

COURSE DESCRIPTOR

WD01 HTML & CSS

Learning hours: 40

Aim

Apply the fundamentals of Hypertext Markup Language and Cascading Style Sheets to develop a multi-page website.

Learning outcomes

Students will be able to:

1. Produce a multi-page responsive website using a supplied brief and assets (2 credits)
2. Apply styling to a multi-page website to implement a specified visual style (2 credits)

Content

- Project structure, file systems, command line navigation: opening files, reading, listing, navigating
- Code editors
- Introducing HTML: elements, tags, semantic code, attributes
- Introducing CSS: selectors, syntax, classes and IDs
- Visual styles: colours, background, typography and fonts
- HTML structure for positioning, nesting and layout
- Website layout: responsive layout, HTML and CSS positioning, grid, containers, flexible box layout (flexbox)
- Media queries
- Introducing CSS effects, transitions and animation: parallax scrolling
- HTML forms, Bootstrap overview
- Optimisation: accessibility, speed and search engine optimisation
- Cross-platform and browser testing for consistency
- Hosting and domains names

Assessment

Learning Outcomes Assessed

ASSESSMENT	METHOD	LEARNING OUTCOMES	CREDITS
WD01 Multi-page website	Assignment	1, 2	3

COURSE DESCRIPTOR

WD02 JavaScript

Learning hours: 30

Aim

To develop an understanding of the principles and practice of coding using JavaScript for web development.

Learning outcomes

Students will be able to:

3. Write JavaScript code for navigation, interaction and validation tasks (2 credits)
4. Implement simple database integration with a website using JavaScript (1 credit)

Content

- Syntax: case sensitivity, white space, semicolons, comments, ECMAScript 6 (ES6)
- Variables, values, data types, data structures, arrays, objects
- Control statements, conditionals, functions, loops
- Comparison operators, logical operators
- Multidimensional arrays
- Classes, objects, methods, properties
- Document Object Model, referencing and selecting elements
- Form validation: capturing input data, validation using JavaScript, providing user feedback, overview of popular frameworks
- Arrays and loops, outputting to the page
- Callback functions
- Navigation and interactive effects: hamburger menu, lightbox
- Frameworks: an overview of commonly used frameworks e.g. React
- Creating a SQL or Mongo database, simple database tables, introducing Node.js

Assessment

Learning Outcomes Assessed

ASSESSMENT	METHOD	LEARNING OUTCOMES	CREDITS
WD02 Web application	Assignment	3, 4	4