

[MSG003] Methodological guidelines for preparing a doctoral thesis

GENERAL INFORMATION

Studies	MASTER DEGREE IN SMART ENERGY SYSTEMS	Subject	Methodological Research Foundations
Semester	1	Course	2
Character	OPTIONAL	Mention / Field of specialisation	???
Plan	2022	Modality	Face-to-face
Credits	3	Hours/week	0
		Language	CASTELLANO
		Total hours	12 class hours + 63 non-class hours = 75 total hours

PROFESSORS

(No professor appointed)

REQUIRED PREVIOUS KNOWLEDGE

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

LEARNING RESULTS

LEARNING RESULTS	KC	SK	AB	ECTS
MSRA19 - To demonstrate capacity for the management of technological Research, Development and Innovation		x		1,5
MSR125 - To have and understand knowledge which provides a base or opportunity to be original in the development and/or application of ideas, often in an investigation context	x	x		1,5
Total:				3

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

SECONDARY LEARNING RESULTS

RSM003 [!] *Demostrar capacidad para la gestión de la Investigación, Desarrollo e Innovación tecnológica*

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

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

RSM004 [!] *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

	CH	NCH	TH
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CONTENTS

LEARNING RESOURCES AND BIBLIOGRAPHY

Learning resources	Bibliography
Class presentations Presentations by external Lecturers	<p>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</p> <p>Leyton Castillo, A. (2012). Clases y tipos de Investigación Científica. https://investigacionestodo.wordpress.com/2012/05/19/clases-y-tipos-de-investigacion-cientifica/.</p> <p>Cegarra Sanchez, J.(2004). Metodología de la investigación científica y tecnológica. Madrid. Diaz de Santos.</p> <p>Zarraga, O (2016). Brake-clutch squeal prediction and suppression (tesis doctoral). Mondragon Unibertsitatea, Mondragón.</p> <p>Hernandez Sampieri, R. (2017). Fundamentos de investigación. Méjico. Mc Graw Hill.</p> <p>Nallaperumal, K.(2013). Engineering Research Methodology A Computer Science and Engineering and Information and Communication Technologies Perspective. Manonmaniam Sundaranar University. Tirunelveli, Tamil Nadu, India. https://www.researchgate.net/publication/259183120_Engineering_Research_Methodology_A_Computer_Science_and_Engineering_and_Information_and_Communication_Technologies_Perspective</p> <p>Kumar, R. (2011). Research methodology &#8211; A step-by-step guide for beginners. New Delhi. SAGE Publications.</p> <p>Sáez de Buruaga, M. (2018). A Novel Procedure Based on 2D Finite Element Modeling and Orthogonal Cutting Tests to Predict Machinability and Tool Wear Evolution Considering the Microstructure Effect of Lamellar Ferrite-Pearlite Steels (tesis doctoral).MU-MGEP.</p> <p>Bunge, M. (2001). La ciencia, su método y su filosofía. Editorial Sudamericana, Buenos Aires.</p>