

## [MDC403] INTERACTION DESIGN

### GENERAL INFORMATION

<b>Studies</b>	UNIVERSITY MASTER IN STRATEGIC PRODUCT AND SERVICE DESIGN		<b>Subject</b>	?
<b>Semester</b>	2	<b>Course</b>	1	<b>Mention / Field of specialisation</b>
<b>Character</b>	COMPULSORY		<b>Language</b>	CASTELLANO
<b>Plan</b>	2025	<b>Modality</b>	Face-to-face	<b>Total hours</b> 40 class hours + 60 non-class hours = <b>100 total hours</b>
<b>Credits</b>	4	<b>Hours/week</b>	2.22	

### PROFESSORS

VALENCIA PARAFITA, XABIER

### REQUIRED PREVIOUS KNOWLEDGE

Subjects	Knowledge
DESIGN METHODOLOGY VISUAL COMMUNICATION	(No previous knowledge required)

### LEARNING RESULTS

LEARNING RESULTS	KC	SK	AB	ECTS
<b>MDRB17</b> - To know how to apply the acquired knowledge and competencies and the ability to solve problems in new or unfamiliar contexts within wider (or multidisciplinary) environments related to their field of study		x		4
<b>Total:</b>				<b>4</b>

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

### SECONDARY LEARNING RESULTS

**RMD17** [!] *Desarrollar soluciones digitales interactivas y accesibles, acordes con el ecosistema digital actual, aplicando metodologías data-driven y user-centered, permitiendo realizar analítica visual sobre diferentes fuentes de información*

#### 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	18 h.	22 h.	40 h.
Conducting tests, giving presentations, presenting defences, taking examinations and/or doing checkpoints	2 h.	8 h.	10 h.
Carrying out exercises and solving problems individually and/or in teams	20 h.	30 h.	50 h.

#### EVALUATION SYSTEM

	W
Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems	50%
Presentation and defence of exercises, case studies, computer practical work, simulation practical work, laboratory practical work, term projects, end of degree project, master's thesis, challenges and problems	40%
Individual written and/or oral tests or individual coding/programming tests	10%

#### MAKE-UP MECHANISMS

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  
Observation (technical capacity, attitude and participation)

**CH - Class hours:** 40 h.

**NCH - Non-class hours:** 60 h.

**TH - Total hours:** 100 h.

### CONTENTS

- Digital technology ecosystems:
  - Introduction to existing technologies
  - Factors influencing the development of HMIs
- Design and development of interactive digital interfaces (HMI WEB, HMI Mobile, HMI Industrial):
  - Development of interfaces based on web technologies
  - Interface development based on mobile technologies
  - Interface development based on industrial technologies

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4. Accessibility
  5. Prototyping through frameworks
  6. Interactive images
  3. Visual analytics for user behaviour analysis:
    1. Interaction data analysis
    2. Automatic discovery of interaction patterns
    3. User behaviour based Interface redesign

## LEARNING RESOURCES AND BIBLIOGRAPHY

### Learning resources

Class presentations  
Moodle Platform  
Programmes  
Topic related web quires

### Bibliography

<https://labur.eus/l4iy7>