

Course guide

310627 - 310627 - Environmental Engineering

Last modified: 21/02/2025

Unit in charge: Barcelona School of Building Construction
Teaching unit: 732 - OE - Department of Management.

Degree: BACHELOR'S DEGREE IN GEOINFORMATION AND GEOMATICS ENGINEERING (Syllabus 2016).
(Compulsory subject).

Academic year: 2024 **ECTS Credits:** 4.5 **Languages:** Catalan, Spanish

LECTURER

Coordinating lecturer: Juan Antonio Torrents Arevalo

Others: Juan Antonio Torrents Arevalo

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:

CT3. (ENG) Comprendre i analitzar els problemes de implantació en el terreny de les infraestructures, construccions i edificacions projectades des de l'enginyeria en topografia, analitzar els mateixos i procedir a la seva implantació.

Transversal:

05 TEQ N1. TEAMWORK - Level 1. Working in a team and making positive contributions once the aims and group and individual responsibilities have been defined. Reaching joint decisions on the strategy to be followed.

07 AAT N2. SELF-DIRECTED LEARNING - Level 2: Completing set tasks based on the guidelines set by lecturers. Devoting the time needed to complete each task, including personal contributions and expanding on the recommended information sources.

TEACHING METHODOLOGY

1. Theoretical classes
2. Work realization
3. Exam

LEARNING OBJECTIVES OF THE SUBJECT

The main objective of the course is that students have a greater capacity to analyze, plan and solve problems confronting it in real life.

Also, as the course finishes, know the origin, in a social sense, of the word and all that revolves the environment.

STUDY LOAD

Type	Hours	Percentage
Hours large group	18,0	16.00
Hours medium group	27,0	24.00
Self study	67,5	60.00

Total learning time: 112.5 h

CONTENTS

Environmental history

Description:

This section will discuss the origin of the word "environment" as well as all the history that surrounds it, from the Romans until today. We will also discuss the "DEAL" that takes place today and how it manipulates people to create a new economy based on this concept.

Full-or-part-time: 6h 30m

Laboratory classes: 6h 30m

Current legislation - UNE - ISO- EMAS

Description:

Once learned the origin of the environment, we can focus on how it comes: " Environmental Management and Assessment ."

Explain the history of international and local organizations that implemented the system and Environmental Assessment Management worldwide .

Once we know the source , we will focus on how these organizations work, what is the process of creating these standards , how their implementation in society , it etc ...

We'll discuss the differences between the various organizations.

Full-or-part-time: 6h 30m

Laboratory classes: 6h 30m

ACTIVITIES

Coursework: Environmental Impact

Description:

Be conducted in groups, environmental impact work, properly resized.

Delivery:

The delivery of the work will be the last day of class. There will be an oral presentation by the groups.

Related competencies :

CT3. (ENG) Comprendre i analitzar els problemes de implantació en el terreny de les infraestructures, construccions i edificacions projectades des de l'enginyeria en topografia, analitzar els mateixos i procedir a la seva implantació.

05 TEQ N1. TEAMWORK - Level 1. Working in a team and making positive contributions once the aims and group and individual responsibilities have been defined. Reaching joint decisions on the strategy to be followed.

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Full-or-part-time: 26h

Theory classes: 11h 40m

Laboratory classes: 11h 40m

Self study: 2h 40m



GRADING SYSTEM

Continuous work throughout the course (E.I.A.)
The system will be the following

Partial Exams (EP): 30%
Attendance (CS): 20%
Final project (BP): 50%

Final Score = $(0.30 \times EP) + (0.20 \times CS) + (0.60 \times BP)$

EXAMINATION RULES.

Handing in the work at the end of the term is mandatory, as well as passing it with at least a 5

BIBLIOGRAPHY

Basic:

- Muñoz Camacho, Eugenio, Contreras López, Alfonso Molero Menses, Mariano. Ingeniería del medio ambiente . 2018. Librería UNED. , 2018. ISBN 9788436273816.
- Gómez Orea, Domingo; Gómez Villarino, M^a Teresa. Evaluación de impacto ambiental . 3a ed. rev. y amp. Madrid : Mundi-Prensa, cop. 2013. ISBN 9788484766438.