

Course guide

290641 - INTERVEPA1 - Intervention in the Building Stock

Last modified: 05/07/2024

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:** 4.0 **Languages:** Catalan, Spanish, English

LECTURER

Coordinating lecturer: Gonzalez Solanes, Manuel
Others: Primer quadrimestre:
MARIA DE MONTSERRAT CUCURELLA JORBA - 1
MANUEL GONZALEZ SOLANES - 1

PRIOR SKILLS

Not necessary

REQUIREMENTS

Without prior requirements

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:

ET3G. An aptitude for conserving building structures, foundations and civil works.
ET4G. An aptitude for conserving finished works.
ET10G. The ability to conserve rough building work.
ET12G. The ability to conserve installations.

Generical:

CE10. A capacity for design that satisfies the requirements of the users of a building and respects the limits imposed by budget factors and building regulations.
CE1. An aptitude for creating architectural projects that meet both aesthetic and technical demands.

TEACHING METHODOLOGY

Theoretical classes, guided tours related to the course content and course practices.

LEARNING OBJECTIVES OF THE SUBJECT

Make known, both the techniques and the necessary tools to deal with the problems arising from the existence of pathologies in all types of existing buildings. To highlight the role of rehabilitation in the current era, basically as an essential tool to face the future challenges of the construction sector.

STUDY LOAD

Type	Hours	Percentage
Self study	56,0	56.00
Hours large group	22,0	22.00
Hours medium group	22,0	22.00

Total learning time: 100 h

CONTENTS

INTERVENTION IN THE BUILDING PARK

Description:

Get the knowledge and tools necessary to deal with all kinds of tasks related to rehabilitation and intervention in the building stock.

Specific objectives:

0. Philosophy of rehabilitation
 1. Diagnosis and analysis of pre-stocks: Tests and trials.
 3. Interventions below ground: foundations.
 4. Interventions, pathologies and technological solutions to intervene in all types of bending elements: slabs, slabs and others.
 5. Interventions in wall and portico systems.
 6. Rehabilitation and consolidation of heritage and other contemporary façades.
 7. Fifth facade: roofs
 8. Energy rehabilitation.
 9. Interior finishes: Solutions, specific techniques and application in the field of rehabilitation.
- Course practice.

Full-or-part-time: 44h

Theory classes: 22h

Practical classes: 22h

GRADING SYSTEM

The evaluation is based on a practice that intends to collect all the pedagogical areas of the course. The percentages are indicated at the beginning of the course.

BIBLIOGRAPHY

Basic:

- Espasandín López, Jesús; García Casas, José Ignacio. Manual para el diseño, cálculo y construcción de apeos y refuerzos alternativos. Madrid: Munilla-Lería, DL 2002. ISBN 84-89150-53-2.
- Bellmunt i Ribas, Rafael; Paricio Casademunt, Antoni; Vilà Martínez, Antonia. Reconeixement, diagnosi i intervenció a les façanes. Barcelona: Institut de Tecnologia de la Construcció de Catalunya, DL 2000. ISBN 84-7853-403-2.
- Trujillo, Lara; Caula, Lluís. Manual de diagnosis e intervenció en cubiertas planas. Barcelona: Col·legi d'Aparelladors i Arquitectes Tècnics de Barcelona, 2002. ISBN 8487104509.
- Bellmunt i Ribas, Rafael. Manual de diagnosis e intervenció en estructures de hormigón armado. Barcelona: Col·legi d'Aparelladors i Arquitectes Tècnics de Barcelona, 2000. ISBN 8487104436.
- Muñoz Hidalgo, Manuel; Sierra Calle, María. Manual de patología de la edificación : detección, diagnosis y soluciones. Sevilla: Manuel Muñoz Hidalgo, 2012. ISBN 9788461562169.
- Fiol Femenia, Francisco. Manual de patología y rehabilitación de edificios. Burgos: Universidad de Burgos, cop. 2014. ISBN 9788492681785.