

## Course guide

# 205054 - 205054 - Implementation and Testing of Metaheuristics for Optimisation Problems

Last modified: 22/04/2021

**Unit in charge:** Terrassa School of Industrial, Aerospace and Audiovisual Engineering  
**Teaching unit:** 732 - OE - Department of Management.

**Degree:** Academic year: 2021 ECTS Credits: 3.0  
**Languages:** English

### LECTURER

**Coordinating lecturer:** Jose M Sallan

**Others:**

### PRIOR SKILLS

It is strongly recommended to study the introduction to metaheuristics for optimization problems course to take this course.

### TEACHING METHODOLOGY

Classes in computer room are proposed to teach students how to code metaheuristics. R language will be used to teach codes, but students can use the programming language of their choice.

### LEARNING OBJECTIVES OF THE SUBJECT

### STUDY LOAD

Type	Hours	Percentage
Hours large group	27,0	36.00
Self study	48,0	64.00

**Total learning time:** 75 h

### CONTENTS

#### Module 1: Metaheuristics for optimization problems: a review

**Description:**

Metaheuristics for optimization problems: a review

**Full-or-part-time:** 15h

Theory classes: 6h

Self study : 9h



### Module 2: Implementing algorithms: coding and testing

**Description:**

Implementing algorithms: coding and testing

**Full-or-part-time:** 45h

Theory classes: 15h

Self study : 30h

### Module 3: Comparing metaheuristics

**Description:**

Comparing metaheuristics

**Full-or-part-time:** 15h

Theory classes: 6h

Self study : 9h

## GRADING SYSTEM

The grade is obtained through three assignments, weighting 20% each, and with a final project with a weight of 40%.