Course Unit Code ACSC476 Type of course unit: Bachelor (1st Cycle) Year of study: 34 Semester when the Unit is delivered: 57 (Fail) Number of ECTS credits allocated 6 Learning Outcomes of the course unit By the end of the course, the students should be able to: 1 Describe and explain how the main application-layer protocols (for web, email, etc) operate and discuss their actual usage in the Internet. 2: Design and construct high-quality static web pages using XHTML and CSS. 3: Evaluate the differences between client-side and server-side programming, be familiar with the dominant programming languages that support each type, and argue on the efficiency/effectiveness of each on various scenarios. 4: Develop client-side web programs employing technologies such as JavaScript and employ commonly used libraries such as JQuery. 5: Construct elementary server-side components to process HTTP requests in PHP. 6: Discuss the impact of Various emerging technologies in the Internet domain (e.g. HTML5, web services). Mode of Delivery Face-to-face Prerequisites AMDM100, AMDM182 Co-requisites Course Contents Part 1: Review of Networking Essentials: Networking Layers and the TCP/IP stack. Sockets. Common Internet applications. Client-side vario	Course Unit Title	Internet Technologies		
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Part 4: XML Documents and the future of the Web (2 weeks): The XML meta-language. XML languages and documents. Well-formed and valid documents. XML language definition (DTD, XSD). Impact of XML on Internet development. The receding of XML today and the emergence of alternative approaches. JSON documents. Introduction to the Semantic Web and Web 2.0. Recommended and/or required reading: Textbooks • No specific textbook is followed	Mode of Delivery Prerequisites Recommended optional program components Course Contents	Face-to-face AMDM100, AMDM182 NONE Part 1: Review of Networking Essection TCP/IP stack. Sockets. Common International HTTP, SMTP, POP3 at Elementary socket programming. Part 2: Web Content Development construction. Web page presentation Advanced Design features with CCS3 usability issues. HTML5.	co.requisites NONE entials: Networking Layers and the ernet applications and their protocols. and other dominant protocols. cket analysing. : Syntax of XHTML, Basics of web page and web browsers. Page Styling. 3. Principles of web design, design and	
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References	 Kurose J, Ross K; Computer Networking: A top down approach. Addison Wesley. 	
	 Deitel, Internet & World Wide Web, How to Program, Pearson Education. 	
	 Bowers M, Pro CSS and HTML Design Patterns, O'Reilly. 	
	Crockford D JavaScript: The Good Parts, O'Reilly.	
Planned learning activities and teaching methods	The course is taught in a traditional manner of lectures (2 hours per week) backed up with laboratory sessions (2 hpw). Lectures consist of presentations of new material and discussion of new concepts. Laboratory work mainly consists of demonstrations and programming exercises to gain practical skills.	
	The course material (notes, exercises, forum, etc) is maintained on the university's e-learning platform.	
Assessment	Assignments 15%	
methods and criteria	Test 10%	
	Lab work 15%	
	Final Exam 60%	
Language of instruction	English	
Work placement(s)	NO	