

COURSE PROFILE

Course Name	Code	Semester	Term	Theory+PS+Lab (hour/week)	Local Credits	ECTS
Business Process Engineering	IT487	Fall	5	3 + 0 + 0	3	6

Prerequisites	None
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Course Language	English
Course Type	Elective
Course Lecturer	Assist. Prof. Dr. Cüneyt Sevgi
Course Assistant	Büşra Özdenizci
Course Objectives	<p>This course examines analysis, design and implementation issues of Business Process in managerial and modelling contexts. A managerial context provides students with knowledge on business transformation, process reengineering, organizational restructuring, business and IT alignment. Modelling context refers to methods, tools and techniques for business process engineering. Further emphasis will be on aligning business process management with enterprise architecture. Learning mechanism includes directed readings along with several case studies and hands-on modelling exercises.</p>
Course Learning Outcomes	<p>Upon successful completion of the course, students will be able to:</p> <ul style="list-style-type: none"> • Use information technology (IT) for redesigning business processes and organizations • Address problems and possible solutions in the planning and implementation of business process related change • Evaluate a variety of approaches to using IT to improve organizations • Methods, tools and techniques for modelling business processes • Evaluate business process modelling languages and standards • Relate business process management with enterprise architecture, workflow management systems • Gain skills about redesigning business processes using case projects.

Course Content	Analysis, design, and implementation issues of Business Processes in managerial and modelling contexts. Business transformation, business and IT alignment. Methods, tools and techniques for BPE. Modelling languages and standards for BPE. Relating Enterprise information architecture to BP.
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COURSE CONTENT

Week	Subjects	Related
1	An Overview of BPE	
2	Innovation and Management Perspective	
3	Innovation and Management Perspective	
4	Analysis Perspective and Modeling	
5	Analysis Perspective and Modeling	
6	Analysis Perspective and Modeling	
7	Redesign Perspective and Modelling	
8	Redesign Perspective and Modelling	
9	Redesign Perspective and Modelling	
10	Migration and Evaluation Perspective	
11	Migration and Evaluation Perspective	
12	Emerging BPE applications	
13	Emerging BPE applications	
14	Project Presentation, Review	

Course Textbook	Business Information Systems – A process approach, Warboys et al.1999, McGrawHill
Recommended References	<p>Michael Hammer. Reengineering work: Don't automate, obliterate. Harvard Business Review, pages 104-112, July 1990.</p> <p>G. Decker et al. (2008) Oryx – An Open Modeling Platform for the BPM Community, BPM 2008, LNCS 5240, pp. 382–385, 2008</p> <p>Venkatraman, N. (1994), 'IT-Enabled Business Transformation: From Automation to Business Scope Redefinition', Sloan Management Review, Winter: 73-87.</p> <p>P. O. Lutthuis et al. (2001) Visualising business processes,</p>

	<p>Computer Language 27, 39-59.</p> <p>E. Wiersta (2000) Systematic analysis of business processes, Journal of Knowledge and Process Management, 7(2) 87-96.</p> <p>Thomas H. Davenport and Donna B. Stoddard (1994) Reengineering: Business Change of Mythic Proportions? MIS Quarterly, Vol. 18, No. 2 (Jun., 1994), pp. 121-127</p> <p>J. Racker et al. (2009) Business Process Modeling- A Comparative Analysis, Journal of AIS, Volume 10, Issue 4, pp. 333-363, April 2009</p> <p>P. Baloh et al. (2008) A Business Process Oriented Method of KM Solution Design: The Case of Samsung Electronics Anycall Gumi, AMCIS 2008, Toronto, Canada</p> <p>M. Dimitrov et al (2007) A BPMO Based Semantic Business Process Modelling Environment, SBPM 2007.</p>
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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

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	3	42
Presentations / Seminar			
Project	1	20	20
Preparatory reading	14	3	42
Homework Assignments			
Quizzes			
Midterm Exams	1	3	3
Final / Resit Exam	1	3	3
		Total Workload	152

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	50
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	10
4	Science	48	Computer	40
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