

# AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Agricultural Machinery Service and Maintenance								
Course Code		TAM224		Couse Level		Short Cycle (Associate's Degree)				
ECTS Credit	4	Workload	100 (Hours)	Theory	2	Practice	2	Laboratory	0	
Objectives of the Course Gaining competence ,design of machines used in agrıcultural sector in computer enviroment, mecha drawing, prepationg of user guide with machinery catalog, protyping processes is aimed by this less										
Course Content		Agricultural machinery design, modelling of machine in computer environmental as three-dimensional, creation of technical drawings, creations user guides of machines and catalogs, manufacture of prototype machine								
Work Placement N/A		N/A								
Planned Learning Activities and Teaching Methods			Explanation (Presentation), Demonstration, Discussion, Project Based 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**

Week	Weekly Detailed Course Contents				
1	Theoretical	Knowledge about project and choose of machinery.			
2	Theoretical	Research of Machinery.			
3	Theoretical	Digitizing of machinery parts.			
4	Theoretical	Reverse engineering applications.			
5	Theoretical	Revision of machinery and parts.			
6	Theoretical	Computer aided three dimensional design of machinery parts.			
7	Theoretical	Computer aided three dimensional design and assembly of machinery parts.			
8	Intermediate Exam	Midterm exam.			
9	Theoretical	Preparing of visualization for machinery catalogs and brochures.			
10	Theoretical	Drafting of machinery parts.			
11	Theoretical	Preparing of machinery catalogs and brochures.			
12	Theoretical	Manufactoring of machinery prototype using rapid prototyping methods.			
13	Theoretical	Manufactoring of machinery prototype using rapid prototyping methods.			
14	Theoretical	Manufactoring of machinery prototype using rapid prototyping methods.			
15	Theoretical	Presentation of projects.			

Workload Calculation							
Activity	Quantity	Preparation		Duration		Total Workload	
Lecture - Theory	14		0	2		28	
Lecture - Practice	14		0	2		28	
Project	1		28	1		29	
Midterm Examination	1		5	1		6	
Final Examination	1	Ι.,	8	1		9	
Total Workload (Hours) 100						100	
[Total Workload (Hours) / 25*] = <b>ECTS</b> 4						4	
*25 hour workload is accepted as 1 ECTS							

## **Learning Outcomes**

1 To be able to create user guide and machinery catalogs.



To be able to make protyping and models by reverse engineering methods.

#### **Programme Outcomes** (Agricultural Machinery)

- To be able to comprehend social, cultural and societal responsibility and keep up with national and international up contemporary issues and developments.
- To be able to be bounded to the Atatürk nationalism, adopted to the national, ethic, spiritual and cultural value of the Turkish Nation, opened to the universal and modern development, adopted the richness, deep seated and productive properties of the Turkish language, having language sympathy and awareness, having reading pleasure and habit and having sufficient foreign language for their vocational necessities, In the directions of the Atatürk Principles and Revolutions,
- To be able to recognize the basic computer hardware and operating systems, knowledge of internet usage being able to prepare documents, electronic tables and presentation by using office programs.
- To be able to be aware of ethic responsibility and vocational profession and to have consciousness of a lifelong learning concept
- 5 To be able to know current vocational issues and to have skill to define and interprete them.
- To be able to be aware of the universal and social dimensional effects in engineering solutions, and to be able to have knowledge about entrepreneurship and newfangleness.
- To recognize the materials which used for preparation of agricultural machinery and have skill for the choosing the appropriate material.
- 8 To be able to acquire the skill of using the necessary tools and equipments which are used in the production and maintenance of agricultural machinery.
- To be able to prepare the agricultural tools and machineries, to determine the breakdowns and to do periodic maintenance and repairs.
- To be able to comprehend the picture of the agricultural tools and machinery and their fabrication , and have the skill to draw them via computer.
- To be aable to assemble and to combine machinery pieces by using demountable and nondetachable junction methods.
- 12 To be able to have the skill of resistance calculations of the agricultural tool and machinery on computer.
- To be able to test and control the suitability of new machines and mechanic equipment to the definite standarts and technical properties.
- 14 To be able to have general knowledge of agricultural production.
- 15 To be able to have knowledge of basic sciences.

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

	L1	L2		
P3	1	1		
P5	5	5		
P6	3	3		
P7	1	1		
P8	4	4		
P9	1	1		
P10	3	3		
P13	3	3		
P14	4	4		

