

[GOJ303] QUANTITATIVE METHODS FOR INDUSTRIAL ORGANISATION II

GENERAL INFORMATION

Studies	DEGREE IN INDUSTRIAL ORGANIZATION ENGINEERING	Subject	?
Semester	1	Course	3
Character	COMPULSORY	Mention / Field of specialisation	
Plan	2022	Modality	Face-to-face
Credits	6	Hours/week	5.33
		Language	CASTELLANO/EUSKARA
		Total hours	96 class hours + 54 non-class hours = 150 total hours

PROFESSORS

SOTO RUIZ DE GORDOA, MIRIAM

REQUIRED PREVIOUS KNOWLEDGE

Subjects	Knowledge
<i>(No specific previous subjects required)</i>	<i>(No previous knowledge required)</i>

LEARNING RESULTS

LEARNING RESULTS	KC	SK	AB	ECTS
GOR304 - To analyze supply chains, production plants and/or supply chains using simulation tools, in order to make timely organizational decisions	x			5,08
G-RTR1 - To develop interdisciplinary projects specific to their specialty and of gradual complexity, - becoming aware of respect for human rights and fundamental rights, and analyzing and assessing the impact of the proposed solutions on the SDGs - to acquire and/or apply basic, advanced and /or avant-garde, demonstrating the ability to work in multidisciplinary teams and/or undertake further studies with a high degree of autonomy		x		0,44
G-RTR2 - To express information, ideas and the arguments that support them in an orderly, clear and coherent manner, orally and in writing, based on quality information, self-made or obtained from different sources, using inclusive and non-discriminatory language		x		0,48

Total: 6

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

ENAE LEARNING RESULTS

ENAE LEARNING RESULTS	ECTS
ENAE03 - Knowledge and understanding: Sufficient knowledge of their branch of engineering, including some knowledge at the forefront of their field.	1,8
ENAE07 - Analysis in engineering: Ability to choose and apply relevant modelling and analytical methods.	0,45
ENAE09 - Engineering projects: Understanding of the different methods and ability to use them.	0,45
ENAE11 - Research & innovation: Ability to design and carry out experiments, to interpret data and draw conclusions.	1,8
ENAE12 - Research & innovation: Technical and lab competences.	0,3
ENAE15 - Practical application of engineering: Understanding of applicable methods and techniques and their limitations.	0,3
ENAE17 - Transversal competences: To work effectively, both individually and in a team.	0,45
ENAE18 - Transversal competences: To use different methods to communicate effectively with the engineering community and society in general.	0,45

Total: 6

CONTENTS

1. Introduction to simulation
2. How to simulate using Flexsim
 1. Flexsim: concepts and terminology
 2. Grouping and ungrouping flowitems
 3. Global tables
 4. Conveyors
 5. Production prioritization
 6. Production sequencing
 7. Task executers
 8. Experimenter
3. Decision making using Flexsim

LEARNING RESOURCES AND BIBLIOGRAPHY

Learning resources

Specific Master Software
Slides of the subject
Video projections
Moodle Platform
Class presentations

Bibliography

(No bibliography)