

## **Subject**

### **Data Visualization III**

**Year:** 3

**Credits:** 3 ECTS

**Language:** Spanish

## **Competencies**

### **Core competences:**

CB1. Students have demonstrated knowledge and understanding in an area of study that builds on the foundation of general secondary education and is usually at a level that, while relying on advanced textbooks, also includes certain elements involving cutting-edge knowledge in their field of study

CB4. Students are able to convey information, ideas, problems and solutions to both specialist and non-specialist audiences.

### **General competences:**

CG2. Curiosity and empathy

### **Specific competences:**

CE08. Communicate effectively, responsibly and appropriately in the various communicative situations arising in the realm of business analytics, using data visualisation techniques and ensuring multilingualism.

## Learning outcomes

RA2. Ability to ask questions, and to empathise with the problems and concerns of the people around them. This ability to listen enables the person to detect opportunities and identify the problems to be solved.

RA16. Communicate effectively, responsibly and appropriately in the various communicative situations that may arise in their professional environment

RA17. Know and use visualisation tools for decision making

## Syllabus

### JavaScript graphics

- Introduction to javascript
- D3.js
- Plotly.js
- Nvd3.js

### Introduction to front-end development

- Html
- Css
- Bootstrap

### Cloud-based BI tool Visual and UX models

## Training activities

The training activities planned for this module are the following:

- Challenge-based learning (0.75 ECTS)
- Teamwork (0.5 ECTS)
- Workshops (0.5 ECTS)
- Online resources (0.25 ECTS)
- Reflection (0.25 ECTS)
- Learning communities (0.25 ECTS)
- Individual work (0.25 ECTS)
- Carrying out projects with real companies (0 ECTS)

## Assessment system

Assessment will be by means of the continuous assessment system, providing constant feedback to both teachers and students on the learning process throughout the academic period:

- Learning activities involving the presentation of knowledge and individual study may be assessed by means of oral and/or written tests, which will account for a maximum of 60% of the final mark.
- The training activities aimed at acquiring the practical skills of the subjects will be assessed through the completion of various activities (assignments, case studies, challenges, etc.) accounting for at least 40% of the final mark.

Details of the assessment and marking will be made explicit in the annual academic planning of the subjects, in accordance with the teachers responsible and the determining factors of each course.

## Bibliography

- Meeks, E. 2017. D3. js in Action: Data visualization with JavaScript. Simon and Schuster.
- Larsen, R. (2018). Mastering SVG: Ace web animations, visualizations, and vector graphics with HTML, CSS, and JavaScript. Packt Publishing Ltd.