



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Pyrolysis Method							
Course Code		AEK116		Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	3	Workload	74 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		Within the scope of the present study, students given theories and technological advancements relevant with waste management as well as pyrolysis method, mechanism, reactions and current examples.							
Course Content		Fundamentals of pyrolysis method, its mechanical operations, relevant chemical reactions and principles, waste management facilities, current transformation systems as well as relevant methods.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Case Study, Individual Study					
Name of Lecturer(s)									

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Alternatif Enerji Kaynakları Yazar: Mustafa Acaroğlu
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Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction, solid waste concept
2	Theoretical	Solid waste management
3	Theoretical	Amount and constituents of solid waste, solid waste analysis methods
4	Theoretical	Classification of solid waste, chemical composition of solid waste
5	Theoretical	Collecting solid waste, route determination, transfer stations
6	Intermediate Exam	Midterm exam
7	Theoretical	Solid waste disposal methods, recycling, reusing
8	Theoretical	Pyrolysis technic, general principles
9	Theoretical	Physical and chemical steps in pyrolysis method
10	Theoretical	Polysis processes of different waste products
11	Theoretical	Polysis processes of different waste products
12	Theoretical	Polysis processes of different waste products
13	Theoretical	Examples of energy production plants
14	Theoretical	Storage and disposal of waste products
15	Final Exam	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	13	1	1	26
Assignment	6	1	1	12
Project	3	2	2	12
Individual Work	6	1	1	12
Midterm Examination	1	5	1	6
Final Examination	1	5	1	6
Total Workload (Hours)				74
[Total Workload (Hours) / 25*] = ECTS				3

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	Defines waste product and classifies
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2	Learns material classification, analysis methods of physical, chemical parameters.
3	Learns pyrolysis methods and usage areas.
4	
5	

Programme Outcomes (Alternative Energy Sources Technology)

1	To have knowledge about basic science and technology.
2	To have knowledge about basic energy and alternative energy sources.
3	To have knowledge about basic electrical and electronic laws.
4	To have knowledge about the installation and operation of energy facilities.
5	Learning the methods of recycling of waste and use of energy.
6	To have experience in energy generation and project design.

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	3	3	3	3
P2	4	4	4	4	4
P5	5	5	5	5	5

