

2022-2023 FALL SEMESTER

ENG 499 MULTI DISCIPLINARY PROJECT LIST

Şube No	Akademisyen (Lecturer)	Proje Adı (Project Name)	Projeyi Alabilecek Öğrencilerin Bölümleri (Departments of Students Who Will Register for the Project)
1	Prof. Dr.ÖMER EYERCİOĞLU	Design and construction of a roll-to-plate 3D printer	Electrical and Electronics Eng.
			Mech. Eng.
2	Prof.Dr. NİHAT YILDIRIM	Design and construction of a prototype solar air heater with measurement and control of input and output parameters	Electrical and Electronics Eng.
			Mech. Eng.
			Food Eng.
3	Prof.Dr. NİHAT YILDIRIM	Design and construction of a prototype vacuum drying unit with measurement and control of input and output parameters	Electrical and Electronics Eng.
			Mech. Eng.
			Food Eng.
4	Prof.Dr. NİHAT YILDIRIM	Design and construction of a prototype fluid level indicator for stationary tanks	Electrical and Electronics Eng.
			Mech. Eng.
5	Prof.Dr. MELDA ÇARPINLIOĞLU	Industrial Applications of Supercritical Fluids (Focusing on Thermodynamic Analysis and Property Calculation Methodology)	Food Eng.
			Textile Eng.
6	Prof.Dr. A. İHSAN KUTLAR	Design and construction of a prototype solar air heater with measurement and control of input and output parameters	Electrical and Electronics Eng.
			Mech. Eng.
			Food Eng.
7	Prof.Dr. A. İHSAN KUTLAR	Design and construction of a prototype vacuum drying unit with measurement and control of input and output parameters	Electrical and Electronics Eng.
			Mech. Eng.
			Food Eng.
8	Prof.Dr. A. İHSAN KUTLAR	Design and construction of a prototype fluid level indicator for stationary tanks	Electrical and Electronics Eng.
			Mech. Eng.
9	Dr.Öğr.Üyesi N. FURKAN DOĞAN	Application of low impact behavior analysis to automobile bumper model with ANSYS finite element program&geometric optimization.	Mech. Eng.
			Met. and Mat. Eng.
10	Dr.Öğr.Üyesi N. FURKAN DOĞAN	Climatic chamber design for the drop-weight impact test device	Mech. Eng.
			Electrical and Electronics Eng.
11	Doç.Dr. ÖMER YAVUZ BOZKURT	Octoprint systems in 3Dprinters This project includes a detailed review on the features of the Octoprint system, which is one of the most well-known examples of external control/operating systems that are increasingly common in 3D printers, and the creation of an example Octoprint hardware structure based on this review. The project will be completed by taking sample prints using the Artillery Sidewinder X2 3D printer with the created system.	Mech. Eng.
			Electrical and Electronics Eng.
12	Doç.Dr. ÖMER YAVUZ BOZKURT	Desktop filament production system for 3D printers	Mech. Eng.
			Electrical and Electronics Eng.
13	Prof. Dr. EMRAH	A System Restructuring Study by Using Lean	Mech. Eng.

