

## 2023-2024 SPRING SEMESTER ENG 499 MULTI DISCIPLINARY PROJECT LIST

Şube No (Group No)	Akademisyen (Lecturer)	Proje Adı (Project Name)	Proje Bölümü (Project Department)	Projeyi Alabilecek Öğrencilerin Bölümleri (Departments of students Who will register for the project)
3	Prof. Dr.ÖMER EYERCİOĞLU	DESIGN AND CONSTRUCTION OF A VISCOMETER	Mech. Eng.	Mech. Eng. Electrical and Electronics Eng.
4	Dr.Öğr.Üyesi N. FURKAN DOĞAN	Savonius wind turbine (SRT) design and prototype: This study consists of the design, analysis, and prototype stages of SRTs: vertical-axis wind turbines. Solid modeling software such as SolidWorks will be used in the design phase	Mech. Eng.	Mech. Eng. Engineering Physics
5	Prof. Dr. EMRAH ÖZAHİ	A System Restructuring Study by Using Lean Manufacturing Principles to Increase Production Efficiency by Reducing Waste Energy.	Mech. Eng.	Mech. Eng. Industrial Eng.
6	Dr.Öğr.Üyesi M. ERKAN KÜTÜK	Design and Implementation of a 2 DOF Planar Parallel Manipulator	Mech. Eng.	Mech. Eng. Electrical and Electronics Eng.
7	Dr.Öğr.Üyesi SADIK OLGUNER	Multiobjective optimization of a gearbox for power generation applications	Mech. Eng.	Mech. Eng. Industrial Eng.
8	Dr.Öğr.Üyesi SADIK OLGUNER	Defect detection on material surface with image processing	Mech. Eng.	Mech. Eng. Electrical and Electronics Eng.
11	Prof.Dr. SADETTİN KAPUCU	Design a device that reduces tremors. Users of wearable shaking reduction devices experience less trembling by internally creating forces that cancel out or lessen the amount of trembling they experience.	Mech. Eng.	Mech. Eng. Electrical and Electronics Eng.
12	Doç.Dr. Hüseyin YAĞLI	Off-grid smart green city design considering energy, building and food sustainability	Mech. Eng.	Mech.Eng. Electrical and Electronics Eng. Civil Eng. Food Eng.

13	Prof.Dr. Nihat YILDIRIM Prof.Dr. A. İhsan KUTLAR	Design and construction of a prototype load cell based on strain gage technology	Mech. Eng.	Mech.Eng. Electrical and Electronics Eng.
14	Prof.Dr. Nihat YILDIRIM Prof.Dr. A. İhsan KUTLAR	Development of a defect detection system based on AI coding	Mech. Eng.	Mech. Eng. Electrical and Electronics Eng. Engineering Physics Industrial Eng.
15	DOÇ.DR. FUAT YILMAZ	Design and construction of a Bladeless Vortex Hydro Turbine	Mech. Eng.	Mech. Eng. Electrical and Electronics Eng. Industrial Eng.
17	PROF.DR. Ö. YAVUZ BOZKURT	Proje 1 – 3B yazıcı ile fırçasız DC elektrik motoru tasarımı ve üretimi Bu proje 3Boyutlu yazıcı kullanarak üretilebilecek bir fırçasız DC elektrik motoru tasarımı ve üretimini içermektedir. Öncelikle proje çıktısı olacak fırçasız DC motor	Mech. Eng.	Mech.Eng. Electrical and Electronics Eng.
19	PROF.DR. Ö. YAVUZ BOZKURT	Proje 2 – 3 Boyutlu yazıcılar için filament kurutucu saklama kutusu Bu proje 3 Boyutlu yazıcılarda kullanmak üzere filamentlerin nem almasını önlemek için ısıtıcı düzeneği bir filament saklama kutusu tasarımı ve üretimini kapsamaktadır. Bu proje için aranan paydaşlar Makine Mühendisliği, Elektrik-Elektronik Mühendisliği veya Malzeme Mühendisliği bölümünü öğrencileridir. Project 2 – Filament dryer storage box for 3D printers This project covers the design and production of a filament storage box with a heater device to prevent the filaments from getting moisture for use in 3D printers. Stakeholders sought for this project are students of Mechanical Engineering, Electrical-Electronics Engineering or Materials Engineering departments.	Mech. Eng.	Mech.Eng. Electrical and Electronics Eng. Metallurgical and Materials Eng.
20	DR. ÖĞR. ÜYESİ ALİ KILIÇ	Conceptual and Architectural Design of Autonomous Warehouse Robots	Mech. Eng.	Mech. Eng. Electrical and Electronics Eng. Industrial Eng.
22	PROF.DR. AHMET ERKLIĞ	Production of self-balancing robot	Mech. Eng.	Mech. Eng. Electrical and Electronics Eng. Engineering Physics
23	PROF.DR. AHMET ERKLIĞ	Experimental and numerical investigation of flexural behavior of sandwich composite structures	Mech. Eng.	Mech. Eng. Metallurgical and Materials Eng.

