AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Decanter Theory and Applications								
Course Code	MME601		Couse Level		Third Cycle (Doctorate Degree)				
ECTS Credit	9	Workload	228 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	Teaching about the basic decanter, separation principle and decanter applications. Describing basic construction, components of the decanter and applications.								
Course Content	Introduction, the basic decanter, separation principle, decanter applications and design, special features, decanter theories								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Individual Study, Problem Solving								
Name of Lecturer(s)									

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

Recommended or Required Reading	
1	1. Decanter Centrifuge Handbook Alan Record and Ken Sutherland

Week	Weekly Detailed Course Contents	
2	Theoretical	Decanter Design
3	Theoretical	Decanter Design
4	Theoretical	Decanter Design
5	Theoretical	Decanter Applications
6	Theoretical	Decanter Applications
7	Theoretical	Decanter Applications
8	Intermediate Exam	Midterm Exam
9	Theoretical	Decanter Theories
10	Theoretical	Decanter Theories
11	Theoretical	Decanter Theories
12	Theoretical	Calculations and Scaling
13	Theoretical	Calculations and Scaling
14	Theoretical	Instrumentation and Control
15	Theoretical	Instrumentation and Control
16	Theoretical	Final Exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	16	5	3	128
Assignment	5	0	3	15
Term Project	1	15	10	25
Quiz	4	3	1	16
Midterm Examination	1	20	2	22

Final Examination	1	20	2	22
			Total Workload (Hours)	228
			[Total Workload (Hours) / 25*] = **ECTS**	9
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	He/She can explain about basic decanter
2	He/She can comment separation principle
3	He/She can comment decanter applications
4	He/She can comment components of decanter
5	He/She can compare decanter theories

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	4	5	5	4	5
P2	5	5	4	5	5
P3	4	5	4	5	5
P4	5	4	5	5	5
P5	5	4	5	5	4
P6	4	5	5	5	5
P7	4	4	4	5	4
P8	5	4	4	5	4
P9	4	4	5	4	5
P10	5	5	5	4	5
P11	5	5	5	5	5
P12	4	5	4	5	4
P13	4	5	4	5	4
P14	5	4	5	5	5