

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. ÖMER EYERÇİOĞLU	Elbow Range of Motion (ROM) Tracker (2 Students Daytime) Introduction Effective recovery from orthopedic surgery (e.g., elbow fracture) or neurological events like a stroke hinges on consistent, properly performed home exercises. However, patient adherence and technique are difficult to monitor outside the clinic. This project creates a low-cost, wearable device that combines a sensor to track range of motion (ROM) with a simple mechanical arm support. By providing objective data on exercise form, count, and progress, it empowers patients with feedback and gives therapists remote oversight. The integrated passive-assist mechanism can also support weakened muscles, encouraging safe, guided movement crucial for rehabilitation. Important: The construction of a working prototype for this project may require the purchase of specific materials and components. Students interested in undertaking this project should be aware of this potential financial responsibility from the outset. Expectations from Student(s) Student(s) working on this project should be able to show that they have skills in some engineering and professional areas: •Technical Execution: oDevelop a prototype of a system that may includes sensors, microcontrollers/ microcomputer/computer, and actuators. oUse a sensor fusion algorithm (if it necessary) to get accurate orientation data. oMake a working software for processing data, for providing biofeedback, and visualization. •Design & Testing:	Mechanical Engineering	Mechanical Engineering
				Textile Engineering
				Metallurgical and Materials Eng.
2	PROF.DR. ÖMER EYERÇİOĞLU	A Hybrid Manufacturing Process- Additive manufacturing and injection molding case studies	Mechanical Engineering	Mechanical Engineering Textile Engineering Metallurgical and Materials Eng.
3	PROF.DR. NİHAT YILDIRIM	Design and implementation of a shaft speed measurement system	Mechanical Engineering	Mechanical Engineering Electrics and Electronics Eng.
4	PROF.DR. NİHAT YILDIRIM	Design and Implementation of a heart pulse rate measurement system for medical use	Mechanical Engineering	Mechanical Engineering Electrics and Electronics Eng.
5	PROF.DR. A. İHSAN KUTLAR	Design and implementation of an outdoor air quality measurement system	Mechanical Engineering	Mechanical Engineering Electrics and Electronics Eng.
6	PROF.DR. A. İHSAN KUTLAR	Design and implementation of a human body temperature measurement system for medical use	Mechanical Engineering	Mechanical Engineering Electrics and Electronics Eng.
7	PROF.DR. A. İHSAN KUTLAR	A Comparative Field Performance Study of Aluminium and Composite Bladed Axial Fans	Mechanical Engineering	Mechanical Engineering Electrics and Electronics Eng.
8	PROF.DR. Ö. YAVUZ BOZKURT	Making a mini electric motor with a 3D printer: This involves designing and manufacturing an electric motor for production with a 3D printer. Examples available online can be used for the design section. The materials required for production will be provided by the advisor.	Mechanical Engineering	Mechanical Engineering Electrics and Electronics Eng.
9	PROF.DR. Ö. YAVUZ BOZKURT	Video extensometer construction; the project involves using a Raspberry Pi and camera system to determine the displacement of a sample during an experiment through image processing. One of the sample systems available online related to the project topic will be selected and set up. The necessary materials will be provided by the advisor.	Mechanical Engineering	Mechanical Engineering Electrics and Electronics Eng.
10	PROF.DR. Ö. YAVUZ BOZKURT	Experimental studies on the development of FDM printing systems.	Mechanical Engineering	Mechanical Engineering Electrics and Electronics Eng.
11	PROF.DR. Ö. YAVUZ BOZKURT	Experimental studies on the development of composite materials.	Mechanical Engineering	Mechanical Engineering Electrics and Electronics Eng.
12	PROF.DR. EMRAH ÖZAHI	A System Restructuring Study by Using Lean Manufacturing Principles to Increase Production Efficiency by Reducing Waste Energy.	Mechanical Engineering	Mechanical Engineering Industrial Engineering
13	PROF.DR. AHMET ERKLİĞ	A Digital Twin-Enabled Structural Health Monitoring System for Real-Time Damage Identification and Localization in Composite Materials	Mechanical Engineering	Mechanical Engineering Industrial Engineering Metallurgical and Materials Eng.
