

## [GCM301] LIFE CYCLE ANALYSIS

### GENERAL INFORMATION

<b>Studies</b>	DEGREE IN ENGINEERING IN ECO-TECHNOLOGY IN INDUSTRIAL PROCESS		<b>Subject</b>	?
<b>Semester</b>	1	<b>Course</b>	3	<b>Mention / Field of specialisation</b>
<b>Character</b>	COMPULSORY		<b>Language</b>	ENGLISH
<b>Plan</b>	2022	<b>Modality</b>	Face-to-face	<b>Total hours</b> [!] 72 class hours + 67 non-class hours = <b>139 total hours</b>
<b>Credits</b>	3	<b>Hours/week</b>	4	

### PROFESSORS

GALLO FERNANDEZ, ANGEL

### REQUIRED PREVIOUS KNOWLEDGE

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

### LEARNING RESULTS

LEARNING RESULTS	KC	SK	AB	ECTS
<b>GCR309</b> - Assesses the environmental impact of a product or industrial process throughout its life cycle		x		2,56
<b>G-RTR1</b> - 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		0,2
<b>G-RTR2</b> - 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		0,24
<b>Total:</b>				<b>3</b>

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

### CONTENTS

1. Definition and assessment of environmental impact:

-Preliminary concepts

-ISO 14040 and 14044 standards (methodology)

-Definition of the steps of the methodology:

-objectives and boundaries

-Inventory

-evaluation

-IT tools 2. Product design and eco-design

-Market analysis and functional analysis

-Specification booklet

-Product design

-Design for X (DfX)

-Ecodesign tools

## LEARNING RESOURCES AND BIBLIOGRAPHY

Learning resources	Bibliography
Moodle Platform Slides of the subject Programmes	<a href="https://katalogoa.mondragon.edu/janium-bin/referencista.pl?Id=20231112111600">https://katalogoa.mondragon.edu/janium-bin/referencista.pl?Id=20231112111600</a>