AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Innovation Methods								
Course Code	MME614		Couse Level	Third Cycle (Doctorate Degree)					
ECTS Credit	9	Workload	229 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	To introduce basic terms and concepts of innovation. To discuss the link between design and innovation. To explain how industrial design is positioned in new product or system organizations. To show students how to link certain concepts of innovation with real situations in industrial life and customer expectations. To teach important tools for innovation management and apply them at a conceptual level.								
Course Content	This course aims to introduce some key elements of innovation management whereby students can better position design activities within the framework of the innovation process. Models of innovation, the role of technology transfer in innovation, knowledge management, innovation strategies, and product planning are some of the areas that will be covered. Management tools and techniques regarding R&D, design, new product development, and innovation will also be discussed. Projects will be guided for specific areas of interest of students.								
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. Paul Trott, Innovation Management and New Product Development, Pearson Education, 3rd ed. (2005)
2	2. J. Cagan, Creating Breakthrough Products: Innovation from Product Planning to Program Approval, FT Press (2001)
3	3. T. Kelley, J. Littman, The Ten Faces of Innovation: IDEO's Strategies for Defeating the Devil's Advocate and Driving Creativity Throughout Your Organization, Broadway Business (2005)

Week	Weekly Detailed Course Contents	
2	Theoretical	Introduction to Innovation Management
3	Theoretical	Definitions, Types of Innovations, Models of Innovations
4	Theoretical	Managing Innovation within Firms
5	Theoretical	Managing Innovation within Firms
6	Theoretical	New Product Development
7	Theoretical	Managing the NPD Team
8	Intermediate Exam	Midterm Exam
9	Theoretical	The Role of Technology Transfer in Innovation
10	Theoretical	Intellectual Property
12	Theoretical	Design Management
13	Theoretical	Design Management
14	Theoretical	Project Presentations
15	Theoretical	Project Presentations
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	1. Student will be able to explain the role of industrial design in innovation management and related processes.
2	2. Student will be able to explain various models regarding technology transfer.
3	3. Student will be able to explain the principal requirements and concepts related to R
4	4. Student will be able to describe the methods for intellectual property rights and their application areas.
5	To understood innovation

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
P1	3	4	3	3	3
P2	4	5	4	4	4
P3	5	4	5	5	5
P4	5	4	5	5	5
P5	4	4	4	4	4
P6	3	3	3	3	3
P7	5	4	4	3	3
P8	4	4	3	4	4
P9	3	4	5	5	5
P10	3	4	5	5	3
P11	4	3	4	4	4

P12	5	4	3	3	5
P13	5	5	3	4	5
P14	4	4	4	5	4