

[MHJ303] PRODUCTIVE OPERATION

GENERAL INFORMATION

Studies	UNIVERSITY MASTER IN INDUSTRIAL ENGINEERING	Subject	?
Semester	2	Course	1
Character	COMPULSORY	Mention / Field of specialisation	
Plan	2025	Modality	Face-to-face
Credits	3	Hours/week	1.67
		Language	CASTELLANO
		Total hours	30 class hours + 45 non-class hours = 75 total hours

2030 AGENDA GOALS



PROFESSORS

APAOLAZA PEREZ DE EULATE, UNAI
ISASTI LAZKANO, ARGIDER
GARMENDIA BERNABE, EUKEN

REQUIRED PREVIOUS KNOWLEDGE

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

LEARNING RESULTS

LEARNING RESULTS	KC	SK	AB	ECTS
MH2513 - Demonstrate knowledge of management information systems, industrial organization, production systems and logistics and quality management systems.		x		2,2
MH2526 - Apply acquired knowledge and problem-solving skills in new, unfamiliar or changing environments within broader (or multidisciplinary) contexts related to their area of study.		x		0,2
MH2527 - Demonstrate the ability to integrate knowledge and deal with the complexity of formulate judgments based on incomplete or limited information, including reflections on the SDGs, human rights and fundamental rights, and on social, health and safety, environmental, economic and industrial implications and responsibilities.		x		0,2
MH2528 - Communicate its conclusions and the ultimate knowledge and rationale behind them to specialized and non-specialized audiences in a clear and unambiguous manner.		x		0,2
MH2530 - Work with people, involving them and leading them in a dynamic directed towards a common objective that includes reflection on their ethical and social responsibility, with a global vision of the work to be carried out and the characteristics required (quality, deadlines, etc.), assuming responsibility for the decisions taken.		x		0,2

Total: 3

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

SECONDARY LEARNING RESULTS

RMH129 [I] *Identifica las distintas corrientes de producción y describe las condiciones y herramientas necesarias para su ejecución.*

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	3 h.	6 h.	9 h.
Conducting tests, giving presentations, presenting defences, taking examinations and/or doing checkpoints	2 h.		2 h.
Presentation by the teacher in the classroom, in participatory classes, of concepts and procedures associated with the subjects	9 h.	19 h.	28 h.

EVALUATION SYSTEM	W	MAKE-UP MECHANISMS
Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems	20%	Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems
Individual written and/or oral tests or individual coding/programming tests	80%	Individual written and/or oral tests or individual coding/programming tests

CH - Class hours: 14 h.

NCH - Non-class hours: 25 h.

TH - Total hours: 39 h.

RMH128 [!] *Plantea políticas de gestión de materiales y stocks atendiendo a diferentes cadenas de suministro y estrategias productivas.*

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		2 h.	4 h.	6 h.
Conducting tests, giving presentations, presenting defences, taking examinations and/or doing checkpoints		2 h.		2 h.
Presentation by the teacher in the classroom, in participatory classes, of concepts and procedures associated with the subjects		8 h.	11 h.	19 h.
EVALUATION SYSTEM		W	MAKE-UP MECHANISMS	
Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems		20%	Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems	
Individual written and/or oral tests or individual coding/programming tests		80%	Individual written and/or oral tests or individual coding/programming tests	

CH - Class hours: 12 h.
NCH - Non-class hours: 15 h.
TH - Total hours: 27 h.

RMH130 [!] *Conoce y aplica procesos de mejora de la calidad a través de herramientas de resolución sistemática de problemas.*

LEARNING ACTIVITIES		CH	NCH	TH
Personal study and flexible development of concepts and subjects using active dynamics, to foster more meaningful learning			5 h.	5 h.
Presentation by the teacher in the classroom, in participatory classes, of concepts and procedures associated with the subjects		4 h.		4 h.
EVALUATION SYSTEM		W	MAKE-UP MECHANISMS	
Individual written and/or oral tests or individual coding/programming tests		100%	(No mechanisms)	

CH - Class hours: 4 h.
NCH - Non-class hours: 5 h.
TH - Total hours: 9 h.

CONTENTS

LEARNING RESOURCES AND BIBLIOGRAPHY

Learning resources	Bibliography
Topic related web quires	Anaya,J.J. (2000) Logística Integral. La Gestión Operativa de la empresa. Ediciones ESIC
Moodle Platform	Boyer, R. & Freyssenet, M. (2003) “Los Modelos Productivos”. Ediciones Fundamentos
Class presentations	Chase, R.B., Aquilano N.J. & Jacobs F.R. (1998) “Production and Operations Management: Manufacturing and Services. Eighth Edition” Irwin/Mcgraw-Hill
Slides of the subject	Cox III, J. F., and Schleier Jr, J. G. (2010) Theory of constraints
Video projections	
Topic related web quires	

handbook. McGraw-Hill Education.

Cox III, J.F., Boyd, L.H., Sullivan, T.T., Reid, R.A., and Cartier, B., (2012) The TOCICO Dictionary (Second Edition). McGraw-Hill Education

Pau Cos, J. & Navascúes y Gasca, R. (1998) Manual de Logística Integral. Ediciones Diaz de Santos

Pittman, P.H., and Atwater, J.B. (2019) The APICS Dictionary, 16th edition. American Production and Inventory Control Society

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Umble, M., and Srikanth, M. L., (1995) Synchronous manufacturing: principles for world-class excellence. Spectrum Publishing, pp 211-255.

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Davis, M. M., Aquilano, N. J., & Chase, R. B. (2003). Fundamentals of operations management (3rd ed.). Boston: McGraw-Hill/Irwin.

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Suzaki, K. (1991) Competitividad en fabricación en la década de los 90. Tecnologías de Gerencia y Producción S.A.

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Ptak, C., & Smith, C. (2018). The Demand Driven Adaptive Enterprise: Surviving, Adapting, and Thriving in a VUCA World; Industrial Press, Inc.

DEMING, W.E. (1980) Calidad, Productividad y Competitividad. Ediciones Díaz de Santos S.A.

JURAN, JM. (1983) Manual de Control de la Calidad. 2ª Edición. Editorial Reverté.

ISHIKAWA, Kaoru.(1985)Guía de Control de Calidad. UNIPUB. ISBN 0-89059-046-X

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