COURSE PROFILE

Course Name	Code	Semester	Term	Theory+PS+Lab (hour/week)	Local Credits	ECTS
Advanced Server Side Programming - JSP	IT483	Fall	7	3 + 0 + 0	3	6

Prerequisites	None

Course Language	English
Course Type	Elective
Course Lecturer	Assoc. Prof. Dr. Vedat Coskun
Course Assistant	Büsra Özdenizci
Course Objectives	This course aims to equip students with Server Side Programming capability using Java tools.
Course Learning Outcomes	Upon successful completion of the course, students will: • understand basics of web and web server programming • master the important details of creating web application • master interfacing Web applications with multiuser databases • understand all components that Java provides for server side programming, and use the most appropriate Java component while implementing the term project • be familiar with user authentication and authorization techniques, and use them appropriately in the term project • be able to create a term project after defining a topic, specifying the requirements, analysing, designing the model, implementing, preparing the related documents such as database design document, programmers manual, user manual etc., and presenting the project appropriately
Course Content	Basics of web, web server (CGI) programming, Java components such as Servlets, Beans, JSP content, tags, Custom Tags, and JSF. Security of web based programming.

COURSE CONTENT

Week	Subjects	Related
1	Introduction to WWW, Basics of Web	
2	JavaServer Pages	
3	HTTP and Servlet Basics	
4	JSP Technologies Overview	
5	Setting Up the JSP Environment	
6	JSP Application Development	
7	JSP Application Development	
8	Review	
9	JSP Application Development	
10	JSP Application Development	
11	JSP in J2EE and JSP Component Development	
12	JSP in J2EE and JSP Component Development	
13	Review	
14	Project Presentation	

Course Textbook	No textbook is required
Recommended References	Hans Bergsten, JavaServer Pages, O'Reilly Media

Semester Requirements	Number	Percentage of Grade
Attendance/Participation		
Laboratory		
Application		
Special Course Internship (Work Placement)		
Quizzes/Studio Critics		
Homework Assignments	2	20
Presentation		
Project	1	60
Seminar/Workshop		
Midterms/Oral Exams		
Final/Resit Exam	1	20
Total		100

PERCENTAGE OF SEMESTER WORK		80
PERCENTAGE OF FINAL WORK		20
Total		100

Course Category	Core Courses	
	Major Area Courses	X
	Supportive Courses	
	Media and Management Skills Courses	
	Transferable Skill Courses	

COURSE'S CONTRIBUTION TO PROGRAM

#	Program Qualifications / Outcomes	* Level of Contribution				
		1	2	3	4	5
1	A foundation in mathematics and basic sciences and ability to apply acquired knowledge as they relate to the study and practice of information technology			X		
2	An ability to analyze a problem, identify and define the computing requirements appropriate to its solution, to understand, select and use appropriate technology, tools, standards, protocols, building blocks, and components to solve the problem					X
3	An ability to propose, analyze, design, develop, test and maintain an information technology system including software solutions, security model, computer and network infrastructure, information systems etc. to solve information technology problems					X
4	An ability to analyze local and global impact of computing on individuals, organizations and society; and the ability to apply information technology techniques, skills, and tools for regular computing practices as well as to improve effectiveness of current methodologies					X
5	An ability to effectively communicate in oral and written media with all kinds of related audiences; and prepare documentation for this purpose as required			X		
6	An understanding of professional, ethical, legal, and social issues and responsibilities of information technology profession		X			
7	A taste and breadth of knowledge across several social topics outside the immediate requirements of the information technology profession, and the ability to work within heterogeneous teams to accomplish a common goal including people from the information technology area as well as other disciplines			X		
8	An ability to engage in life-long learning and professional development for personal improvement to follow contemporary information technology issues				X	

*1 Lowest, 2 Low, 3 Average, 4 High, 5 Highest

ECTS ALLOCATED BASED ON STUDENT WORKLOAD BY THE COURSE DESCRIPTION

Activities	Number	Duration	Total Workload
Course Hours (Including Exams)	14	3	42
Tutorials			
Laboratory			
Application			
Special Course Internship (Work			
Field Work			
Study Hours Out of Class	14	4	56
Presentations / Seminar	1	1	1
Project			
Preparatory reading	14	4	56
Homework Assignments	2	3	6
Quizzes			
Midterm Exams			
Final / Resit Exam			
		Total Workload	161

COURSE CATEGORY

ISCED GENERAL AREA CODES	GENERAL AREAS	ISCED BASIC AREA CODES	BASIC EDUCATIONAL AREAS	
1	Education	14	Teacher Training and Educational Sciences	0
2	Humanities and Art	21	Art	0
2	Humanities and Art	22	Humanities	0
3	Social Sciences, Management and Law	31	Social and Behavioural Sciences	0
3	Social Sciences, Management and Law	32	Journalism and Informatics	0
3	Social Sciences, Management and Law	38	Law	0
4	Science	42	Life Sciences	0
4	Science	44	Natural Sciences	0
4	Science	46	Mathematics and Statistics	0
4	Science	48	Computer	100
5	Engineering, Manufacturing and Civil	52	Engineering	0
5	Engineering, Manufacturing and Civil	54	Manufacturing and Processing	0
5	Engineering, Manufacturing and Civil	58	Architecture and Structure	0
6	Agriculture	62	Agriculture, Forestry, Livestock, Fishery	0
6	Agriculture	64	Veterinary	0
7	Medicine and Welfare	72	Medical	0
7	Medicine and Welfare	76	Social Services	0
8	Service	81	Personal Services	0
8	Service	84	Transport Services	0
8	Service	85	Environment Protection	0
8	Service	86	Security Services	0