
Language of instruction:	Greek English offered for Erasmus Students
Work placement(s):	