

### COURSE NAME

Name: **MINING WORKS II**

Code: 101202

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

Year: 4

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

Subject: MINING WORKS II

Nature: OBRIGATORY Duration: FIRST SEMESTER

ECTS Credits: 4.5

Classroom hours: 45

Face-to-face classroom percentage: 40%

Non-contact hours: 67.5

### 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.
CEEM1	Extraction of raw materials of mineral origin.
CEEM2	Design, planning and management of mining operations.
CEEM13	Electrification in mining industries.

### OBJECTIVES

The student should master the terminology and basic concepts in the framework of mining. Acquire basic knowledge of underground mining operations, machinery and services. 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. Characteristics of today's mining industry.

Topic 2.- Mining engineering and planning.

Topic 3.- Underground mining. I. VENTILATION.

Topic 4.- Underground mining. II. SUPPORT.

Topic 5.- Underground mining III. ROCK REMOVAL.

Topic 6.- Underground mining IV. LOAD.

Topic 7.- Underground mining V. TRANSPORT.

Topic 8.- Underground mining. VI (Surface). (Mining machinery, winches, belts, cages, etc.)

Topic 9.- Underground mining VI. (Mining methods and operation systems)

### 2. Practical contents.

- Carrying out visits.
- Practical problem solving as part of the study of underground mining.