Course guide
205084 - 205084 - Industrial Fluid Power

Last modified: 19/04/2023

Unit in charge: Terrassa School of Industrial, Aerospace and Audiovisual Engineering
Teaching unit: 729 - MF - Department of Fluid Mechanics.

Degree: MASTER'S DEGREE IN AUTOMATIC SYSTEMS AND INDUSTRIAL ELECTRONICS (Syllabus 2012). (Optional subject).
MASTER'S DEGREE IN INDUSTRIAL ENGINEERING (Syllabus 2013). (Optional subject).
MASTER'S DEGREE IN AERONAUTICAL ENGINEERING (Syllabus 2014). (Optional subject).
MASTER'S DEGREE IN SPACE AND AERONAUTICAL ENGINEERING (Syllabus 2016). (Optional subject).
MASTER'S DEGREE IN RESEARCH IN MECHANICAL ENGINEERING (Syllabus 2021). (Optional subject).

Academic year: 2023 **ECTS Credits:** 3.0 **Languages:** Catalan, Spanish

LECTURER

Coordinating lecturer: SALVADOR AUGUSTO DE LAS HERAS JIMENEZ

Others: Primer quadrimestre:
SALVADOR AUGUSTO DE LAS HERAS JIMENEZ - 1

TEACHING METHODOLOGY

LEARNING OBJECTIVES OF THE SUBJECT

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STUDY LOAD

Type	Hours	Percentage
Self study	48,0	64.00
Hours large group	18,0	24.00
Hours small group	9,0	12.00

Total learning time: 75 h

CONTENTS

title english

Description:
content english

Full-or-part-time: 12h
Theory classes: 3h
Laboratory classes: 1h
Self study : 8h

title english

Description:
content english

Full-or-part-time: 25h
Theory classes: 5h
Laboratory classes: 4h
Self study : 16h

title english

Description:
content english

Full-or-part-time: 25h
Theory classes: 5h
Laboratory classes: 4h
Self study : 16h

title english

Description:
content english

Full-or-part-time: 13h
Theory classes: 5h
Self study : 8h

GRADING SYSTEM

BIBLIOGRAPHY

Basic:

- Heras, Salvador de las. Fluidos, bombas e instalaciones hidráulicas [on line]. 2a ed. Barcelona: Iniciativa Digital Politècnica, 2018 [Consultation: 10/03/2023]. Available on: http://hdl.handle.net/2117/127556. ISBN 9788498807288.
- Watton, J. Fundamentals of fluid power control. Cambridge [etc.]: Cambridge University Press, 2009. ISBN 9780521762502.
- Heras, Salvador de las; Codina Macià, Esteve. Modelización de sistemas fluidos mediante bondgraph. Terrassa: Los autores, cop. 1997. ISBN 8460570355.
- Heras, Salvador de las. Instalaciones neumáticas. Barcelona: Editorial UOC, 2003. ISBN 9788497880022.
- Karnopp, Dean C. System dynamics : a unified approach. 2nd ed. New York [etc.]: John Wiley & Sons, 1990. ISBN 0471621714.