

## Course guides

# 330456 - EEQ2 - Experimentation in Chemical Engineering II

Last modified: 05/05/2020

**Unit in charge:** Manresa School of Engineering  
**Teaching unit:** 750 - EMIT - Department of Mining, Industrial and ICT Engineering.

**Degree:** BACHELOR'S DEGREE IN CHEMICAL ENGINEERING (Syllabus 2016). (Optional subject).

**Academic year:** 2020    **ECTS Credits:** 6.0    **Languages:** Catalan

### LECTURER

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**Coordinating lecturer:** Gamisans Noguera, Javier

**Others:** Torra Bitlloch, Immaculada  
Bonsfills Pedros, Anna  
Dorado Castaño, Antonio David

### DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

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**Specific:**

1. (ENG) Plantejar i comprovar hipòtesis. Tractar i interpretar correctament dades experimentals. Desenvolupar la capacitat d'anàlisi i síntesi.

**Transversal:**

2. EFFICIENT ORAL AND WRITTEN COMMUNICATION - Level 3. Communicating clearly and efficiently in oral and written presentations. Adapting to audiences and communication aims by using suitable strategies and means.
3. TEAMWORK - Level 3. Managing and making work groups effective. Resolving possible conflicts, valuing working with others, assessing the effectiveness of a team and presenting the final results.
4. SELF-DIRECTED LEARNING - Level 3. Applying the knowledge gained in completing a task according to its relevance and importance. Deciding how to carry out a task, the amount of time to be devoted to it and the most suitable information sources.

### TEACHING METHODOLOGY

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### LEARNING OBJECTIVES OF THE SUBJECT

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### STUDY LOAD

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Type	Hours	Percentage
Self study	90,0	60.00
Hours small group	60,0	40.00

**Total learning time:** 150 h



## CONTENTS

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### title english

**Description:**

content english

**Full-or-part-time:** 25h

Laboratory classes: 10h

Self study : 15h

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## ACTIVITIES

**name english**

**Full-or-part-time:** 20h

Laboratory classes: 6h

Self study: 14h

**name english**

**Full-or-part-time:** 66h

Laboratory classes: 48h

Self study: 18h

**name english**

**Full-or-part-time:** 38h

Self study: 38h

**name english**

**Full-or-part-time:** 14h

Laboratory classes: 4h

Self study: 10h

**name english**

**Full-or-part-time:** 12h

Laboratory classes: 2h

Self study: 10h

## GRADING SYSTEM



## BIBLIOGRAPHY

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### Basic:

- Gamisans, X.; Torra, I. Experimentació en enginyeria química II: guions de pràctiques. Manresa: EPSEM, 2017.

### Complementary:

- Ingham, John. Chemical engineering dynamics: an introduction to modelling and computer simulation. 2nd compl. rev. ed. Weinheim: Wiley-VCH, 2000. ISBN 3527297766.

- McCabe, Warren L.; Smith, Julian C.; Harriott, Peter. Operaciones unitarias en ingeniería química. 7ª ed. Madrid: McGraw-Hill, 2007. ISBN 9701061748.

- Treybal, Robert Ewald. Operaciones de transferencia de masa. 2ª ed. México: McGraw-Hill, 1988. ISBN 9686046348.

- Perry, Robert H.; Green, Don W.; Maloney, James O. Manual del ingeniero químico [on line]. 4ª ed. Madrid: McGraw-Hill, 2001 [Consultation: 31/07/2020]. Available on: [http://www.ingebook.com/ib/NPcd/IB\\_BooksVis?cod\\_primaria=1000187&codigo\\_libro=6572](http://www.ingebook.com/ib/NPcd/IB_BooksVis?cod_primaria=1000187&codigo_libro=6572). ISBN 8448130081.

- Perry, Robert H.; Green, Don W. Perry's chemical engineers' handbook [on line]. 8th ed. New York: McGraw-Hill, 2008 [Consultation: 19/06/2019]. Available on: [https://discovery.upc.edu/iii/encore/record/C\\_\\_Rb1324713?lang=cat](https://discovery.upc.edu/iii/encore/record/C__Rb1324713?lang=cat). ISBN 9780071422949.

- Ollero de Castro, Pedro; Fernández Camacho, Eduardo. Control e instrumentación de procesos químicos. Madrid: Síntesis, 1997. ISBN 8477385173.

- Díaz Fernández, Mario. Ingeniería de bioprocesos. Madrid: Paraninfo, 2012. ISBN 9788428381239.

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