Course Title	Web Programming
Course Code	CSE213
Course Type	Compulsory
Level	Bachelor (1ˢᵗ cycle)
Year / Semester	2ⁿᵈ year /3ʳᵈ semester
Teacher's Name	TBA

ECTS	6	Lectures / week	3 Hours/14 weeks (all practical)	Laboratories / week	None

Course Purpose and Objectives	This course covers HTML5, CSS and JavaScript programming. The primary goal of the course is to introduce students to the possibilities that exist with using the latest HTML version (HTML5) for creating client-side web content, the latest CSS version (CSS3) for formatting and styling client-side web content and the latest JavaScript libraries (such as jQuery) for adding client-side functionality.
Learning Outcomes	Upon succesful completion of this course students should be able to: • Build user interfaces with HTML5 to collect and validate user input • Construct interactive HTML5 forms • Adapt content based on browser's characteristics • Add offline support to web applications • Implement real time communication with web sockets • Perform background processing with web workers • Use CSS to style and format the user interface • Utilize CSS graphics and animations to enhance user experience • Use JavaScript to enable user triggered functionality • Use jQuery functions to enhance user experience • Compare HTML5 forms with ASP forms

Prerequisites	CSE120, CSE125	Co-requisites	None

Course Content	HTML5 • structure a web page using HTML5 tags, such as section, article, nav, heading, footer, label, etc. • implement an interactive user form to collect and validate user input on the client side using attributes such as required, min, max, pattern, autofocus, etc.

	- adapting web content based on user's browser (internet explorer, firefox, google chrome), adapting for printing view and mobile presentation. - Adding offline features on webpages CSS - formatting HTML5 pages with css rules, adding color and styling - implementing animations on web content using the keyframes rule, such as rotating, moving horizontally and vertically, expanding and shrinking - using SVG graphics to design graphical user interfaces JavaScript - adding client-side functionality using internal and external scripts - utilizing the jQuery library to add enhanced user functionality, such as hiding web components when clicked, sliding components up and down, fading components in and out - triggering web workers for background processing - enabling web sockets for real-time server communication ASP - familiarizing with ASP web forms - working with master and content pages - implementing user input controls
Teaching Methodology	Face-to-face
Bibliography	HTML5 Application Development Fundamentals, Microsoft Official Academic Course (MTA Exam 98-375) Exam Ref 70-480 Programming in HTML5 with JavaScript and CSS3 (MCSD), Rick Delorme, Microsoft Press Web Design with HTML, CSS, JavaScript and jQuery Set, Jon Duckett, Wiley The essential guide to CSS and HTML web design, Craig Grannell, Springer
Assessment	Coursework 50% Examinations 40% Class Participation and attendance 10% 100%
Language	English