

2024-2025 Bahar Dönemi ENG499

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)
1	PROF.DR. ADEM ATMACA	Dijital İkiz ve IoT teknolojileri ile veri toplama ve analiz platformu geliştirilmesi.	Mech. Eng.	Mech. Eng. Electrical and Electronics Eng.
4	PROF.DR. NİHAT YILDIRIM PROF.DR. A. İHSAN KUTLAR	Development of a size estimation system based on artificial Intelligence (AI) coding	Mech. Eng.	Mech. Eng. Electrical and Electronics Eng. Industrial Eng.
5	PROF.DR. NİHAT YILDIRIM PROF.DR. A. İHSAN KUTLAR	Development of a plant harvesting time prediction system based on artificial Intelligence (AI) coding	Mech. Eng.	Mech. Eng. Electrical and Electronics Eng. Industrial Eng.
8	PROF.DR. SADETTİN KAPUCU	PROJECT 2- Design a polypropylene fibers bundle chopper Use of micro synthetic or macro synthetic fiber based reinforcement materials in composite structures is known in the industry. Such materials can be introduced into cement mixtures at reinforced concrete production. The present project is about a method for cutting into cylindrical form of a synthetic fiber based reinforcement material comprising packaging of the reinforcement material in a packaging material which is dispersible in water for use in concrete mixtures. The water-soluble wrapped polypropylene fibers bundle (a mainly circular cross-section having a mean diameter of D) should be chopped in form of cylinder (discontinuous bundles having certain lengths of L) with a length per diameter (L/D) ratio within the range between 0.25 and 5, or between 1.5 and 3. To satisfy this requirement ; • propose chop off mechanism types (it is required find possible alternatives), • evaluate which is the best method, • design the selected mechanism in all aspect (size, dimension, shape, material, etc) • design driver for your system (flywheel, motor/actuator). It is required from the ENG 499 group of students (2 from mechanical Eng. and 2 student from electrical and electronics Eng.) to work on an open-ended multidisciplinary design problem and finish at the end of semester by presenting	Mech. Eng.	Mech. Eng. Electrical and Electronics Eng.
11	DOÇ.DR. FUAT YILMAZ	Fast Cooling Freezing Air Conditioner "A ""Fast Cooling Freezing Air Conditioner"" typically refers to an air conditioning unit or system designed to rapidly cool down a space. Example: https://www.youtube.com/watch?v=rohNzWAE-5k "	Mech. Eng.	Mech. Eng. Electrical and Electronics Eng.
12	DR.ÖĞR.ÜYESİ N. FURKAN DOĞAN	Savonius wind turbine (SRT) design and prototype: This study consists of the design, analysis, and prototype stages of SRTs, which are vertical axis wind turbines. Solid modelling software such as SolidWorks will be used in the design phase and analysis software such as Ansys Fluent will be used in the analysis phase. The performance of the model will be analyzed in Ansys Fluent by changing the blade type and number, which significantly affect the performance of SRT designs. At the end of the project, a prototype of the optimum SRT design will be created and electrical energy generation will be provided.	Mech. Eng.	Mech. Eng. Eng. Physics
13	PROF.DR. ÖMER EYERÇİOĞLU	Design and construction of a reciprocating tool for large scale additive manufacturing	Mech. Eng.	Mech. Eng. Electrical and Electronics Eng.
14	DR.ÖĞR.ÜYESİ SADIĞ OLGUNER	Artificial intelligence based defect detection for material surface inspection	Mech. Eng.	Mech. Eng. Electrical and Electronics Eng. Industrial Eng.
15	DR.ÖĞR.ÜYESİ SADIĞ OLGUNER	Development of composite materials using polypropylene nonwoven fabrics for lightweight applications	Mech. Eng.	Mech. Eng. Textile Eng. Met. And Mat. Eng.
17	PROF.DR. Ö. YAVUZ BOZKURT	Mini plastic injection moulding machine construction	Mech. Eng.	Mech. Eng. Electrical and Electronics Eng. Met. And Mat. Eng.
