

Implementation plan Finished

Study unit	Developing ICT Systems: Fundamentals of programming and web development (01119), 10.0
Implementation	NIA0921: 2/2009-2010 (04.01.2010 - 18.06.2010)
Type	APPLIED ICT SYSTEMS (0329)
Groups	Primary: NIA09SN Others :
Involved in the project	
Lecturers	Rathod Paresh and Robert Guinness
Number of participants	Minimum: Maximum:
Enrolment period	30.11.2009 08:00 - 06.12.2009
Main timing for implementation	
Applicability	For exchange students: Yes For elective studies: Yes Open UAS student: No Suitable for virtual UAS: No
Teachers	Rathod Paresh (Teacher in charge), Takala Jouni (Other teacher)
Campus	Laurea Leppävaara
Main location for implementation	
Implementation method	Optima realization/student group, Other method of implementation, Project/venture/R&D Language: English Virtuality: 0 cr Integration of R&D: 0 cr
Implementation class	
Focus areas	
Evaluation at the latest	18.07.2010 Storing of graded material ends.: 18.06.2011
Exam days	
Having completed the study unit the student is able to	# analyze and explain the behaviour of simple programs involving the fundamental programming constructs covered by this unit # design, implement, test, and debug a program that uses each of the following fundamental programming constructs: basic computation, simple I/O, standard conditional and iterative structures, and the definition of functions # choose appropriate conditional and iteration constructs for a given programming task # describe the structure of the World Wide Web as interconnected hypertext documents # create and validate HTML/XHTML documents # demonstrate and show how to display such documents in Web applications # describe the issues involved in developing a web interface # discuss and contrast data entry and validation techniques in Web 2.0
Previous studies	
Generic competences	verkosto-osaamisen kuvaus, eettisen osaamisen kuvaus, globalisaatio-osaamisen kuvaus, innovaatio-osaamisen kuvaus, reflektio-osaamisen kuvaus
Previous studies, more information	-You need to finish following course successfully to participate in the course: Becoming a Business Information Systems Professional or equivalent knowledge
Learning objectives	The course introduces students to the development process of ICT systems. Further deepens the knowledge of basics of programming and web technologies and systems, including programming basics, hypertext, self-descriptive text, web page design, web

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	navigational systems, database integration and digital media. The goal of the study unit is to design, develop, and publish an innovative web application using recommended design practices.
Contents	Section-1 (5 CR) • information technology: purpose, use, value • programming basics including variables, operators, expressions, statements and modifier • control/Block structures • class and methods Section -2 (5CR) • web-markup and display languages • client-side programming • server-side programming • web interfaces • web site implementation and integration
Study material	Section - 1: Java How to Program: Early Objects Version (8th Edition) Author - Paul Deitel & Harvey Deitel Section - 2: - Web Development and Design Foundations with XHTML(5th Edition) Author - Terry Felke - Morris-Principle of Web Design (4th Edition) Author - Joel Sklar
Evaluation criteria and methods	Section-1: 20% - Workshop participation & Competence of the subject and area - 30% - Individual and group lab/project work Section-2: 20% - Competence and skill of the subject area 30% - Individual and Group Project work
Project (name)	1) Nuukia national park 2) DELI 3) LbD conference 4) Project of University of the West of Scotland's professor
R&D methods	LbD, Workshops, Action and Applied Research
Work strain	150 hours for each section Workshops 40 hours Individual Lab Work 30 hours LbD-project work 50 hours Self study, Guidance and Other 30 hours Total 150 hours