

COURSE NAME

Name: **MATHEMATICS III**

Code: 101122

Curriculum: **DEGREE IN CIVIL ENGINEERING**

Year: 2

Subject: MATHEMATICS III

Nature: Basic Duration: FIRST SEMESTER

ECTS Credits: 6

Classroom hours: 60

Face-to-face classroom percentage: 40%

Non-contact hours: 90

FACULTY DETAILS

Name: ROSALES TRISTANCHO, ABEL (Coordinator)

Department: MATHEMATICS

Area: APPLIED MATHEMATICS

Location of the office: EPS BÉLMEZ

E-Mail: arosales@uco.es

Phone number: -

Name: JOAQUÍN QUINTANA MURILLO

Department: MATHEMATICS

Area: APPLIED MATHEMATICS

Location of the office: EPS BELMEZ

E-Mail: jquintana@uco.es

Phone number: -

SKILLS

CB4 Solve problems within the study area of Civil Engineering.

CEB1 Students will be able to solve mathematical problems that may arise in engineering

OBJECTIVES

The goal is for students be able to recognize and solve the different types of equations and systems of differential equations and know what they are used for. An additional goal is for students to know how to calculate the sum of numerical series, as well as use Fourier and Taylor series for these purposes. Finally, the student will be able to solve probability calculation problems and recognize different probabilistic models.

CONTENTS:

1. Theoretical contents

Topic 1. Differential Equations

Topic 2. Numerical and Function Series.

Topic 3. Probability.

2. Practical contents.

Problem solving