

## [MHB201] METHODOLOGICAL GUIDELINES FOR PREPARING A DOCTORAL THESIS

### GENERAL INFORMATION

<b>Studies</b>	UNIVERSITY MASTER IN INDUSTRIAL ENGINEERING	<b>Subject</b>	?
<b>Semester</b>	1	<b>Course</b>	2
<b>Character</b>	OPTIONAL	<b>Mention / Field of specialisation</b>	???
<b>Plan</b>	2022	<b>Modality</b>	Face-to-face
<b>Credits</b>	3	<b>Hours/week</b>	0.67
		<b>Language</b>	CASTELLANO
		<b>Total hours</b>	12 class hours + 63 non-class hours = <b>75 total hours</b>

### PROFESSORS

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### REQUIRED PREVIOUS KNOWLEDGE

Subjects	Knowledge
(No specific previous subjects required)	(No previous knowledge required)

### LEARNING RESULTS

LEARNING RESULTS	KC	SK	AB	ECTS
<b>MHRA19</b> - To demonstrate capacity for the management of technological Research, Development and Innovation		x		1,5
<b>MHR125</b> - To possess and understand knowledge that provides a basis or opportunity to be original in the development and/or application of ideas, often in a research context		x		1,5
			<b>Total:</b>	<b>3</b>

KC: Knowledge or Content / SK: Skills / AB: Abilities

### ENAAE LEARNING RESULTS

ENAAE LEARNING RESULTS	ECTS
<b>ENA126</b> - Knowledge and comprehension: Critical knowledge of the broad multidisciplinary context of engineering and the interrelations existing between the knowledge of the different fields.	0,38
<b>ENA130</b> - Analysis in engineering: Ability to identify, formulate and solve engineering problems in emerging areas of their speciality.	0,37
<b>ENA132</b> - Engineering projects: Ability to project while applying the knowledge and cutting-edge understanding of their engineering speciality.	0,37
<b>ENA134</b> - Research and innovation: Ability to carry out bibliographic searches and consult and use databases and other information sources with discretion, in order to carry out simulations with the aim of conducting research on complex topics of their speciality.	0,37
<b>ENA136</b> - Research and innovation: High-level capacity and ability to project and carry out experimental investigations, interpret data with criteria, and draw conclusions.	0,37
<b>ENA137</b> - Research and innovation: Ability to investigate the application of the most advanced technologies in their speciality.	0,37
<b>ENA145</b> - Preparation of judgements: Ability to manage complex technical or professional activities or projects that require new approach approaches, assuming responsibility for the decisions made.	0,37
<b>ENA148</b> - Continued training: Ability to undertake their own continued training independently.	0,37
	<b>Total: 3</b>

### SECONDARY LEARNING RESULTS

#### **RAH203** [!] *Demostrar capacidad para la gestión de la Investigación, Desarrollo e Innovación tecnológica*

#### LEARNING ACTIVITIES

LEARNING ACTIVITIES	CH	NCH	TH
Development and writing of records, reports, presentations, audiovisual material, etc. on projects/work experience/challenges/case studies/experimental investigations carried out individually and/or in teams		31,5 h.	31,5 h.
Presentation by the teacher in the classroom, in participatory classes, of concepts and procedures associated with the subjects	6 h.		6 h.

#### EVALUATION SYSTEM

Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems	<b>W</b> 100%
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#### MAKE-UP MECHANISMS

Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems
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**CH - Class hours:** 6 h.  
**NCH - Non-class hours:** 31,5 h.  
**TH - Total hours:** 37,5 h.

**RAH204** [!] *Poseer y comprender conocimientos que aporten una base u oportunidad de ser originales en el desarrollo y/o aplicación de ideas, a menudo en un contexto de investigación*

**LEARNING ACTIVITIES**

	<i>CH</i>	<i>NCH</i>	<i>TH</i>
Development and writing of records, reports, presentations, audiovisual material, etc. on projects/work experience/challenges/case studies/experimental investigations carried out individually and/or in teams		31,5 h.	31,5 h.
Presentation by the teacher in the classroom, in participatory classes, of concepts and procedures associated with the subjects	6 h.		6 h.

**EVALUATION SYSTEM**

Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems

*W*

100%

**MAKE-UP MECHANISMS**

Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems

**CH - Class hours:** 6 h.  
**NCH - Non-class hours:** 31,5 h.  
**TH - Total hours:** 37,5 h.

**CONTENTS**

**LEARNING RESOURCES AND BIBLIOGRAPHY**

**Learning resources**

Class presentations  
 Presentations by external Lecturers

**Bibliography**

OCDE (2015), Frascati Manual 2015: Guidelines for Collecting and Reporting Data on Research and Experimental Development, The Measurement of Scientific, Technological and Innovation Activities. Publicado por acuerdo con la OCDE, París (Francia). DOI: <http://dx.doi.org/10.1787/9789264239012-en>

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