

DESCRIPTION OF STUDY MODULE*

Study programme Applied Informatics and Programming

Study module FRONT-END WEB DEVELOPMENT

Credits in total 5

Learning outcomes

- Knows JavaScript, JQuery, Angular, Bootstrap concepts and terminology.
- Knows each technology advantages and disadvantages.
- Able to compare and to choose appropriate technologies for concrete practical solution.
- Design and code beautiful, interactive and client-facing dynamic website.
- Able to create responsive design.
- Understand the importance of professional skills development.
- Develop the need to independently improve their programming skills.

Aims of study module

The course aim is to provide students with the opportunity to undertake substantial web based software development project. During this course student will learn such technologies as jQuery (JS library) and frameworks Angular JS & Bootstrap.

Annotation of a study module

This course is designed to teach students how to quickly translate their ideas into functional, stylized and professional web project for personal or business purposes. This course enables students to create a web project with the user in mind, become more innovative in their current job role, and master the technical vocabulary to communicate ideas to others. Students also make sure the design appears as it's supposed to across various platforms and browsers, and decide how features act when you click or hover over them. During this course students will deepen their knowledge about CSS, JavaScript and will learn to use jQuery, Ajax, Angular JS, Bootstrap.

Topics of the subject

1. Introduction to front-end web development.
2. CSS selectors and the box model.
3. Responsive web design
4. Adaptive layout with media query
5. SVG graphics
6. Git Safari
7. jQuery (JavaScript library)
8. Frameworks
9. Angular JS
10. Bootstrap

Procedure for assessment of knowledge and competences

10-point grading scale and cumulative assessment method: Control tests 1 (CT1) - 10%, Control tests 2 (CT2) - 10%, project (P) – 30%, and examination (E) - 50% of the total grade, which is calculated by the method of weighted mean. Final grade of the course is calculated only when all of the assignments are successfully completed and midterms are passed:
 $G = CT1*0.10 + CT2*0.10 + P*0.3 + E*0.5$

Main literature

1. Duckett J. (2014). *JavaScript and JQuery: Interactive Front-end Development*. Wiley, 640 p.
2. Holzner S. (2009). *jQuery: Visual QuickStart Guide (e-book)*. Peachpit Press.
3. Souders, S. (2007). *High Performance Web Sites: Essential Knowledge for Front-End Engineers*. O'Reilly Media, 170 p.

* Short form