



## Course guides

### 205084 - 205084 - Industrial Fluid Power

Last modified: 29/05/2020

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

**Degree:** MASTER'S DEGREE IN INDUSTRIAL ENGINEERING (Syllabus 2013). (Optional subject).  
MASTER'S DEGREE IN AERONAUTICAL ENGINEERING (Syllabus 2014). (Optional subject).  
MASTER'S DEGREE IN AUTOMATIC SYSTEMS AND INDUSTRIAL ELECTRONICS (Syllabus 2012). (Optional subject).

**Academic year:** 2020    **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 small group	9,0	12.00
Hours large group	18,0	24.00

**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

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## BIBLIOGRAPHY

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**Basic:**

- Heras, Salvador de las. Fluidos, bombas e instalaciones hidráulicas [on line]. Barcelona: Iniciativa Digital Politècnica, 2011 [Consultation: 23/06/2020]. Available on: <http://hdl.handle.net/2099.3/36653>. ISBN 9788476538012.
- 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.