18	PROF.DR. Ö. YAVUZ BOZKURT	3D printer construction	Mech. Eng.	Mech. Eng. Electrical and Electronics Eng. Met. And Mat. Eng.
19	PROF.DR. Ö. YAVUZ BOZKURT	Construction of an experimental set-up for mechanical tests	Mech. Eng.	Mech. Eng. Electrical and Electronics Eng. Met. And Mat. Eng.
20	DR.ÖĞR.ÜYESİ M. ERKAN KÜTÜK	Improvement on Manufacturing and Control of an Already Existing 2 DOF Press Mechanism	Mech. Eng.	Mech. Eng. Electrical and Electronics Eng.
21	DR.ÖĞR.ÜYESİ M. ERKAN KÜTÜK	Improvement of an Already Existing A3 Folding Machine	Mech. Eng.	Mech. Eng. Electrical and Electronics Eng.
22	Dr. Öğr. Üyesi SEYDİ KAÇMAZ	Smart Food Storage and Monitoring System	Electrical and Electronics Eng.	Electrical and Electronics Eng. Food Eng.
23	Prof. Dr. Mete VURAL	Design of a Magnetic Levitation System	Electrical and Electronics Eng.	Electrical and Electronics Eng. Mech. Physics
24	Prof. Dr. Mete VURAL	Design of an Electric Scooter	Electrical and Electronics Eng.	Electrical and Electronics Eng. Mech. Physics
25	Doç.Dr. Taner İnce	Design of a Stair Climber Robot	Electrical and Electronics Eng.	Electrical and Electronics Eng. Mech. Eng.
26	Dr. Öğr. Üyesi Mahmut AYKAÇ	Smart Transmission	Electrical and Electronics Eng.	Electrical and Electronics Eng. Mechanical Engineering
27	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. Mechanical Engineering, Industrial Engineering, Food Engineering.
28	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. Mechanical Engineering, Industrial Engineering, Food Engineering.
29	Prof. Dr. Ergun ERÇELEBİ	Design of a machine that detects defects in textile fabric.	Electrical and Electronics Eng.	Electrical and Electronics Eng. Textile Engineering, Mechanical Engineering, Industrial Engineering.
30	Prof. Dr. Ergun ERÇELEBİ	Design of a drone carrying a payload	Electrical and Electronics Eng.	Electrical and Electronics Eng. Mech. Eng.
31	Prof. Dr. Ergun ERÇELEBİ	Optimization of Electric Vehicle Charging Stations	Electrical and Electronics Eng.	Electrical and Electronics Eng. Industrial Engineering

32	Prof. Dr. Ergun ERÇELEBİ	Smart Traffic Management System	Electrical and Electronics Eng.	Electrical and Electronics Eng. Industrial Engineering
33	Prof. Dr. Hüseyin BOZKURT	Advanced Statistical Application	Food Eng.	Food Eng. Industrial Eng.
34	Prof. Dr. Sevim KAYA	Techniques for appearance and sound measurement of food products	Food Eng.	Food Eng. Physics, Optic-Acoustic
35	Prof. Dr. Medeni MASKAN	Use of ultrasound in degumming of crude vegetable oils.	Food Eng.	Food Eng., Industrial, Optic Acoustic Eng.
37	Prof. Dr. Sibel FADİLOĞLU	Design of electrophoresis instrumental system for protein purification	Food Eng.	Food Eng., Mechanical Eng., Elec. Eng.
38	Prof. Dr. Emine ERÇELEBİ	Use of plant wastes in industrial ecological enzyme production	Food Eng.	Food Eng. Industrial Eng.
39	Prof. Dr. Çiğdem AYKAÇ	Research on historical foods	Food Eng.	Food Eng., History, Gastronomy
40	Prof. Dr. Fahrettin GÖĞÜŞ	Color measurement of solid food materials	Food Eng.	Food Eng. Optic and Acoustic Eng.
41	Prof. Dr. Esra İBANOĞLU	Exploring Polymorphic structures in chocolate on the production line	Food Eng.	Food Eng. Optic and Acoustic Eng.
