AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Quality Assurance Systems								
Course Code	MME611		Couse Level		Third Cycle (Doctorate Degree)				
ECTS Credit	9	Workload	229 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	To make students learn the quality and quality control definitions and the varieties at the quality and quality control understanding in the global world and the principles related to the total quality management.								
Course Content	The presentation of the attendance of all manpower, all sides of the jobs, all population and all the service and product, to meet the demands and needs of the customers just on time, to make possible the expectations in the future. To behave as a leader and a model in execution of managerial duties. Change and management of EFQM excellence model; standard and standardization with production of standard and the importance of in service sector; to inform about the quality management methods and especially environmental standards.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Project Based Study, Individual Study								
Name of Lecturer(s)									

Prerequisites & Co-requisities	
Language Requisite	Yes

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	15
Final Examination	1	60
Quiz	4	15
Assignment	5	5
Term Assignment	1	5

Recommended or Required Reading	
1	1. Feigenbaum A.V., Total Quality Control, ISBN-13: 978-0070220034, 4th edition, 2004.
2	2. Juran J.M., Juran on Quality by Design: The New Steps for Planning Quality into Goods and Services, ISBN-13: 978-0029166833, 1992.
3	3. EFQM Mükemmellik Modeli 2000, EFQM VE KALDER Yayınları, İstanbul, 1998.
4	4. ISO 9001:2008 Quality management systems – Requirements
5	5. OHSAS 18001:2007 Occupational health and safety management systems – Requirements
6	6. ISO 50001:2011Energy management systems – Requirements with guidance for use.
7	7. ISO 14001:2004, Environmental management systems – Requirements with guidance for use.

Week	**Weekly Detailed Course Contents**	
1	Theoretical	Quality classification, quality definition, quality and competition. Approach of W. A. SHEWHART, CROSBY, DEMING, FEIGENBAUM, JURAN, TAGUCHI, ISHIKAWA, IMAI.
2	Theoretical	Quality responsibilities at activities, marketing, design engineering, purchasing, and process design.
3	Theoretical	The purpose of total quality management and basic features, basic characteristic of total quality management.
4	Theoretical	Definition of customer, customer satisfaction, customer satisfaction and measurement.
5	Theoretical	Constant correcting (Kaizen), customer satisfaction (Kaizen), constant satisfaction features.
6	Theoretical	To compare with definition quality cycles and other study groups. Brain storming, collecting datum technics, Pareto analyses, cause effect diagram, histogram and classification.
7	Intermediate Exam	Midterm Exam
8	Theoretical	Total participation, project groups, advice system, participation benefits, and constant education.
9	Theoretical	ISO 9001:2008 Quality management systems – Requirements
10	Theoretical	OHSAS 18001:2007 Occupational health and safety management systems – Requirements

11	Theoretical	ISO 50001:2011Energy management systems – Requirements with guidance for use.
12	Theoretical	ISO 14001:2004, Environmental management systems – Requirements with guidance for use.
13	Theoretical	Occupational standards.
14	Theoretical	Occupational standards.
15	Theoretical	Occupational standards.
16	Final Exam	Final Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	16	5	4	144
Assignment	5	0	3	15
Term Project	1	15	10	25
Quiz	4	3	1	16
Midterm Examination	1	15	2	17
Final Examination	1	10	2	12
			Total Workload (Hours)	229
			[Total Workload (Hours) / 25*] = **ECTS**	9

**25 hour workload is accepted as 1 ECTS*

Learning Outcomes

1	To explain quality and quality concept.
2	To understand importance of quality guarantee.
3	Standard and standardization.
4	Quality management system.
5	Total quality management.
6	EFQM and change management.
7	Occupational standards.

Programme Outcomes *(Mechanical Engineering (English) Doctorate)*

1	1. In Mathematics, natural sciences and mechanical engineering, department has the sufficient infrastructure; the ability to use the theoretical and practical information for engineering solutions
2	2. The ability to identify, define, and solve the formula for complex engineering problems; the ability to select and apply for the appropriate analytical methods and modelling techniques
3	3. To meet desired needs of a system, system component, or process, analysing and designing skill under realistic constraints; in this respect, the ability to apply the methods of modern design
4	4. The ability to use and choose modern techniques and tools for required engineering applications and; the ability to use information technology effectively
5	5. The ability to design the experiment, collect the data for the experiment and interpret to analysing results
6	6. The ability to use computer software and hardware information, access to information and other information sources
7	7. The ability to work individually and with multidisciplinary teams effectively, taking responsibility self-confidence for complex situations
8	8. The ability to communicate with foreign colleagues by having high level of foreign language knowledge in the field of engineering
9	9. Monitoring the science and technology developments and the ability to renew itself with innovative ideas constantly
10	10. Professional and ethical responsibility awareness
11	11. Having an adequate information and awareness in the subjects of occupational safety, occupational health, social security rights, quality control and management issues of environmental protection
12	12. The ability to appreciate the effects of engineering solutions and applications in universal and social dimensions
13	13. The ability to be enlightened to the experts or non-expert audience groups on the issues related with engineering problems and solutions written and oral
14	14. The ability to have adequate knowledge and skills in the project development and application, manage the activities planning, including the projects to the employees having the responsibility of the project by increasing vocational awareness

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

	L1	L2	L3	L4	L5	L6	L7
P1	5	3	5	4	4	4	5
P2	4	3	5	4	4	4	5

P3	5	4	5	4	3	4	5
P4	5	4	5	5	3	4	5
P5	5	4	5	5	3	5	4
P6	3	3	3	5	3	5	4
P7	3	5	4	5	5	5	3
P8	3	3	4	3	5	5	3
P9	4	5	4	4	5	5	3
P10	4	5	4	4	4	3	4
P11	4	5	4	4	3	3	4
P12	5	3	5	5	4	3	4
P13	5	4	5	5	5	4	3
P14	5	3	5	5	3	4	5