25	PROF.DR. M. YAŞAR GÜNDOĞDU	CHEMICAL ANALYSIS OF HUMAN BLOOD	Mech. Eng.	Mech. Eng.
				Electrical and Electronics Eng.
26	PROF.DR. M. YAŞAR GÜNDOĞDU	ARTERY DEVELOPMENT OF HUMAN IN WORLD	Mech. Eng.	Mech. Eng.
				Electrical and Electronics Eng.
28	DOÇ.DR. N. KARA TOĞUN	Internet Based Smart Irrigation and Remote Monitoring System	Mech. Eng.	Food Eng.
				Electrical and Electronics Eng.
29	DOÇ.DR. N. KARA TOĞUN	Generation of electricity from water using rack and pinion mechanism	Mech. Eng.	Mech. Eng.
30	Dr.Öğr.Üyesi Serkan ÖZBAY	Investigating the conductivity of stretchable fabrics for different bending levels	Electrical and Electronics Eng.	Electrical and Electronics Eng.
				Textile Engineering
31	Doç.Dr. Taner Ince	Hand Motion Controlled Robotic Vehicle	Electrical and Electronics Eng.	Electrical and Electronics Eng.
				Mech. Eng.
32	Dr. Öğr. Üyesi SEYDİ KAÇMAZ	Smart Food Storage and Monitoring System	Electrical and Electronics Eng.	Electrical and Electronics Eng.
				Food Eng.
33	Prof.Dr. Nuran Doğru	Remote controlled smart trolley	Electrical and Electronics Eng.	Electrical and Electronics Eng.
				Mech. Eng.
34	Doç.Dr. Tolgay Kara	Sensor-free Mobile Robot with Visual Feedback	Electrical and Electronics Eng.	Electrical and Electronics Eng.
				Mech. Eng.
35	Dr. Öğr. Üyesi Musa Bute	Design of solid granule pumping machine	Electrical and Electronics Eng.	Electrical and Electronics Eng.
				Mech. Eng.