	ÖZAHİ	Manufacturing Principles to Increase Production Efficiency by Reducing Waste Energy.	Ind. Eng.
14	Doç.Dr. ALİ KILIÇ	Conceptual and Architectural Design of Autonomous Warehouse Robots	Mech. Eng.
			Electrical and Electronics Eng.
			Ind. Eng.
15	Dr.Öğr.Üyesi M. ERKAN KÜTÜK	Manufacturing and Control of a 2 DOF Press Mechanism Prototype	Mech. Eng.
			Electrical and Electronics Eng.
16	Prof.Dr. AHMET ERKLİĞ	3 boyutlu yazıcı ile halat örgü makinesi yapımı.	Mech. Eng.
			Electrical and Electronics Eng.
			Textile Eng.
17	Dr.Öğr.Üyesi SADIK OLGUNER	Static structural and harmonic response analyses of a highway bridge using ANSYS Workbench	Mech. Eng.
			Civil Eng.
18	Dr.Öğr.Üyesi SADIK OLGUNER	Mass/Volume optimisation of a planetary gearbox for wind turbine applications	Mech. Eng.
			Ind. Eng.
19	Doç.Dr. ABDULLAH AKPOLAT	An investigation about production and usage areas of Polytetrafluoroethylene (PTFE).	Mech. Eng.
			Met. and Mat. Eng.
20	Prof.Dr. SADETTİN KAPUCU	Design a tremor reduction device	Mech. Eng.
			Electrical and Electronics Eng.
21	Prof. Dr. Ergun Erçelebi	Design of NIR spectrometre	Food Eng.
			Mech. Eng.
22	Prof. Dr. Ergun Erçelebi	Design of an acoustic system for determination of iron density under plaster	Civil Eng.
			Mech. Eng.
23	Prof. Dr. Gölge Ögücü Yetkin	Designing a Wireles Data Transfer System for Underwater Use	Electrical and Electronics Eng.
			Mech. Eng.
24	Prof. Dr. Gölge Ögücü Yetkin	Sun Tracking Solar Panel	Electrical and Electronics Eng.
			Mech. Eng.
25	Prof. Dr. Arif NACAROĞLU	Thrown item catching arm	Electrical and Electronics Eng.
			Mech. Eng.
26	Prof. Dr. Savaş UÇKUN	Design and construction of a project which uses electromagnetic wave for transformation of data.	Electrical and Electronics Eng.
			Mech. Eng.
27	Prof. Dr. Uğur Cem Hasar	Structural Health Monitoring Using Non-Destructive Microwave Techniques	Civil Eng.
			Electrical and Electronics Eng.
28	Prof. Dr. Arif NACAROĞLU	Heat follower	Electrical and Electronics Eng.
			Mech. Eng.
29	Prof. Dr. Sema Kayhan	Design and Implementation of Robotic Arm	Electrical and Electronics Eng.
			Mech. Eng.
30	Prof. Dr. Sema Kayhan	Sales Forecasting using Machine Learning Algorithm	Electrical and Electronics Eng.
			Ind. Eng.
31	Doç. Dr. Taner İnce	Machine Learning Based Earth mineral identification using Hyperspectral Images for Unmanned Aerial Vehicles (UAV)	Electrical and Electronics Eng.
			Mech. Eng.
32	Doç.Dr. A. Mete VURAL	Design and Implementation of an Electric Crane	Electrical and Electronics Eng.
			Eng. Physics
33	Dr. Öğr. Üyesi Serkan ÖZBAY	Investigating the conductivity of stretchable fabrics for different bending levels	Electrical and Electronics Eng.
			Textile Eng.

