



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Quality Management and Process Improvement							
Course Code		ISL444		Couse Level		First Cycle (Bachelor's Degree)			
ECTS Credit	5	Workload	125 ( <i>Hours</i> )	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		The course aims to provide the students with a full understanding of the pros and cons of all quality management and process improvement techniques and how to use them in the day-to-day operations of real-life business practice and enables them to preconceive the necessary infrastructure for successful ERP and business intelligence in the future.							
Course Content		The quality concept, Quality Management Standards, Total Quality Management Concepts, Process Concepts, create Process, Workflow Diagrams, Process Improvement, Six Sigma							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion					
Name of Lecturer(s)		Lec. Esin SAYIN							

### Prerequisites & Co-requisites

ECTS Requisite	120
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### Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

### Recommended or Required Reading

1	The Six Sigma Handbook: A Complete Guide For Managers At All Levels, Pyzdek, Thomas; McGraw Hill.
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Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction The overall introduction to the concept of 'Quality' and its requirements, The development of the quality management over its historical perspective
2	Theoretical	Quality Management Standards I Introduction to Quality standards and their basics QM in connection with the process improvement approach, The Principles of QM Standards by using ISO 9000
3	Theoretical	Quality Management Standards II A detailed introduction to ISO 9000 and basic introduction to other standards: such as AQAP, TS 16949, ISO 27001, ISO 22000, OHSAS 18001 and ISO 14001, ISO 20000
4	Theoretical	Auditing Process I Planning, performing and reporting of a Quality Management System audit Audit and its benefits to process improvement, The registration and accreditation of the quality certificate process
5	Theoretical	Auditing process II Understanding the auditors gaze in performing an audit process. How evaluate an 'objective evidence' for nonconformity, Corrective actions and its importance process improvement
6	Theoretical	Total Quality management I Basics of TQM, TQM models and awards: EFQM, MBNQA, and Deming Business context of TQM, Managing people and sustaining TQM
7	Theoretical	Total Quality Management II Principles of self-assessment, EFQM and its applications CMMI as special applications of TQM
8	Theoretical	Midterm Examination
9	Theoretical	Tools and Techniques of Process Improvement Process mapping and workflow modeling, Principles of BPR
10	Theoretical	Introduction to the principles of collecting data, Selecting tools and techniques, developing charts, graphs, lists, diagrams, histograms Pareto analysis, mistake proofing, cause- effect, fish-bone, scatter and regression analysis Seven management tools and its applications
11	Theoretical	Statistical Process Control (SPC) The principles of using the statistical tools to monitor and evaluate the process over time, Charting to detect out of control deviations How to secure the central tendency of a process



12	Theoretical	Quality Function Deployment (QFD) and Failure Mode and Effects Analysis (FMEA) How to develop a customer driven company Understanding the Voice of Customer via house of quality; Addressing customer needs by identifying and prioritizing actions Principles of FMEA How to minimize the collateral damage due to product or process change, Converting the qualitative input to specific prioritized actions
13	Theoretical	Design of Experiment (DOE) Basics of DOE Finding the right settings of key process input variable How to use KPIV to optimize the business processes
14	Theoretical	Principles of Six Sigma Methodology I General Review of six sigma methodology; and its overall terminology Understanding six sigma goals and metrics,
15	Theoretical	Principles of Six Sigma Methodology II The DMAIC roadmap to improvement process, How to choose the appropriate tools of process improvement for the stages of Six Sigma projects
16	Final Exam	Final Exam
17	Final Exam	Final Exam

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	3	70
Midterm Examination	1	25	1	26
Final Examination	1	28	1	29
Total Workload (Hours)				125
[Total Workload (Hours) / 25*] = ECTS				5

\*25 hour workload is accepted as 1 ECTS

### Learning Outcomes

1	Learn the basics of quality management and the principles of process improvement.
2	Be able to have a thorough understanding of business processes management and the ways in which to collect data in order to develop metrics for improvement.
3	Learn the tools, techniques and methods for processes monitoring and improvement.
4	Understand how quality management systems can support profitability of enterprise via continuous process improvement.
5	Associates quality control technique with the company's success in competition

### Programme Outcomes (International Trade and Finance)

1	To become individuals having high intellectual capacity, improved social skills, positive thinking, the ability to adapt to different environments and institutions
2	To have technical equipment, flexible thinking and action ability and multiple language skills to be capable of working in international platforms
3	To be able to utilize the basic knowledge they obtained with an interdisciplinary approach to business, economics, etc. in creating expertise in the fields of International Trade and Finance in accordance with the requirements of the globalized business world
4	To develop suggested solutions and recommendations by informing the people and institutions predicting regional, national and international problems in the fields of international trade and finance with a proactive approach
5	To possess the ability of analytical thinking and the ability to synthesize with quantitative proficiency as required in the program
6	To have the characteristics to inquire and investigate the knowledge and skills acquired during the education process in relation to the requirements of existing market conditions
7	To identify and analyze the validity of theories related to the international trade and finance and their relationships regarding current conditions
8	To possess the knowledge of a second foreign language to the extent of their individual abilities, besides the competency in the English language to be able to communicate effectively
9	To have the qualifications of managing and being managed to solve existing and potential problems encountered in practice
10	To be able to organize activities that will contribute to the personal and professional development of the employees in the department where he/she holds an executive position

### Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High

	L1	L2	L3	L4	L5
P1	3	2	3	2	1
P2	3	2	3	3	1
P3	3	2	3	3	2
P4	5	3	4	3	2
P5	5	3	4	4	3
P6	3	3	4	4	3



P7	5	4	4	3	4
P8	5	4	4	4	4
P9	3	5	3	4	3
P10	4	5	2	4	2

