

## 1. BASIC DETAILS

<b>Course</b>	Design and Online Programming
<b>Degree</b>	Bachelor's Degree in Advertising
<b>School/Faculty</b>	Social and Communication Sciences
<b>Year</b>	3º
<b>ECTS</b>	6 ECTS
<b>Type</b>	Optional
<b>Language(s)</b>	Spanish
<b>Delivery Mode</b>	On campus
<b>Semester</b>	2nd semester

## 2. INTRODUCTION

The Design and Online Programming subject in the Bachelor's Degree in Advertising at Universidad Europea focuses on providing students with the knowledge and skills required to create and develop digital content for online media.

Students will learn how to use design and programming tools and techniques, as well as how to understand the fundamental principles of user experience and usability. The key concepts of web programming will also be explored, including the use of programming languages such as HTML, CSS and JavaScript, in addition to the creation of interactive web applications.

The themes that will be covered include website planning and creation, graphic design for digital media, creation of animation and visual effects, development of web applications, optimisation of search engines and integration of social media and other digital media.

Students will also learn how to work as a team and collaborate on projects, which will allow them to develop communication and teamwork skills, as well as gain experience in project management and decision-making.

## 3. SKILLS AND LEARNING OUTCOMES

**Key skills (CB, by their acronym in Spanish):**

CB2 - Students can apply their knowledge to their work or vocation in a professional manner and possess the skills which are usually evident through the forming and defending of opinions and resolving problems within their study area

CB4 - Students can communicate information, ideas, problems and solutions to both specialist and non-specialist audiences

CB5 - Students have developed the learning skills necessary to undertake further study in a much more independent manner

**Transversal skills (CT, by their acronym in Spanish):**

CT2 - Independent learning: Skillset for choosing strategies to search, analyse, evaluate and manage information from different sources, as well as to independently learn and put into practice what has been learnt

CT3 - Teamwork: Ability to integrate and collaborate actively with other people, areas and/or organizations to reach common goals.

CT4 - Written/spoken communication: Ability to communicate and gather information, ideas, opinions and viewpoints to understand and be able to act, spoken through words or gestures or written through words and/or graphic elements

CT5 - Analysis and problem-solving: Be able to critically assess information, break down complex situations, identify patterns and consider different alternatives, approaches and perspectives in order to find the best solutions and effective negotiations

CT6 - Adapting to change: Be able to accept, consider and integrate different perspectives, adapting your own approach as required by the situation at hand, and to work effectively in ambiguous situations

CT8 - Entrepreneurial spirit: Ability to take on and carry out activities that generate new opportunities, foresee problems or lead to improvements

CT9 - Global mindset: Be able to show interest in and understand other customs and cultures, be aware of your own biases and work effectively as part of a global community.

**Specific skills (CE, by their acronym in Spanish):**

CE25 - Ability to describe the processes involved in the use of technology, estimate the resources required to efficiently design a communication product and defend the proposal made.

CE26 - Ability to identify and criticise the procedures established in the use of technology, as well as plan the way in which it should be used.

CE27 - Ability to use communication technology appropriately, discovering new uses of existing communication technology and predicting its ephemeral nature to be updated.

**Learning outcomes (RA, by their acronym in Spanish):**

RA1: Understand the basic concepts on which online design is based: interface, responsive multiscreeen design, optimisation of formats, hierarchy and of content, etc.  
Know the different CMS platforms such as Wordpress, Joomla, etc.

RA2: Know the basic programming languages. HTML and HTML5 for online content design and PHP for dynamic content programming (together with an SQL database).  
Creation of custom modules for the aforementioned CMS which are based on PHP language.

RA3: Recognise and use the different tools and resources which are used in design processes and programming of these.

Skills	Learning outcomes
CB4, CT9, CE27	RA1
CB4, CT9, CE27	RA2
CB4, CT9, CE27	RA3

## 4. CONTENTS

- Design, accessibility and usability. Publication on the internet or mobile application.
- Programming for content visualisation.
- SEO (Search Engine Optimization) programming and positioning.

## 5. TEACHING/LEARNING METHODS

### ON CAMPUS STUDY MODE

- Lecture/online conference
- Collaborative learning
- Problem-based learning
- Project-based learning
- Simulation environments

## 6. LEARNING ACTIVITIES

The types of learning activities, plus the amount of time spent on each activity, are as follows:

### On-campus:

Learning activity	Number of hours
Lectures	24
Asynchronous lectures	6
Case study analysis	10

Problem-solving	10
Drawing up reports and written work	15
Group tutorials	10
Independent working	45
Workshops and/or laboratory work	30
<b>TOTAL</b>	<b>150</b>

## 7. ASSESSMENT

The assessment methods, plus their weighting in the final grade for the course, are as follows:

### On-campus:

Assessment system	Weighting
On-campus knowledge tests	40.0
Reports and written work	10.0
Case study/problem scenario	10.0
Laboratory work	20.0
Performance observation	20.0

On the Virtual Campus, when you open the course, you can see all the details of your assessment activities and the deadlines and assessment procedures for each activity.

## 8. BIBLIOGRAPHY

The work of reference for follow-up of the course is:

The recommended bibliography is indicated below:

Duckett, J. (2011). HTML y CSS: diseño y construcción de sitios web. Anaya Multimedia.

Duckett, J. (2014). JavaScript y jQuery: desarrollo de páginas web interactivas. Anaya Multimedia.

Freeman, E., & Freeman, E. (2015). Use a cabeça! Programação com JavaScript. Alta Books.

McFarland, D. (2012). CSS3: The Missing Manual. O'Reilly Media.

W3C. (2021). HTML5. <https://www.w3.org/TR/html52/>

W3C. (2021). CSS. <https://www.w3.org/Style/CSS/Overview.en.html>

W3C. (2021). JavaScript. <https://www.w3.org/standards/webdesign/script>