34	Dr. Öğr. Üyesi Serkan ÖZBAY	Design of a defect detection system using neural network	Electrical and Electronics Eng. Mech. Eng.
35	Prof.Dr. Nuran Dođru	Laser cutter for different applications	Electrical and Electronics Eng. Mech. Eng.
36	Dr. Öğr. Üyesi Musa Bute	Design of solid granule pumping machine	Electrical and Electronics Eng. Mech. Eng.
37	Dr. Öğr. Üyesi Musa Bute	Control of solid granule pumping machine	Electrical and Electronics Eng. Mech. Eng.
38	Doç.Dr.Tolgay KARA	Glove-controlled Robotic Hand	Electrical and Electronics Eng. Mech. Eng.
39	Dr. Öğr. Üyesi Mehmet DEMİR	Design and realization of an unmanned autonomous underwater system	Electrical and Electronics Eng. Mech. Eng.
40	Dr. Öğr. Üyesi Seydi KAÇMAZ	Design and implementation of Computer Vision based 3D printed Robotic Arm controlled by interactive GUI	Electrical and Electronics Eng. Mech. Eng.
41	Dr.Öğr. Üyesi Nurdal Watsuji	Pick, sort and place robot	Electrical and Electronics Eng. Mech. Eng.
42	Dr. Öğr. Üyesi Ali Osman ARSLAN	Design, analysis and construction of a prototype for educational technology	Electrical and Electronics Eng. Mech. Eng. Civil Eng. Food Eng. Ind. Eng. Eng. Physics
43	Dr. Öğr. Üyesi Mahmut AYKAÇ	Automated and Automatic Targeting System	Electrical and Electronics Eng. Mech. Eng.
44	Prof.Dr. Sevim KAYA	Determination of Barrier, Mechanical and Stuctural Properties of Some Edible Films	Food. Eng Mech. Eng. Opt. and Acou. Eng.
45	Prof.Dr. Ahmet KAYA	Design of Pistahio Paste Grinder	Food Eng. Mech. Eng.
46	Prof.Dr. Çiğdem AYKAÇ	Investigation of microwave usage habits: creating a web-based survey program and analyzing the results	Food. Eng Electrical and Electronics Eng. Ind. Eng.
47	Prof.Dr. Şenol İBANOĞLU	Online ozone monitoring during food processing	Food Eng. Opt. and Acou. Eng. Electrical and Electronics Eng.
48	Prof.Dr. Esra İBANOĞLU	Particle Size Determinatination by Light Scattering Method	Food Eng. Opt. and Acou. Eng. Ind. Eng.
49	Prof.Dr. Fahrettin GÖĞÜŞ	Solar drying of fruits and vegetables	Food. Eng Mech. Eng.
50	Prof.Dr. Medeni MASKAN	Use of ultrasound in detection of maturity level of fruits and vegetables.	Food Eng. Eng. Physics Opt. and Acou. Eng.
51	Prof.Dr. Medeni	Cost estimation of "minimal" and "coventional refining"	Food Eng.

	MASKAN	of vegetable oils.	Ind. Eng.
52	Prof.Dr. Mustafa BAYRAM	Design of Food Plant in Mars	Food Eng. Met. and Mat. Eng. Civil Eng.
53	Doç.Dr. Derya KOÇAK YANIK	Production of value added materials from food waste.	Food. Eng Met. and Mat. Eng.
54	Doç. Dr. Nihat Atmaca	Design of Structural System, Mechanical Installation and Electrical System of Reinforced Concrete Buildings	Civil Eng. Mech. Eng. Electrical and Electronics Eng.
55	Prof. Dr. Aytaç Güven	Design of Solar Energy Project for Roof of Buildings	Civil Eng. Mech. Eng. Electrical and Electronics Eng.
56	Prof. Dr. Abdulkadir Çevik	Artificial Intelligence Applications in Engineering	Civil Eng. Mech. Eng. Electrical and Electronics Eng. Ind. Eng.
57	Prof. Dr. Esra Mete Güneyisi	Design of a transmission tower (pylon)	Civil Eng. Electrical and Electronics Eng.
58	Doç. Dr. Mehmet Eren Gülşan	Design of a reinforced concrete factory by the consideration of both energy savings and vibration resistance	Civil Eng. Mech. Eng. Electrical and Electronics Eng.
59	Prof. Dr. Mehmet İshak Yüce	Design and optimization of a hydrokinetic turbine by using CFD methods	Civil Eng. Mech. Eng.
60	Prof.Dr. Mustafa Özakça	Design of the future house (Energy efficient, Water efficient, Social responsibility and innovative design)	Civil Eng. Mech. Eng. Electrical and Electronics Eng. Ind. Eng.
61	Prof. Dr. Hamza Güllü	Post-Eartquake Damage Evaluation of Buildings	Civil Eng. Mech. Eng. Electrical and Electronics Eng.
62	Doç. Dr. Talha Ekmekyapar	Design of an Industrial Steel Building with Sprinkler Fire Extinguishing Sytem	Civil Eng. Mech. Eng.
63	Dr.Öğr.Üyesi Esra Eylem Karataş	Design of ecological and sustaniable buildings	Civil Eng. Mech. Eng. Electrical and Electronics Eng. Ind. Eng.
64	Prof.Dr.Mustafa Günal	Bridge pier cross section design for reducing local scour for flood conditions.	Civil Eng. Mech. Eng.
65	Öğr. Üyesi Dr. Ayşe Yeter GÜNAL	Thermal, sound Insulation and waterproofing of a multistorey building and economical analysis.	Civil Eng. Mech. Eng.
66	Doç. Dr. Mehmet Tolga GÖĞÜŞ	Design of extensometer for tensile testing of metals	Civil Eng. Mech. Eng.
67	Prof Dr Ali Fırat ÇABALAR	Sustainable materials for road pavement designs	Civil Eng. Met. and Mat. Eng.

