COURSE PROFILE

Course Name	Code	Semester	Term	Theory+PS+Lab (hour/week)	Local Credits	ECTS
Enterprise Architecture	MIS324	Spring	6	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 examines enterprise architecture (EA) from business and IT perspectives. Special emphasis is to be on Business and IT alignment. Frameworks of EA will be analysed in terms of abstraction levels (including scope, object system analysis and design, implementation) and various aspects (including data, process, goal, organization). Promising EA standards development (including TOGAF) along with architecture languages (e.g. Archimate) will be discussed. Learning mechanism includes directed readings along with several case studies and hands-on modelling exercises.
Course Learning Outcomes	Upon successful completion of the course, students will: • be able to develop EA for organizations • be able to address problems and possible solutions concerning managing EA • be able to evaluate a variety of frameworks to develop EA • be able to use languages for developing EA • be able to relate enterprise architecture with business process management • be able to follow emerging trends related EA
Course Content	Design, selection, implementation and management of enterprise IT solutions. Frameworks and strategies for infrastructure management, data/information architecture. Architecture strategies, modelling, and compliance issues. Best practices and case analysis. Applications.

COURSE CONTENT

Week	Subjects	Related
1	An Overview of EA	
2	EA Concepts	
3	Enterprise Architecting, Examples	
4	All Viewpoints, Examples	
5	System Architecture	
6	System Architecture	
7	Software Architecture	
8	Methodology Overview	
9	Unified Modelling for EA	
10	Data Architecture	
11	Data Architecture	
12	Emerging Issues, Trends Applications about EA	
13	Emerging Issues, Trends Applications about EA	
14	Project Presentation, Review	

Course Textbook	Practical Guide to Enterprise Architecture, James McGovern, Scot W. Ambler, Micheal E. Stevens, Vikas Sharan, Ellias, K. Jo, Prentice Hall, 2003, ISBN -13?9780131412750 FEAC Certified Enterprise Architect CEA Study Guide, Prakash Roa, Ann Reedy, Berly Bellman, McGrawHill, 2011
Recommended References	Lankhorts et al. (2010): Enterprise Architecture at Work-Modeling, Communication and Analysis Van den Berg and van Sttenbergen (2006) Building an Enterprise Architecture Practice

Semester Requirements	Number	Percentage of Grade
Attendance/Participation		
Laboratory		
Application		
Special Course Internship (Work Placement)		
Quizzes/Studio Critics		
Homework Assignments		
Presentation		
Project	1	40
Seminar/Workshop		
Midterms/Oral Exams	1	30
Final/Resit Exam	1	30
Total		100

PERCENTAGE OF SEMESTER WORK		70
PERCENTAGE OF FINAL WORK		30
Total		100

	Core Courses	
	Major Area Courses	X
Course Category	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			
Project			
Preparatory reading	14	4	56
Homework Assignments			
Quizzes			
Midterm Exams	1	2	2
Final / Resit Exam	1	2	2
		Total Workload	158

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	40
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	60
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