

Course guide

210343 - CAEI - Building Architecture with Industrialized Structure

Last modified: 30/06/2025

Unit in charge: Barcelona School of Architecture
Teaching unit: 753 - TA - Department of Architectural Technology.
Degree: DEGREE IN ARCHITECTURE STUDIES (Syllabus 2014). (Optional subject).
Academic year: 2025 **ECTS Credits:** 3.0 **Languages:** Catalan, Spanish

LECTURER

Coordinating lecturer:

Others: Segon quadrimestre:
LAIA MARÍN SELLARÉS - 2SM
PAULA MARTÍN GOÑI - 2SM
ORIOL PONS VALLADARES - 2SM

TEACHING METHODOLOGY

LEARNING OBJECTIVES OF THE SUBJECT

Go to catalan or spanish version.

STUDY LOAD

Type	Hours	Percentage
Hours large group	30,0	40.00
Self study	45,0	60.00

Total learning time: 75 h

CONTENTS

Building architecture with industrialized structures

Description:

The materialization of architecture tends towards industrialized, prefabricated, automated construction solutions. These allow to minimize wet in situ works and replace them with emerging technologies that obtain greater precision and control, reduce associated emissions and waste generation, decrease occupational risks and deviations from cost and deadlines. This industrialization must be kept in mind from the beginning of the project, when it is necessary to define the structure, both the material - steel, concrete, wood...; and the structural typology - frames, portals, modules...

Full-or-part-time: 45h

Theory classes: 20h

Practical classes: 10h

Self study : 15h



GRADING SYSTEM

BIBLIOGRAPHY

Basic:

- Código Estructural. Ministerio de Fomento,
- Documento básico SE-M : seguridad estructural, madera. Madrid: Ministerio de Fomento,

Complementary:

- Klanten, Robert. Prefab and modular : prefabricated houses and modular architecture. Berlin: Gestalten, 2024. ISBN 9783967041248.
- Wallance, David. The future of modular architecture. New york: Routledge Taylor & Francis Group, 2021. ISBN 9780367467227.