68	Doç. Dr. Nildem Tayşi	Optimization Techniques in Engineering	Civil Eng.
			Mech. Eng.
			Electrical and Electronics Eng.
			Ind. Eng.
69	Prof. Dr. Vural E. Kafadar	Applications of ultrasonic sensors in food process control	Opt. and Acou. Eng.
			Food Eng.
			Electrical and Electronics Eng.
70	Prof.Dr.Bülent GÖNÜL	A search on viability of fusion reactors	Eng. Physics
			Mech. Eng.
			Electrical and Electronics Eng.
71	Doç. Dr. R.Güler YILDIRIM	Engineering Applications of Excel	Opt. and Acou. Eng.
			Food Eng.
			Electrical and Electronics Eng.
			Mech. Eng.
			Civil Eng.
			Ind. Eng.
			Textile Eng.
Met. and Mat. Eng.			
72	Prof.Dr.Hayriye TÜTÜNCÜLER	Investigation of dye sensitized solar celles	Eng. Physics
			Electrical and Electronics Eng.
			Food Eng.
73	Prof.Dr.Ömer F. Bakkaloğlu	Design of solar cell	Eng. Physics
			Mech. Eng.
			Electrical and Electronics Eng.
74	Assist. Prof. Dr. Mehmet KOÇAK	Wireless Transmission of Electricity	Eng. Physics
			Electrical and Electronics Eng.
			Opt. and Acou. Eng.
75	Prof. Dr. Okan Özer	Applications of Monte Carlo Method (MCM) in Reactor Safety&Security Systems	Eng. Physics
			Mech. Eng.
			Electrical and Electronics Eng.
76	Prof. Dr.Beşire GÖNÜL	An investigation of band gap tuning in semiconductors for photonic devices	Eng. Physics
			Electrical and Electronics Eng.
			Met. and Mat. Eng.
77	Doç. Dr Mustafa YILMAZ	Water harvesting from moisture in the air by 3D mesh nets.	Food Eng.
			Mech. Eng.
			Opt. and Acou. Eng.
78	Prof. Dr. Metin Bedir	Investigation of the corrosion behaviour of the metallic materials by the way different methods	Eng. Physics
			Mech. Eng.
			Met. and Mat. Eng.
79	Prof.Dr.A.Necmedin YAZICI	Investigation of luminaire and road properties on uniform lighting in road examples.	Opt. and Acou. Eng.
			Eng. Physics
			Electrical and Electronics Eng.
80	Prof. Dr. Ayda	Glove-controlled robotic arm.	Civil Eng.
			Eng. Physics

