Course number and name	END 429 / Process Management
Credits, contact hours, categorization of credits	3 credits / 42 hours / Engineering topic
Instructor or course coordinator	Cemil CEYLAN
Text book and other supplemental materials	• Rashid N. Khan (2004), *Business Process Management: A Practical Guide*, Meghan Kiffer Pr, ISBN: 0929652320. • Richard Hodgets, Translator Canan Çetin, Esin Can Mutlu, (1999), Theory, Process and Practice, Beta Press. • Gary Born, (1996), Process Management to Quality Improvement, John Wiley &Sons • Eugene H. Melan, (1993), Process Management, McGraw-Hill.

Course information	
Content	The aims of this course are to provide the concepts of process analysis, measurement and improvement in manufacturing and service activities, and to give an ability to apply knowledge of process management on application areas such as work description, productivity and quality improvement.
Prerequisites	END 215 System Thinking and Analysis
Type	Selected elective

Course learning outcomes
Students who pass the course will: I. Use the knowledge of organizational evolution, manufacturing and service industry development. II. Relate the processes and the concepts of quality and efficiency. III. Acquire the skills to describe, analyze, control, design, evaluate and develop processes. IV. Apply the techniques related to process management.

Student outcomes	Level of contribution
SO1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.	Partial
SO2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.	Partial
SO3. An ability to communicate effectively with a range of audiences.	Not applicable
SO4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	High
SO5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.	Partial
SO6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	Partial
SO7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.	High

Week	Topics	Learning outcome(s)
1	Evolution of Organizations	I
2	The Service Industry Evolution	I
3	Quality Improvement	II
4	Characteristics of A Process	II, III
5	Process Initialization, Defining Process	III
6	Process Control, Process Analyzing	III
7	Assessing and evaluating a process	III
8	Designing a New Process	III
9	Measurement of Process	III
10	Process Improvement	II, IV
11	Preparing Procedure and Subordinate	IV
12	Benchmarking	IV
13	A Practice of Process Improvement at 7 Steps	IV
14	Process Management in Service Systems	IV