

Course guide

290600 - BATEC14 - Basic Technique

Last modified: 03/02/2025

Unit in charge: Vallès School of Architecture
Teaching unit: 753 - TA - Department of Architectural Technology.
Degree: DEGREE IN ARCHITECTURE STUDIES (Syllabus 2014). (Compulsory subject).
Academic year: 2024 **ECTS Credits:** 6.0 **Languages:** Catalan

LECTURER

Coordinating lecturer: ALBERTO CUCHÍ BURGOS

Primer quadrimestre:
ALBERTO CUCHÍ BURGOS - Grup: MOB, Grup: 1

Others: Primer quadrimestre:
ENRIQUE CORBAT DIAZ - Grup: MOB, Grup: 1
ALBERTO CUCHÍ BURGOS - Grup: MOB, Grup: 1

PRIOR SKILLS

No matter being first course

REQUIREMENTS

No matter being first course

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:

EAB1G. An aptitude for applying graphic skills to the representation of spaces and objects (T).
EAB8G. Adequate knowledge of the principles of thermodynamics, acoustics and optics applied to architecture and urbanism.

Generical:

CE9. Adequate knowledge of the physical problems, technologies and functions of buildings so as to provide them with comfortable indoor conditions and protection from climate factors.

TEACHING METHODOLOGY

- 1) Weekly theoretical session.
- 2) 2 Practical exercises and face-to-face group discussions.

LEARNING OBJECTIVES OF THE SUBJECT

- Be able to describe the role of technique in Architecture
- Be able to recognize the technical context in which Architecture is built and the limitations it produces in its design
- Be able to refer to the environmental limitations that determine the technical context in which Architecture is built



STUDY LOAD

Type	Hours	Percentage
Hours large group	33,0	22.00
Self study	84,0	56.00
Hours medium group	33,0	22.00

Total learning time: 150 h

CONTENTS

Syllabus

Description:

The course is divided into an introduction, 11 topics that are developed weekly and that constitute the content of the course, and a conclusion. The first six topics develop the technical solutions of the basic operations of what has been the traditional technique from stacking to the configuration of traditional factory buildings. The following five develop the technical transformation generated by the industrial revolution, and how this involves a radical break in the technical model and, consequently, in Architecture. At the same time, the environmental crisis generated by the model born of the industrial revolution puts our technical model in crisis and forces a change in which the students of the course will be the protagonists in their professional lives.

Each topic has a theoretical part that is developed on Thursday and a practical part that is discussed the following Monday on the work carried out by the students between these two days. Basically, the course aims to teach how to look - you only see what you already know - and that the student is able to recognize elements of reality from the theoretical class and express this recognition with a photograph, drawing, story, etc. of elements captured from reality. The dissonances between the theoretical explanation and what is collected on the street, new aspects that attract attention, additional perceptions, etc., are the material that is expected to be found and discussed on Mondays to establish the topic discussed.

Syllabus:

- Introduction. The vision of the course and the reason for its contents
- Stacking. The basic operation that determines the first technical possibilities and limitations
- Mortar. The technical prodigy that improves stacking
- Cutting. The optimum of stacking and the consequences for Architecture
- Conforming. The low-cost alternative for optimal stacking
- The box. The third dimension of stacking
- The building. From the factory to the building: the limitations of design

At this point an evaluation exam is proposed

- Industrial Revolution. The change in social metabolism in industrial society
- New materiality. The change in the material model of the industrial system
- New architecture. The five points of the new architecture and its meaning
- The new building. The logic of the industrial building
- Industrialization. What is and what does industrialization mean in Architecture

At this point there is a second evaluation exam

- Conclusion. Where the topics covered are finally linked to that of Environmental Physics and the technology subjects of the 3rd and 4th QM

Specific objectives:

- Acquire a view of architectures from the possibilities and restrictions generated by their construction.
- Understand the restrictions that operate from the technique in designing architecture: technique as limitations in operating and, consequently, in the conformation of architecture
- Understand the framework that determines the techniques used in architecture
- Understand the role of materials and construction techniques in the environmental impact of Architecture
- Introduce into the discourse and in a pertinent way knowledge about materials as well as relevant physical phenomena and the magnitudes that intervene in them

Full-or-part-time: 66h

Theory classes: 33h

Practical classes: 33h

GRADING SYSTEM

Theory 50%

practice 35%

Participation in the debates 15%

EXAMINATION RULES.

2 face-to-face theoretical exams in class 25% each.

In the case of a suspended exam, the exam grade will be weighted at 40% in short stories and 25% in the final grade.

11 practices

11 debates