

## [GDW305] DESIGN METHODOLOGY II

### GENERAL INFORMATION

<b>Studies</b>	DEGREE IN INDUSTRIAL DESIGN AND PRODUCT DEVELOPMENT ENGINEERING		<b>Subject</b>	?	
<b>Semester</b>	1	<b>Course</b>	3	<b>Mention / Field of specialisation</b>	
<b>Character</b>	COMPULSORY				
<b>Plan</b>	2022	<b>Modality</b>	Face-to-face	<b>Language</b>	CASTELLANO/EUSKARA
<b>Credits</b>	4,5	<b>Hours/week</b>	3.83	<b>Total hours</b>	69 class hours + 43.5 non-class hours = <b>112.5 total hours</b>

### PROFESSORS

GONZALEZ OCHOANTESANA, ITSASO
URIARTE IÑURRATEGUI, IONE

### 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
<b>GDR309</b> - To define a product by applying the right tools		x		3,78
<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		0,4
<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		0,32
<b>Total:</b>				<b>4,5</b>

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

#### ENAE LEARNING RESULTS

	ECTS
<b>ENAE03</b> - Knowledge and understanding: Sufficient knowledge of their branch of engineering, including some knowledge at the forefront of their field.	0,72
<b>ENAE06</b> - Analysis in engineering: Ability to apply their knowledge and understanding in analysing product, process and method engineering.	1,2
<b>ENAE08</b> - Engineering projects: Ability to apply their knowledge in the development and completion of projects which meet specific requirements.	0,48
<b>ENAE09</b> - Engineering projects: Understanding of the different methods and ability to use them.	0,6
<b>ENAE10</b> - Research & innovation: Ability to perform bibliographic searches, to use databases and other sources of information.	0,24
<b>ENAE11</b> - Research & innovation: Ability to design and carry out experiments, to interpret data and draw conclusions.	0,52
<b>ENAE13</b> - Practical application of engineering: Ability to select and use suitable equipment, tools and methods.	0,12
<b>ENAE15</b> - Practical application of engineering: Understanding of applicable methods and techniques and their limitations.	0,12
<b>ENAE16</b> - Practical application of engineering: To be aware of the implications of the practical application of engineering.	0,12
<b>ENAE18</b> - Transversal competences: To use different methods to communicate effectively with the engineering community and society in general.	0,12
<b>ENAE19</b> - Transversal competences: Demonstrate that they are aware of the responsibility implied in the practical application of engineering, the social and environmental impact, and show commitment with professional ethics, responsibility and regulations of the practical application of engineering.	0,1
<b>ENAE21</b> - Transversal competences: To recognise the need for and be able to voluntarily develop continuous learning.	0,16
<b>Total:</b>	<b>4,5</b>

### CONTENTS

- 1\_ Introduction :Design methodology
- 2\_ Strategic search
  - 2.1 Depest
  - 2.2 SWOT \_TOWS
- 3\_Exploration phase

3.1 HCD tools

3.2 Functional analysis

3.2 FMEA

3.4 Value analysis

## LEARNING RESOURCES AND BIBLIOGRAPHY

### Learning resources

Subject notes  
Moodle Platform  
Class presentations

### Bibliography

[http://katalogoa.mondragon.edu/janium-bin/janium\\_login\\_opac\\_relnk.pl?grupo=DISINDUSTRIAL31&ejecuta=40&\\_ST](http://katalogoa.mondragon.edu/janium-bin/janium_login_opac_relnk.pl?grupo=DISINDUSTRIAL31&ejecuta=40&_ST)