42	Prof. Dr. A. Coşkun DALGIÇ	Process simulation in food industry	Food Eng.	Food Eng., Ind. Eng., Mech. Eng.
43	Prof. Dr. Ahmet KAYA	Design of enzyme/oxygen indicator.	Food Eng.	Food Eng., Eng. Physics, Optik Müh.
44	Dr. Öğr. Üyesi Hasene KESKİN ÇAVDAR	Design of automated titration system for determination of enzyme activity	Food Eng.	Food Eng., Mechanical Eng., Elec. Eng.
45	Dr. Öğr. Üyesi Fatih BALCI	Elektrospinning ile Gıda Atıklarından Biyoplastik Lif Üretimi ve Tekstil Uygulamaları	Food Eng.	Food Eng., Textile Eng.
48	Prof. Dr. Ömer F. Bakkaloğlu	Design of solar cell	Eng. Physics	Eng. Physics Mechanical Eng. Optic and Acoustic Eng. Electrical and Electronics Eng.
49	Assist. Prof. Dr. Mehmet KOÇAK	Wireless Transmission of Electricity	Eng. Physics	Physics Eng. Electrical and Electronics Eng. Optic and Acoustic Eng.
50	Dr. Öğr. Üyesi Serap Çelik	Efficiency calculations of half-cut solar panels under shaded conditions	Eng. Physics	Eng. of Physics Optic and Ac. Eng. Electrical and Electronics Eng.
52	Prof. Dr. Beşire GÖNÜL	An investigation of band gap tuning in semiconductors for photonic devices	Eng. Physics	Eng. Physics Optic and Ac. Eng. Metallurgical and Materials Eng.
53	Prof. Dr. Eser OLGAR	Design and construction of absorptive acoustic panels	Eng. Physics	Eng. of Physics Optic and Ac. Eng. Civil Eng. Mechanical Eng. Architecture
54	Prof. Dr. A. Necmeddin YAZICI	Investigation of luminaire and road properties on uniform lighting in road examples.	Eng. Physics	Optic and Ac. Eng Eng. Physics Electrical and Electronics Eng.
55	Prof. Dr. Hüseyin TOKTAMIŞ	"Investigation of radiation absorption of lime in drinking water of Gaziantep province."	Eng. Physics	Üniversitemizin Tüm Birimleri
56	Prof. Dr. E. Vural KAFADAR	Enhancing Filter Coffee Brewing with Ultrasonic Waves	Eng. Physics	Optic and Ac. Eng Food Eng. Eng. Physics
57	Prof. Dr. Hayriye TÜTÜNCÜLER	Investigation of dye sensitized solar cells	Eng. Physics	Electrical and Electronics Eng. Food Eng. Optic and Acoustic Eng. Eng. Physics
58	Doç. Dr. Mustafa YILMAZ	Water harvesting from moisture in the air by 3D mesh nets.	Eng. Physics	Optic and Ac. Eng Mechanical Eng. Eng. Physics
59	Prof. Dr. Ramazan KOÇ	Paper and Water based battery design	Eng. Physics	Eng. Physics Optic and Ac. Eng Electrical and Electronics Eng. Food Eng Chemistry department
61	Prof. Dr. Ali Fırat Çabalar	Sustainable materials for road pavement designs	Civil Eng.	Civil Eng. Metallurgical and Materials Eng.
62	Prof. Dr. Aytaç Güven	Artificial Intelligence and Geographical Information Systems Design Applications in Eng.	Civil Eng.	Civil Eng. Mechanical Eng., Electrical Eng.
65	Prof. Dr. Mehmet İshak Yüce	Design and optimization of renewable energy sources and investigation of structural integrity	Civil Eng.	Civil Eng. Mechanical Eng., Industrial Eng.

