

Course guide

240IME31 - 240IME31 - Mechanical Design

Last modified: 16/05/2023

Unit in charge: Barcelona School of Industrial Engineering
Teaching unit: 712 - EM - Department of Mechanical Engineering.

Degree: MASTER'S DEGREE IN INDUSTRIAL ENGINEERING (Syllabus 2014). (Optional subject).

Academic year: 2023 **ECTS Credits:** 4.5 **Languages:** Catalan

LECTURER

Coordinating lecturer: Clos Costa, Daniel

Others: Veciana Fontanet, Joaquin Maria
Domenèch Mestres, Carlos
Fàbregas Massana, Xavier

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:

CEMEI03. Ability for the design and assays in machines.

CEEMEC5. Analyse the dynamic phenomenon and its formulation for its application in the development of all and each one of the planning, design and calculation of mechanical elements stages.

CEEMEC2. Analyse the advanced fluid dynamic processes, the power transmission and advanced manufacturing for its application in industrial facilities regarding to the product and production volume, elements, machines and vehicles.

TEACHING METHODOLOGY

LEARNING OBJECTIVES OF THE SUBJECT

To design machines in its mechanical aspects, integrating acquired knowledge in various subjects (Mechanics, Machine and Mechanism Theory, Machine Technology, Machine Elements Calculation and Engineering Drawing) in synthesis projects, as machine projects.

STUDY LOAD

Type	Hours	Percentage
Hours small group	20,3	18.03
Self study	72,0	63.94
Hours large group	20,3	18.03

Total learning time: 112.6 h



CONTENTS

title english

Description:

content english

Full-or-part-time: 10h

Practical classes: 5h

Laboratory classes: 5h

title english

Description:

content english

Full-or-part-time: 10h

Practical classes: 5h

Laboratory classes: 5h

title english

Description:

content english

Full-or-part-time: 9h

Practical classes: 4h

Laboratory classes: 5h

title english

Description:

content english

Full-or-part-time: 9h

Practical classes: 4h

Laboratory classes: 5h

title english

Description:

content english

Full-or-part-time: 3h

Practical classes: 3h

GRADING SYSTEM