36	Prof.Dr.Ahmet Mete VURAL	Electromagnet crane	Electrical and Electronics Eng.	Electrical and Electronics Eng. Mech. Eng.
37	Prof.Dr.Ahmet Mete VURAL	Wearable Gas Sensor	Electrical and Electronics Eng.	Electrical and Electronics Eng. Food Eng.
38	Dr.Öğr.Üyesi Mahmut AYKAÇ	Undeivable Seat Belt	Electrical and Electronics Eng.	Electrical and Electronics Eng. Mech. Eng.
39	Prof. Dr. Sema Kayhan	Development of Student Attendance System Based on Fingerprint Biometrics	Electrical and Electronics Eng.	Electrical and Electronics Eng. Industrial Eng.
40	Prof. Dr. Ergun ERÇELEBİ	Designing a student attendance tracking system based on artificial intelligence and facial recognition.	Electrical and Electronics Eng.	Electrical and Electronics Eng. Industrial Eng. Food Eng.
41	Prof. Dr. Ergun ERÇELEBİ	Designing a granular dried legume or dried fruit sorting device based on artificial intelligence and image processing.	Electrical and Electronics Eng.	Electrical and Electronics Eng. Industrial Eng. Food Eng.
42	Prof. Dr. Ergun ERÇELEBİ	Design of a machine that detects defects in textile fabric.	Electrical and Electronics Eng.	Electrical and Electronics Eng. Textile Engineering Mech. Eng. Industrial Eng.
43	Prof. Dr. Medeni MASKAN	Use of ultrasound in detection of maturity level of fruits	Food Eng.	Food Eng. Optic and Acoustical Eng. Engineering Physics Electrical and Electronics Eng.
44	Prof.Dr. Sibel FADİOĞLU	Design of electrophoresis instrumental system for protein purification	Food Eng.	Food Eng. Mech. Eng. Electrical and Electronics Eng.
45	Prof.Dr. Mustafa BAYRAM	Food Consumption Trends	Food Eng.	Food Eng., Industrial Eng., Computer Eng., Mechanical Eng. Software Eng.,
46	Prof. Dr. Çiğdem AYKAÇ	Research on alternative polymers for food packaging	Food Eng.	Food Eng. Metallurgical and Materials Eng.
48	Prof. Dr. Şenol İBANOĞLU	Design of amachinery to measure omega 3 and omega 6 levels in vegetable oils using spectroscopy	Food Eng.	Food Eng. Engineering Physics Optic and Acoustical Eng.
49	Prof. Dr. Hüseyin BOZKURT	Novel Mathematic modelling in Engineering	Food Eng.	Food Eng. Industrial Eng. Electrical and Electronics Eng.
50	Prof. Dr. Emine ERÇELEBİ	Tarımsal/endüstriyel atıkların değerlendirilmesi	Food Eng.	Food Eng. Industrial Eng.
51	Prof.Dr. A. Coşkun DALGIÇ	Process simulation in food industry	Food Eng.	Food Eng. Industrial Eng. Mech. Eng.
52	Prof. Dr. Esra İBANOĞLU	Exploring Polymorphic structures in chocolate on the production line	Food Eng.	Food Eng. Optic and Acoustical Eng.
53	Prof.Dr. Ahmet KAYA	Design of enzyme/oxygen indicator.	Food Eng.	Food Eng. Engineering Physics Optic and Acoustical Eng.
54	Prof.Dr. Sevim KAYA	Changes in properties of milk during cheese production	Food Eng.	Food Eng. Optic and Acoustical Eng.
55	Dr. Öğr. Üyesi Hasene KESKİN ÇAVDAR	Design of automated titration system for determination of enzyme activity	Food Eng.	Food Eng. Mech. Eng. Electrical and Electronics Eng.
56	Dr. Öğr. Üyesi Fatih BALCI	Elektrospinning ile Gıda Atıklarından Biyoplastik Lif Üretimi ve Tekstil Uygulamaları	Food Eng.	Food Eng. Textile Engineering
59	Prof.Dr.Ömer F. Bakkaloğlu	Design of solar cell	Engineering Physics	Engineering Physics Mech. Eng. Electrical and Electronics Eng.
60	Assist. Prof. Dr. Mehmet KOÇAK	Wireless Transmission of Electricity	Engineering Physics	Engineering Physics Electrical and Electronics Eng. Optic and Acoustical Eng.
61	Dr. Öğr. Üyesi Serap Çelik	Efficiency calculations of half-cut solar panels under shaded conditions	Engineering Physics	Engineering Physics Optic and Acoustical Eng. Electrical and Electronics Eng.
62	Prof. Dr. Okan Özer	Applications of Monte Carlo Method (MCM) in Reactor Safety&Security Systems	Engineering Physics	Engineering Physics Industrial Eng.
63	Prof. Dr. Okan Özer	Thermodynamic simulation of performance of Otto Cycle with Heat Transfer and Variable Specific Heats of Working Fluid	Engineering Physics	Engineering Physics Mech. Eng.
64	Prof. Dr. Okan Özer	Calculation of Decay Heat Power in a PWR type Reactor - Akkuyu/Mersin example	Engineering Physics	Engineering Physics Electrical and Electronics Eng.
65	Prof. Dr.Beşire GÖNÜL	An investigation of band gap tuning in semiconductors for photonic devices	Engineering Physics	Engineering Physics Optic and Acoustical Eng. Metallurgical and Materials Eng.

