AYDIN ADNAN MENDERES UNIVERSITY
KOÇARLI VOCATIONAL SCHOOL
MECHANICAL AND METAL TECHNOLOGY
AGRICULTURAL MACHINERY
COURSE INFORMATION FORM

Course Title	Engineering Science								
Course Code	TAM130		Couse Level		Short Cycle (Associate's Degree)				
ECTS Credit	6	Workload	100 *(Hours)*	Theory	3	Practice	1	Laboratory	0
Objectives of the Course	Providing information about,The behaviours of required solids and fluids in the design of machinery and elements in variety of enviromental conditions, gain the ability to create solutions for the problems faced by ,is aimed in this course.								
Course Content	The mechanic of solid bodies, fluid mechanic, thermodynamics, thermal energy.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Demonstration, Discussion, Individual Study, Problem Solving								
Name of Lecturer(s)									

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading	
1	Engineering Sience (Gül H., KÖK M., DENKTAŞ M., ESKİ Ö., DİLAY Y., DOĞAN A., SERTKAYA A., BUZLU B., AYDEMİR E., BIYIK M., KARADEMİR Ş.)
2	Strength of Materials (Hanifi BİNİCİ)
3	Fluid Mechanics, Fundamentals and Applications (ÇENGEL Y.A., CIMBALA J.M)
4	Lecture notes (MEGEP)

Week	Weekly Detailed Course Contents	
1	Theoretical	Strength of materials (Solid, rigid, elastic and plastic bodies)
2	Theoretical	Strength of materials (Load types,boundry conditions, stress and types)
4	Theoretical	Strength of materials (Normal stress)
5	Theoretical	Strength of materials (Share stress)
6	Theoretical	Strength of materials (Buckling)
7	Theoretical	Strength of materials (Buckling)
8	Intermediate Exam	Midterm exam.
9	Theoretical	Fluis mechanics.
10	Theoretical	Fluis mechanics.
11	Theoretical	Fluis mechanics.
12	Theoretical	Thermodynamics.
13	Theoretical	Thermodynamics.
14	Theoretical	Heat transfer.
15	Theoretical	Heat transfer.
16	Theoretical	

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	3	42
Lecture - Practice	14	0	1	14
Assignment	2	9	0	18
Midterm Examination	1	12	1	13

Final Examination	1	12	1	13
			Total Workload (Hours)	100
			[Total Workload (Hours) / 25*] = **ECTS**	4
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	
2	
3	

Programme Outcomes *(Agricultural Machinery)*	
1	To be able to comprehend social, cultural and societal responsibility and keep up with national and international up contemporary issues and developments.
2	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,
3	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.
4	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.
6	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.
7	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.
9	To be able to prepare the agricultural tools and machineries, to determine the breakdowns and to do periodic maintenance and repairs.
10	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.
11	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.
13	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	L3
P5	2	2	2
P6	5	5	5
P7	3	4	1
P12	5	5	
P13	1	2	1
P15	3	1	2