	Beddall		Electrical and Electronics Eng.
			Mech. Eng.
81	Prof.Dr.Ahmet BİNGÜL	Bidirectional optical communication	Opt. and Acou. Eng.
			Eng. Physics
			Electrical and Electronics Eng.
82	Prof.Dr.Ramazan KOÇ	Investigation of enzyme battery	Eng. Physics
			Food Eng.
83	Prof.Dr.Hüseyin TOKTAMIŞ	The applications of wideband gap S/C in industry	Eng. Physics
			Electrical and Electronics Eng.
			Ind. Eng.
84	Prof. Dr. Zihni Öztürk	Investigation of the thorium resources in Turkey	Eng. Physics
			Mech. Eng.
			Met. and Mat. Eng.
			Electrical and Electronics Eng.
85	Dr. Öğr. Üyesi Serap Çelik	Efficiency calculations of half-cut solar panels under shaded conditions	Eng. Physics
			Opt. and Acou. Eng.
			Electrical and Electronics Eng.
86	Prof.Dr.Eser OLĞAR	Design and construction of absorptive acoustic panels	Eng. Physics
			Opt. and Acou. Eng.
			Civil Eng.
			Mech. Eng.
87	Prof. Dr. Mehmet TOPALBEKİROĞLU	Design of weft insertion mechanism and shedding mechanism for hand-made woven carpet production/ Developing software to control multiple stepper motors for textile machines	Textile Eng.
			Electrical and Electronics Eng.
			Mech. Eng.
88	Doç.Dr. H. İbrahim ÇELİK	Design and production of conductive knitted fabric	Textile Eng.
			Electrical and Electronics Eng.
89	Doç.Dr. H. Kübra KAYNAK	Investigation of conductive yarn production	Textile Eng.
			Met. and Mat. Eng.
90	Doç.Dr. Züleyha DEĞİRMENCİ	Designing of thermal jacket/Designing of 3D textiles	Textile Eng.
			Electrical and Electronics Eng.
			Mech. Eng.
91	Dr. Öğretim Üye M. Erdem İNCE	Design and Production of Weft Knitted Fabric Reinforced Polymer Matrix Composite	Textile Eng.
			Met. and Mat. Eng.
			Mech. Eng.
92	Prof.Dr.Serap U.SEÇKİNER	Work load balancing in scheduling problems	Ind. Eng.
			Mech. Eng.
93	Doç.Dr. Zeynep D. U. DURMUŞOĞLU	Simulation of different queuing systems in a job shop manufacturing environment where there are parallel machines.	Ind. Eng.
			Food Eng.
			Mech. Eng.
94	Doç.Dr. Alptekin DURMUŞOĞLU	A system restructuring study by using lean manufacturing principles to increase manufacturing efficiency	Ind. Eng.
			Mech. Eng.
95	Doç.Dr.Süleyman METE	Straight Assembly Line Balancing Problem	Ind. Eng.
			Mech. Eng.
96	Doç.Dr.Eren	Vehicle Routing Problem with Drones for Last Mile	Ind. Eng.

	ÖZCEYLAN	Delivery	Electrical and Electronics Eng.
97	Öğr. Gör. Azmi Mert ÇELİK	Synthesis of flame retardant zinc borate powders using thermochemical methods	Met. and Mat. Eng.
			Ind. Eng.
			Textile Eng.
98	Dr. Öğr. Üyesi Abdulaziz KAYA	Process optimization of removal of methylene blue dye from aqueous solution by almond shell powder	Met. and Mat. Eng.
			Food Eng.
			Ind. Eng.
99	Dr. Öğr. Üyesi Mustafa Guven GOK	Design, production and characterization of polymeric 3d lattice structures	Met. and Mat. Eng.
			Mech. Eng.
			Ind. Eng.
			Eng. Physics
100	Dr. Öğr. Üyesi Halil İbrahim İÇOĞLU	Glass fiber reinforced polyester composite production via vacuum infusion method	Met. and Mat. Eng.
			Ind. Eng.
			Textile Eng.
101	Doç. Dr. Mikail ASLAN	Nano clay reinforced aluminum composite	Met. and Mat. Eng.
			Mech. Eng.
			Ind. Eng.
102	Doç. Dr. Abdulcabbar YAVUZ	Fabrication of flexible electrode for water purification	Met. and Mat. Eng.
			Food Eng.
			Textile Eng.
103	Doç. Dr. Derya K. YAVUZ	Design and cost analysis of a dental restorative production plant based on QCD principles.	Met. and Mat. Eng.
			Ind. Eng.