66	Prof.Dr.Ahmet BİNGÜL	Bidirectional optical communication	Engineering Physics	Engineering Physics Optic and Acoustical Eng. Mech. Eng. Electrical and Electronics Eng.
67	Prof.Dr.Eser OLĞAR	Design and construction of absorptive acoustic panels	Engineering Physics	Engineering Physics Optic and Acoustical Eng. Civil eng. Mech. Eng. Architecture
68	Prof.Dr.A.Necmeddin YAZICI	Investigation of luminaire and road properties on uniform lighting in road examples.	Engineering Physics	Engineering Physics Optic and Acoustical Eng. Electrical and Electronics Eng.
71	Prof.Dr.Hayriye TÛTÛNCÛLER	Investigation of dye sensitized solar celles	Engineering Physics	Engineering Physics Electrical and Electronics Eng. Food Eng.
72	Prof.Dr.Ayda BEDALL	Prototype automatic glass-plastic bottle sorter for a recycling plant.	Engineering Physics	Engineering Physics Electrical and Electronics Eng.
73	Doç.Dr.Mustafa YILMAZ	Water harvesting from moisture in the air by 3D mesh nets.	Engineering Physics	Engineering Physics Optic and Acoustical Eng. Mech. Eng.
74	Prof.Dr.Ramazan KOÇ	Paper based aluminum ion battery design	Engineering Physics	Engineering Physics Optic and Acoustical Eng. Industrial Eng. Textile eng. Mech. Eng. Electrical and Electronics Eng. Food Eng. Chemistry department
75	Prof. Dr. Nihat Atmaca	Earthquake design of different structures by ETABS.	Civil Eng.	Civil eng. Mech. Eng. Electrical and Electronics Eng.
78	Doç. Dr. Mehmet Eren GÛlşan	Design of an Industrial Building Including Solar Energy Panels.	Civil Eng.	Civil eng. Mech. Eng. Electrical and Electronics Eng.
80	Prof.Dr. Mustafa Özakça	Design of innovative resilient infrastructure for campus (transportation, heating/cooling, clean/waste qater system, energy/electricity, etc.The student group	Civil Eng.	Civil eng. All Departments
81	Prof. Dr. Hamza GÛllü	Post-Eartquake Damage Aesessment of Buldings .	Civil Eng.	Civil eng. Mech. Eng.
82	Prof. Dr. Talha Ekmekyapar	Artificial Intelligence in (Civil Engineering)	Civil Eng.	Civil eng. Mech. Eng.
83	Dr.Öğr.Üyesi Esra Eylem Karataş	Design of ecological and sustaniable buildings	Civil Eng.	Civil eng. Mech. Eng. Electrical and Electronics Eng. Architecture
84	Prof.Dr.Mustafa GÛnal	Investigation of climate change effects on dam reservoir water level in Gaziantep region.	Civil Eng.	Civil eng. Mech. Eng.
85	Dr.Öğr. Üyesi Aşşe Yeter GÛNAL	Dam lakes effects on change of climate in Gaziantep region.	Civil Eng.	Civil eng. Mech. Eng.
86	Doç. Dr. Mehmet Tolga GÖĞÛŞ	Design of on extensometer for tensile testing of metals	Civil Eng.	Civil eng. Mech. Eng.
87	Prof Dr Ali Fırat ÇABALAR	Developing a new material for bonding.	Civil Eng.	Civil eng. Metallurgical and Materials Eng.
88	Prof. Dr. Nildem Tayşı	Design and Analysis of Wind Turbines.	Civil Eng.	Civil eng. Mech. Eng. Electrical and Electronics Eng. Industrial Eng.
89	Prof.Dr.Serap U.SEÇKİNER	Work load balancing in scheduling problems	Industrial Eng.	Industrial Eng. Mech. Eng.
90	Doç.Dr. Zeynep D. U. DURMUŞOĞLU	Simulation of different queing systems in a manufacturing or service organization where there are parellel resources.	Industrial Eng.	Industrial Eng. Mech. Eng.
91	Doç.Dr. Alptekin DURMUŞOĞLU	A system restructuring study by using lean manufacturing principles to increase manufacturing efficiency	Industrial Eng.	Industrial Eng. Mech. Eng.
94	Prof. Dr. Mehmet Topalbekiroğlu	Design of shedding mechanism for hand-made woven carpet production	Textile Eng.	Textile Eng. Mech. Eng. Electrical and Electronics Eng.
95	Prof. Dr. Cem Güneşoğlu	Web based testing laboratory search portal	Textile Eng.	Textile Eng. Electrical and Electronics Eng. Computer Eng.
96	Prof. Dr. Hatice KÛbra Kaynak	Investigation of conductive yarn production	Textile Eng.	Textile Eng. Metallurgical and Materials Eng.
97	Doç. Dr. Halil İbrahim Çelik	Textile Based Piezoelectric Sensor	Textile Eng.	Textile Eng. Electrical and Electronics Eng.

98	Prof. Dr. Züleyha Değirmenci	Designing of thermoregulated textile structures	Textile Eng.	Textile Eng. Electrical and Electronics Eng.
100	Doc. Dr. Halil İbrahim İcoglu	Production and characterization of PCL nanofibers via electrospinning	Textile Eng.	Textile Eng. Metallurgical and Materials Eng.
101	Dr. Öğr. Üyesi Hatice İbili	Functional Surfaces	Textile Eng.	Textile Eng. Food Eng.
103	Doç.Dr.Abdulcabbar YAVUZ	Flexible Electrodes for Energy Storage Devices	Metallurgical and Materials Eng.	Metallurgical and Materials Eng. Engineering Physics Textile Eng.
104	Doç.Dr.Derya KAPUSUZ YAVUZ	Synthesis of oxide nanoparticles	Metallurgical and Materials Eng.	Metallurgical and Materials Eng. Mech. Eng. Industrial Eng.
105	Doç.Dr.Mikail ASLAN	Nanoclay reinforced magnesium composites	Metallurgical and Materials Eng.	Metallurgical and Materials Eng. Mech. Eng.
106	Doç.Dr.Mustafa Güven GÖK	Failure analysis of 3D printed polimer materials	Metallurgical and Materials Eng.	Metallurgical and Materials Eng. Mech. Eng. Industrial Eng.

