



## Course guide

### 240409 - 240PE012 - Formula Student 1

Last modified: 13/09/2023

**Unit in charge:** Barcelona School of Industrial Engineering  
**Teaching unit:** 723 - CS - Department of Computer Science.  
729 - MF - Department of Fluid Mechanics.

**Degree:** BACHELOR'S DEGREE IN INDUSTRIAL TECHNOLOGY ENGINEERING (Syllabus 2010). (Optional subject).

**Academic year:** 2023    **ECTS Credits:** 6.0    **Languages:** Catalan, Spanish

#### LECTURER

**Coordinating lecturer:** Arnau Dòria

**Others:** Lluís Roger, Daniel Montesinos, Vicenç Puig, Vicenç Parisi

#### TEACHING METHODOLOGY

#### LEARNING OBJECTIVES OF THE SUBJECT

General objective: To acquire and put into practice the necessary knowledge for the design and construction of a Formula Student-type vehicle.

Specific objectives:

To learn to plan, organize and develop the tasks of a project.

To acquire group work skills, responsibilities and leadership.

To develop effective oral and written communication skills.

To acquire knowledge related to automotive and mobility.

To contribute to reducing the gender gap in engineering, in general, and the automotive sector, in particular.

To improve students' motivation and school success through participation in centre projects.

To consolidate more comprehensive training in engineering, with involvement in multidisciplinary projects.

#### STUDY LOAD

Type	Hours	Percentage
Hours large group	60,0	100.00

**Total learning time:** 60 h

#### CONTENTS

##### Training in automotive engineering

**Description:**

New members will acquire knowledge related to the project section from the sessions with the reference faculty.

**Full-or-part-time:** 30h

Guided activities: 5h

Self study : 25h



### Project planning

**Description:**

The students, with the help of the reference teachers, will raise the team's objectives and the associated tasks.

**Full-or-part-time:** 30h

Guided activities: 5h

Self study : 25h

### Development of tasks

**Description:**

The students, with the help of the reference teaching staff, will develop the assigned tasks, with the corresponding validations to corroborate the proposed designs.

**Full-or-part-time:** 30h

Guided activities: 5h

Self study : 25h

### Assembly of the vehicle

**Description:**

The students, with the help of the reference teachers, will carry out the necessary tasks to have a functional vehicle at the end of the season, and ready to participate in the competitions.

**Full-or-part-time:** 30h

Guided activities: 5h

Self study : 25h

### Preparation and participation in competitions

**Description:**

The students will prepare the vehicle and participate in the competitions that are considered appropriate.

**Full-or-part-time:** 30h

Guided activities: 5h

Self study : 25h

## GRADING SYSTEM

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