



Course guide

290721 - ARQPARA - Parametric Architecture

Last modified: 19/07/2023

Unit in charge: Vallès School of Architecture
Teaching unit: 752 - RA - Departamento de Representación Arquitectónica.
Degree: MASTER'S DEGREE IN ARCHITECTURE (Syllabus 2015). (Optional subject).
Academic year: 2023 **ECTS Credits:** 5.0 **Languages:** Catalan, Spanish

LECTURER

Coordinating lecturer: Crespo Cabillo, Isabel
Others: Bertomeu Farnós, Gerard
Serra Ureta, Marc
Roca Musach, Marc

TEACHING METHODOLOGY

The subject is semi-intensive:
- First part of short exercises done in the classroom, on 7 alternate Mondays from 4:00 pm to 7:00 pm starting on September 25th.
- Second intensive part of 4 hours a day in the week of January 22nd to 26th.

LEARNING OBJECTIVES OF THE SUBJECT

After doing this subject, the student must be able to know which aspects of his design are susceptible to improvement or to be controlled with these parametric tools to achieve a more efficient, more economical design or more adjusted to the requirements defined by him same

CONTENTS

Parametric architecture

Description:

Free form modeling geometry.
Parametric design based on series (stairs, roofs,...)
Generative design from tree series (lattices, groupings of modules,...)
Modeling of natural and modified terrains and 2D and 3D printing.
Formal, water and climate analysis of the existing or future territory.
Management of information in databases and its readability in maps.

Full-or-part-time: 45h
Laboratory classes: 45h

GRADING SYSTEM

Each exercise will be evaluated in the 7 sessions from September to December and the exercise developed in the intensive week of January. The evaluation of the course will be cumulative and will take into account the progression.