**Training objectives**

THEORIES OF ARCHITECTURAL DESIGN 2017/2018
Module 40 hours: DISTRIBUTIVE CHARACTERISTICS OF THE BUILDINGS.
Module 30 hours: TYPOLOGICAL AND MORPHOLOGICAL. CHARACTERISTICS OF ARCHITECTURE.
Module 20 hours: FUNDAMENTALS OF HISTORY OF CONTEMPORARY ARCHITECTURE
The 3 modules are to be considered synergical and complementary, as they deal with the fundamental organization of buildings.
The final goal is to make students able to recognize building types and basic rules of urban desig, to be able to recognize anallogies and differences, and make use of those elements with awareness.
This basic rules must consider dimensional scale, environmental situations, technologies, historical processes of modification and evolution and also immatrial factors (as culture and perception).
The course aims to provide a basic knowledge about the role of urban analysis and building types in the development of contemporary towns.The relationship between urban morphology and building typologies is considered both in its contemporary aspects and in historical perspective of continuous modification, through some basic rules, which can be understood referring to the concepts of type, model, archetype.The importance of some elements of urban landscapes (such as streets, green areas, etc.) is underlined analysing physical and perceptive aspects.
This basic information aims to provide the student a first knowledge about building types considered as fundamental elements in the comprehension of buildt environment.
In parallel (by the means of practice exercises dealing with case-studies with increasing complexity) the student will be made aware of the role of this instruments not only as a mean of knowledge and interpretation, but also as a supporting tool for architectural design.
The module Fundamentals of History of contemporary architecture.
The teaching module Fundamentals of History of contemporary architecture aims to provide useful tools to introduce students to the history of Contemporary Architecture, from the beginning of the Twentieth Century to the present day, in the International scene. The method offers a comparative analysis of major works, crossing the points of view of spatial composition, structural and formal, with attention to the dominant themes in different historical periods.

**Prerequisites:** No one

**Course programme**

The common aim of both combined modules is to teach students a method of analysis on buildings’ organization and layout, so that to prpvide practical tools for architectural design.
The Theories of Architectural Design (Distributive, Characteristics of the Buildings) module concerns urban planning, type analysis, architectonic composition and furnishing of inner and external spaces. The lessons will describe the evolution of the city in last 150 years, analysing in particular the urban development in Berlin, Barcelona and Rome, focusing on the evolution of the plan of the cities on the basis of specific inhabited, influenced by political and historical background
Analysing works by some of the most important architects of the XX century, urban and architectonic aspects will be studied in order to highlight peculiarities of the buildings. Focusing on some works of modern architecture, the characteristics of the buildings banisters house, of the low- to mid-rise apartment building, of the cascade, of the high-rise apartment building and of the small apartment building will be considered, emphasizing some of their operative and distributive peculiarities.
The evolution of construction techniques and materials will be studied, so that structural, economic topics concerning the optimization of the energetic saving of the buildings will be considered.
In addition, design criteria to optimize the functionality of inner interiors will be emphasized. Therefore, spaces and their functional area of some of the commonest elements of furnishing will be deemed.
The Typological and morphological characters of architecture module aims to provide a basic knowledge about the role of urban analysis and building types in the development of contemporary towns.The relationship between urban morphology and building typologies is considered both in its contemporary aspects and in historical perspective of continuous modification, through some basic rules, which can be understood referring to the concepts of type, model, archetype.The importance of some elements of urban landscapes (such as streets, green areas, etc.) is underlined analysing physical and perceptive aspects. Lessons will concern buildings and their relationship with urban and territorial dimension, dealing both with theoretical aspects and real case studies

THE MODULE FUNDAMENTALS OF HISTORY OF CONTEMPORARY ARCHITECTURE

The teaching module aims to provide useful tools to introduce students to the history of Contemporary Architecture, from the beginning of the Twentieth Century to the present day, on the International scene and through the work of the main masters. The method offers a comparative analysis of major works, crossing the points of view of spatial composition, structural and formal, with attention to the dominant themes in different historical periods.

THE MODULE FUNDAMENTALS OF HISTORY OF CONTEMPORARY ARCHITECTURE

Module topics:
Frank Lloyd Wright: from the "prairie houses" to California; from Broadacre City to the Guggenheim Museum in New York.

Le Corbusier: from his beginnings in La Chaux de Fonds to Algiers plan; from the Unité d’habitation in Marseilles to the Capitol in Chandigarh.

Ludwig Mies van der Rohe: in Germany and in America.

Alvar Aalto and James Stirling.

Frank O. Gehry and Zaha Hadid.

**Didactic methods**

In all the 3 modules practical drills will be carried out in parallel to the theoretical ones,.
Groups of three students will be given the opportunity to design on A3-format sheets and to examine some of the topics discussed in the lessons.

In addition to front lessons and team work, students are also required to achieve personal competence (study of basic bibliography) and the level will be cheked with an oral individual final exam.
As a first step, it is necessary to have some fundamental rudiments and a shared lexicon. That’s why students are required to study some fundamental texts in the first three weeks of the course (see bibliography). Then further bibliographies will be delivered on specific subjects.
The module Fundamentals of History of contemporary architecture consists of ex cathedra lessons on each of the topics listed in the program. No contemplated collective exercises; individual signs for the deepening of the study program can be provided during the hours devoted to the students reception.

**Learning assessment procedures**

Four practical drills (with different and increasinfg complexity will stimulate and test the following swills:
Basic knowledge on paths and spaces (organization, dimensioning, costs/benefits ratio)
Importance of full (building types) and empty (urban morphologies) spaces, their mutual interaction, and aware use in design
Dimesioning and layout of spaces, facilities, furniture and their interaction with structure, plants, functions and architecture
Improvement and stimulation of capacities of observation and comprehension of urban scene by the means of direct experience (a photo contest) and through different and less conventional approaches(evoking an psychological aspects).

The individual final exam consists of an oral individual test on basic knowledge and a comment on the graphic exercises developed during the 3 integrated courses. Attendance to lessons will be considered also in the final evaluation.
The final exam will also test if fundamental knowledge on the discipline has been achieved on main topics such as: history-development-trends, competence with specialistic “ortography and sintax”.
This will provide our future architects with grounded tools , as intuition and talent are (of course) essential ingredients, but not sufficient to manage the complexity of design activity.

**Reference texts**

ESSENZIAL BIBLIOGRAPHY: Aldo Rossi, "l'Architettura della città", Ed. Clup 1966; M. Zaffagnini, A. Gaiani, N. Marzot, "Morfologia urbana e tipologia edilizia", Ed. Pitagora, Bologna 1995; G. Caniggia, G. L. Maffei,"Il progetto nell'edilizia di base", Ed. Marsilio 1979.
Regarding prof. Mulazzani: Manfredo Tafuri, Francesco Dal Co, Architettura contemporanea, Electa, Milano 1976.
In addition, they are useful lecture notes.
A supplementary bibliography needed to deal with the deepening of the individual topics covered in the module will be provided at the beginning of the course.