

# University of Nicosia, Cyprus

Course Code	Course Title	ECTS Credits	
ARCH-322	Building Services	4	
Department	Semester	Prerequisites	
Architecture	spring	Arch 112	
Type of Course	Field	Language of Instruction	
Required	Architecture	English	
Level of Course	Year of Study	Lecturer(s)	
1 <sup>st</sup> cycle	3rd	Adonis Kleanthous	
Mode of Delivery	Work Placement	Co-requisites	
face-to-face	N/A	none	

## **Objectives of the Course:**

- To explore the full range of interior construction components related to building services, including environmental control systems (heating and ventilation), electrical installations, plumbing and drainage.
- To present construction details and materials in relation to building services emphasizing their structural as well as their aesthetic properties.
- To teach students the required skills in order to produce working drawings and details
- Develop student's ability to integrate building technology into building design.
- Develop student's ability to 'read' and understand technical drawings and specification documents.
- Develop student's ability to assess environmental issues related to building performance.

#### Learning Outcomes:

After completion of the course students are expected to be able to:

- Utilize building technology, through the study of sustainable systems, HVAC, plumbing, and electrical
- Apply, 'read', understand, and communicate technical drawings and specification documents.
- Employ materials, and their qualities and assembly processes
- Apply knowledge of all essential building installations, and most recent technologies

#### **Course Contents:**

- Site visits to ongoing construction sites and completed buildings. Surveying, measuring, observing, on-site tutoring
- Case-study of building technology. Systems/methods/performance/energy conservation/concepts, from selected published projects
- In-class laboratory experiments with mechanical accessory components and their integration into building-design.
- Lectures and Readings

#### Learning Activities and Teaching Methods:

Lectures, Site visits, Lab Presentations, Lab Tutorials, Drawing and modelling Assignments

## **Assessment Methods:**

3 Documenting assignments. One on HVAC systems and elevators, one on plumbing and electrical, and one on sustainable systems, In-class student presentation, Presentation of lab-work/drawing/model details, Mid-term exam, final exam

## **Required Textbooks/Reading:**

Authors	Title	Publisher	Year	ISBN
Klaus Daniels	Advanced Building	Birkhauser	2003	3-7643-6723-7
	Systems			

## **Recommended Textbooks/Reading:**

Authors	Title	Publisher	Year	ISBN
Andrea Deplazes	Constructing	Birkhauser	2005	10:3-7643-7189-7
	Architecture, Materials			
	Processes Structures			