

COURSE NAME

Name: **HYDRAULICS WORKS**

Code: 101150

Curriculum: **DEGREE IN CIVIL ENGINEERING**

Year: 3

Subject: DESIGN AND MANAGEMENT OF HYDRAULIC AND HYDROELECTRIC SYSTEMS

Nature: OBRIGATORY Duration: SECOND SEMESTER

ECTS Credits: 6

Classroom hours: 60

Face-to-face classroom percentage: 40%

Non-contact hours: 90

FACULTY DETAILS

Name: CASA REINA, FERNANDO DE LA (Coordinator)

Department: AGRONOMY

Area: HYDRAULIC ENGINEERING

Location of the office: EPS Belmez

E-Mail: fcasa@uco.es

Phone number: 957213041

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.
- CB3 Be able to apply the knowledge acquired in professional contexts and to elaborate and defend arguments in the field of knowledge of mining engineering.
- CB7 Possess the learning skills necessary to undertake studies with a high degree of autonomy.
- CU2 Know and refine the user level of ITs.
- CEH1 Knowledge of and ability to design and dimension hydraulic works and facilities, energy systems, hydroelectric facilities, and the planning and management of surface and groundwater hydraulic resources.

OBJECTIVES

Knowledge and ability to design and dimension canals and associated works; channelling and flood defence works; tanks and water storage ponds, as well as basic knowledge of dams and reservoirs from a hydraulic perspective.

CONTENTS:

1. Theoretical contents

1. CANALS
2. RIVER ENGINEERING
3. WATER STORAGE PONDS AND TANKS
4. DAMS AND RESERVOIRS

2. Practical contents.

Problems and case studies related to the theoretical content