

School of Engineering and Natural Sciences / Industrial Engineering (English)

2024 - 2025 Academic Year

BUSINESS PROCESS ANALYSIS and DESIGN

Syllabus

Course Description					
Name	Code	Semester	T+A Hour	Credit	ECTS
BUSINESS PROCESS ANALYSIS and DESIGN	IND4110791	Fall Semester	3+0	3	6
Prerequisites Courses	MODELLEME VE BENZETİM; KALİTE MÜHENDİSLİĞİ				
Recommended Elective Courses					
Language of Instruction	English				
Course Level	First Cycle (Bachelor's Degree)				
Course Type	Elective				
Course Coordinator	Assoc.Prof. Yasin GÖÇGÜN				
Name of Lecturer(s)	Lect. Özgür EROL, Assoc.Prof. Yasin GÖÇGÜN				
Assistant(s)					
Aim	This course defines concepts related to business processes and methods for business process analysis and design. It provides an understanding of the connection between having well-designed business processes and industrial engineering practices to increase efficiency and effectiveness.				
Course Content	This course contains; Process and Business Process Definitions and Concepts,Industrial Engineering and Business Process Analysis and Design,Business Process and Analysis and Design and Other Quality Programs,Business Process Analysis Tools and Techniques,Business process reengineering case study,Analysis of stakeholders and their expectations in business processes,Modeling Business Processes (flowcharts) ,Identifying Key Performance Metrics for Business Processes and Measuring Processes,Introduction to AS-IS vs TO-BE business process concepts,Determining Performance Criteria for Business Processes,Business Process Reengineering and design,The Importance of Business Processes and Technology, Business processes in terms of e-commerce,Final project presentations,Final Project Presentations.				
Course Learning Outcomes			Teaching Methods	Assessment Methods	
1. Students define the concepts of process and business processes.			10, 14, 4, 9	A, E, F	
2. Students explain the definition of process analysis and design and the relationship of these concepts with quality management and similar programs.			10, 14, 4, 9	A, E, F	
3. Students evaluate process analysis and methods.			10, 14, 2, 4, 9	A, E, F	
4. Students define the approaches to redesigning processes.			10, 14, 2, 4, 9	A, E, F	
5. Students identify metrics to evaluate process performance.			10, 14, 2, 4, 9	A, E, F	
Teaching Methods	10: Discussion Method, 14: Self Study Method, 2: Project Based Learning Model, 4: Inquiry-Based Learning, 9: Lecture Method				
Assessment Methods	A: Traditional Written Exam, E: Homework, F: Project Task				
Lecture Schedule					
Sequence	Topics	Preliminary Preparation			
1	Process and Business Process Definitions and Concepts	Lecture Notes			
2	Industrial Engineering and Business Process Analysis and Design	Lecture Notes			
3	Business Process and Analysis and Design and Other Quality Programs	Lecture Notes			
4	Business Process Analysis Tools and Techniques	Lecture Notes			
5	Business process reengineering case study	Lecture Notes			
6	Analysis of stakeholders and their expectations in business processes	Lecture Notes			
7	Modeling Business Processes (flowcharts)	Lecture Notes			
8	Identifying Key Performance Metrics for Business Processes and Measuring Processes	Lecture Notes			
9	Introduction to AS-IS vs TO-BE business process concepts	Lecture Notes			
10	Determining Performance Criteria for Business Processes	Lecture Notes			
11	Business Process Reengineering and design	Lecture Notes			
12	The Importance of Business Processes and Technology, Business processes in terms of e-commerce	Lecture Notes			
13	Final project presentations	Project Presentations			
14	Final Project Presentations	Project Presentations			
Evaluation Methods		Weight(%)			
Midterm Exam		30			
General Exam		70			

Resources
Laguna, Manuel; Marklund, Johan. Business Process Modeling, Simulation and Design; Prentice Hall, 2005.; Seppanen, Marvin; Kumar, Sameer; Chandra, Charu; Process Analysis and Improvement; McGraw Hill, 2005.; Harvard Business Review Case Studies; lecture slides, current articles and news pieces, other reading.