

## History of Architecture I

Semester 2

This course introduces an analytical survey of western and non-western architecture, starting from the Egyptian Pharaonic architecture till the Greek and Roman. Lectures are essentially structured chronologically; however, several aspects are deepened horizontally till the current time to see how traditions influenced present architecture. The course includes several excursions to Pharaonic sites around Cairo.

Students develop awareness for the above-mentioned architectural traditions. They should also develop their critical skills and should be able to analyze buildings and space design in those eras.

Code	No.	Course	L	E	P	ECTS
ARCH	202	History of Architecture I	2	0	0	3

## Visual Design

Semester 2

This course deals with the basic equipment, media, techniques and principles of graphic communication. Fundamental skills are established in both freehand and drafting techniques. The course includes studying the different design elements: point, line, direction, shape, size, texture, colour, light and form. It investigates and explores processes involved in perception, nature of light, movement, color, depth, and distance cues. Design fundamentals are reinforced where students can experiment and explore several ideas related to two and three-dimensional forms.

Students develop spatial sensitivity and create compositions using forms, textures, colours and light.

Code	No.	Course	L	E	P	ECTS
ARCH	203	Visual Design	1	3	0	5

## Introduction to Architectural Design

Semester 2

This course aims at introducing the basic concepts of architectural design; students learn about key ideas like abstraction, representation, program, plan, materials, and structure. They learn different methods of designing and how to analyze the design of a building, as well as how to relate architecture to broader cultural and social contexts. Class discussions are supplemented with site visits to prominent buildings. Students develop concepts for small design tasks through several exercises and receive hands-on training in the fundamentals of design, including architectural drawing, model-making, and conceptual development.

Students know how analyze simple building designs and functions; they are able to produce precise designs of simple spaces and develop concepts of small design tasks, integrated with the ability to represent architectural design ideas, using different tools and media.

Code	No.	Course	L	E	P	ECTS
ARCH	204	Introduction to Architectural Design	1	4	0	6

## Building Technology I

Semester 2

This course introduces the building construction process, with a focus on building materials, building structure systems and construction technique. Students are trained to develop adequate building solutions and to understand the impact of building construction and materiality on architectural detail. The course includes the analysis of simple case studies, field trips to buildings under construction and design assignments, focused on building construction. The course also aims at providing a fundamental understanding of the physics related to buildings as well as the effect of environmental forces on buildings. Topics cover moisture and humidity, noise control in buildings and room acoustics.

Students are familiar with building materials and their adequate application in buildings. They understand interaction of Building Physics with Building Construction and are able to develop essential building construction details in drawings and models.

Code	No.	Course	L	E	P	ECTS
ARCH	205	Building Technology I	2	4	0	7

## 3D Model-Making Studio

Semester 2

This course aims to develop individual abilities in material examination and architectural model-making and to develop an understanding of the importance of 3D manual processes within a design context. Model-making will be approached as an experimental practice in which models act as tools for exploring spatial ideas. This practical course will focus on a series of material and process exercises, in which a range of alternative model-making materials will be used. Students will consider an extended range of material possibilities; they will draw relationships between spatial qualities and the symbolic properties of materials during the thinking-making process, considering aspects of tectonic assembly, abstraction, representation and scale.

Students are able to distinguish and express their concepts in sketch models, discuss ideas with the help of working models and showcase their designs by building presentation models in different scales.

Code	No.	Course	L	E	P	ECTS
ARCH	206	3D Model-Making Studio	1	3	0	5