

### COURSE NAME

Name: **MINING WORKS I**

Code: 101201

Curriculum: **DEGREE IN ENERGY ENGINEERING AND MINERAL RESOURCES**

Year: 3

Name of the module to which it belongs: SPECIFIC TO MINING

Subject: **MINING WORKS**

Nature: OBRIGATORY Duration: FIRST SEMESTER

ECTS Credits: 6

Classroom hours: 60

Face-to-face classroom percentage: 40%

Non-contact hours: 90 Online

### FACULTY DETAILS

Name: RIVERA RODRÍGUEZ, RAFAEL (Coordinador)

Department: MECHANICS

Area: MINING OPERATIONS

Location of the office: Main building (Second floor)

E-Mail: rriverar@uco.es

Phone number: 674318510

### SKILLS

CB1	Have and understand specific knowledge of the field of study 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.
CB4	Solve problems within the study area of Mining Engineering.
CU2	Know and refine the user level of ITs.
CEEM1	Extraction of raw materials of mineral origin.
CEEM2	Design, planning and management of mining operations.

### OBJECTIVES

The student should master the terminology and basic concepts in the framework of mining. Acquire basic knowledge about the operation of open-cast mines, earthworks, production, the influence of height and rolling on the machines, yields, machinery, mining methods, services and environmental impact.

Acquire the ability to solve practical cases related to different mining problems.

Acquire basic training in mining safety.

### CONTENTS:

#### 1. Theoretical contents

- Topic 1.- Mining basics
- Topic 2.- Mining rights and legal regulations
- Topic 3.- Mining engineering and planning
- Topic 4.- Open-cast mining I (Basic concepts and parameters)
- Topic 5.- Open-cast mining II (Mining methods and operational systems)
- Topic 6.- Open-cast mining III (Mining machinery)
- Topic 7.- Open-cast mining IV (Ornamental rocks and quarries)
- Topic 8.- Open-cast mining V (Spoil tips)

### 2. Practical contents.

CARRYING OUT VISITS.  
SOLVING PRACTICAL PROBLEMS IN THE STUDY OF OPEN-CAST.  
MINING AND EARTHWORKS.