

### COURSE NAME

Name: **CONSTRUCTION TECHNOLOGY**

Code: 101147

Curriculum: **DEGREE IN CIVIL ENGINEERING**

Year: 4

Name of the module to which it belongs: SPECIFIC CIVIL CONSTRUCTION TECHNOLOGY MODULE

Subject: **CONSTRUCTION TECHNOLOGY**

Nature: OBRIGATORY Duration: FIRST SEMESTER

ECTS Credits: 6

Classroom hours: 60

Face-to-face classroom percentage: 40%

Non-contact hours: 90

### FACULTY DETAILS

Name: BRAVO MÁRQUEZ, MANUEL JOSÉ (Coordinator)

Department: RURAL ENGINEERING

Area: CONSTRUCTION ENGINEERING

Location of the office: EPS Belmez

E-Mail: ir1brman@uco.es

Phone number: 635546600

### SKILLS

CB1	Have and understand specific knowledge of the field of study of mining engineering.
CB2	Have and understand current and cutting-edge knowledge of the field of mining engineering.
CB6	Convey information, ideas, problems and solutions to both specialist and non-specialist audiences.
CU2	Know and refine the user level of ITs.
CU3	Promote active job search habits and entrepreneurship
CECC6	Ability to apply the construction procedures, the construction machinery and the construction planning techniques.

### OBJECTIVES

Understand the general aspects of construction procedures.  
Land treatment and foundations. Roads. Laying of concrete and bituminous mixes  
Organisation and management of works: background to a work.  
Forms of tendering. Managing and optimising resources.  
Equipment costs and production. Quality management in construction.  
Learn how to draw up quality control plans and technical offers for road tenders

### CONTENTS:

#### 1. Theoretical contents

TEACHING UNIT 1: THE CIVIL ENGINEER AND CONSTRUCTION.

TEACHING UNIT 2: MANAGING CIVIL WORKS

TEACHING UNIT 3: SOIL AND ROCK MOVEMENTS.

TEACHING UNIT 4: ROAD SURFACES AND SIGNPOSTING.

TEACHING UNIT 5: CONCRETE STRUCTURES.

TEACHING UNIT 6: QUALITY CONTROL IN A CONSTRUCTION SITE AND CONSERVATION AND OPERATION OF THE WORKS.

TEACHING UNIT 7: TECHNICAL OFFER

### 2. Practical contents.

- 1- Developing a technical and financial offer for a tender, for the award of a work from the authorities.
- 2- Interpreting the main tests for controlling the quality of the work
- 3- Drawing up a quality control plan
- 4- Practicals on how to set up joint ventures and finance a civil engineering project.
- 5- Practicals on the functions of the civil engineer in a project