66	Prof. Dr. Mustafa Günal	Flood Prediction and Disaster Risk Analysis using GIS	Civil Eng.	Civil Eng. Mechanical Eng.
68	Prof. Dr. Nihat Atmaca	Design of Structural System, Mechanical Installation and Electrical System of Reinforced Concrete Buildings	Civil Eng.	Civil Eng. Mechanical Eng., Electrical Eng.
69	Prof. Dr. Nildem Tayşi	Analysis and Design of Wind Turbines	Civil Eng.	Civil Eng. Mechanical Eng., Electrical Eng., Industrial Eng.
70	Prof. Dr. Talha Ekmeçyapar	Design of an Industrial Steel Building with Sprinkler Fire Extinguishing System	Civil Eng.	Civil Eng. Mechanical Eng.
72	Doç. Dr. Mehmet Tolga Göğüş	Design of extensometer for tensile testing of metals	Civil Eng.	Civil Eng. Mechanical Eng.
73	Dr. Öğr. Üyesi Ayşe Yeter Günal	Flood Prediction and Disaster Risk Analysis using Artificial Intelligence	Civil Eng.	Civil Eng. Mechanical Eng.
75	Prof. Dr. Eren ÖZCEYLAN	Human & Object Detection in Warehouses using YOLOv11	DEPARTMENT OF INDUSTRIAL ENG.	DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENG.
78	Dr. Öğretim Üyesi Yunus EROĞLU	Wind Farm Turbine Placement Optimization Using Game Theory and Artificial Intelligence Methods	Industrial Eng.	Electrical and Electronics Eng., Industrial Eng., Mechanical Eng.
79	Dr. Öğr. Üyesi Seda HEZER	Disassembly Line Balancing Problem	Industrial Eng.	Industrial Eng., mechanical Eng.
80	Prof. Dr. Mehmet Topalbekiroğlu	Preparation of software for stepper motors for use in textile machines	Textile Eng.	Textile Eng. Mechanical Eng. Electrical and Electronics Eng.
81	Prof. Dr. Cem Güneşoğlu	Mattress ticking fabrics with advanced sleep quality using plant additives	Textile Eng.	Textile Eng. Food Engineering
82	Prof. Dr. Halil İbrahim Çelik	Design and production of conductive knitted fabric	Textile Eng.	Textile Eng. Electrical and Electronic Engineering
83	Prof. Dr. Hatice Kübra Kaynak	Design and production of textile based sensors	Textile Eng.	All Eng. departments
84	Prof. Dr. Züleyha Değirmenci	Designing of thermoregulated textile structures	Textile Eng.	Textile Eng. Electrical and Electronic Engineering
86	Doç. Dr. Halil İbrahim İÇOĞLU	Production and characterization of electrospun ceramic nanofibers	Textile Eng.	Textile Eng. Metallurgical and Material Engineering
87	Dr. Öğr. Üyesi Hatice İbili	Production of functional textile surfaces	Textile Eng.	Textile Eng. Food Eng.
88	Doç. Dr. Abdulaziz KAYA	Design Of A Pilot Water Treatment Plant For The Removal Of Anionic Dyes From Textile Wastewater With The Use Of Cationic Adsorbent Materials	Met. And Mat. Eng.	Met. And Mat. Eng Industrial Eng. Textile Eng.
89	Doç. Dr. Abdulcabbar YAVUZ	Water purification by flexible electrode	Met. And Mat. Eng.	Met. And Mat. Eng Food Eng. Textile Eng.
90	Doç. Dr. Derya KAPUSUZ YAVUZ	Design of a Bulk-Fill Dental Filling Production Plant based on QCD Principles	Met. And Mat. Eng.	Met. And Mat. Eng Food Eng.
91	Doç. Dr. Mikail ASLAN	The effect of nanoclay on magnesium composites	Met. And Mat. Eng.	Met. And Mat. Eng Mechanical Eng.
92	Doç. Dr. Mustafa Güven GÖK	Design and 3D printing of polymer based multi-materials	Met. And Mat. Eng.	Met. And Mat. Eng Mechanical Eng.