14	PROF.DR. AHMET ERKLİĞ	Development of a Machine Learning Model for Predicting Mechanical Performance of Composites	Mechanical Engineering	Mechanical Engineering Industrial Engineering Metallurgical and Materials Eng.
15	DOÇ.DR. HÜSEYİN YAĞLI	Off-grid smart green city design considering energy, building and food sustainability	Mechanical Engineering	Mechanical Engineering Electrics and Electronics Eng. Civil Engineering Food Engineering
16	DR. ÖĞR. ÜYESİ M. ERKAN KÜTÜK	Improvement of an Already Existing A3 Paper Folding Machine	Mechanical Engineering	Mechanical Engineering Electrics and Electronics Eng.
17	DR.ÖĞR. ÜYESİ SADIK OLGUNER	Development of composite laminates using polypropylene nonwoven fabrics for lightweight applications	Mechanical Engineering	Mechanical Engineering Textile Engineering Metallurgical and Materials Eng.
18	DR.ÖĞR. ÜYESİ SADIK OLGUNER	Artificial intelligence based defect detection on metallic materials	Mechanical Engineering	Mechanical Engineering Electrics and Electronics Eng. Industrial Engineering

19	Prof.Dr. Mustafa BAYRAM	Mars Planet Project: Construction of New Colony	Food Engineering	All Engineering Departments Architecture Sociology Biology
20	Prof. Dr.Medeni MASKAN	Designing an ultrasonic malaxor for olive oil production	Food Engineering	Food Engineering Mechanical Engineering Optic and Ac. Engineering
21	Prof. Dr. Sibel FADIOĞLU	Design of electrophoresis instrumental system for protein purification	Food Engineering	Food Engineering Mechanical Engineering Electrical and Electronics Eng.
22	Prof. Dr. Esra İBANOĞLU	Exploring Polymorphic structures in chocolate on the production line	Food Engineering	Food Engineering Optic and Ac. Engineering
23	Prof.Dr. Fahrettin GÖĞÜŞ	Color measurement of solid food materials	Food Engineering	Food Engineering Optic and Ac. Engineering
24	Prof. Dr. Hüseyin BOZKURT	Advanced Statistical Application	Food Engineering	Industrial Engineering Food Engineering
25	Prof.Dr. Sevim KAYA	Design of packaging material for bulgur	Food Engineering	Food Engineering Gastronomy Chemistry
26	Prof. Dr. Emine ERÇELEBİ	Application of industrial engineering techniques for cost reduction in frozen foods	Food Engineering	Food Engineering Industrial Engineering
27	Prof. Dr. Ahmet KAYA	Design of enzyme/oxygen indicator.	Food Engineering	Food Engineering Engineering Physics Optic and Ac. Engineering
28	Prof.Dr. A. Coşkun DALGIÇ	Process simulation in food industry	Food Engineering	Food Engineering Industrial Engineering Mechanical Engineering
29	Prof.Dr. Çiğdem AYKAÇ	Research on alternative polymers for food packaging	Food Engineering	Food Engineering Metallurgical and Materials Eng.
30	Doç. Dr. Hasene KESKİN ÇAVDAR	Smart Sensor System for Monitoring the Oxidative Stability of Edible Oils	Food Engineering	Food Engineering Mechanical Engineering Electrical and Electronics Eng.
31	Doç. Dr. Hatice Neval ÖZBEK	Extraction of valuable components by microwave	Food Engineering	Food Engineering Mechanical Engineering
32	Dr. Öğr. Üyesi Fatih BALCI	Talking Packaging: Halochromic (Color-Changing) Starch-Zein Nanofiber Labels for Monitoring Meat Freshness	Food Engineering	Food Engineering Textile Engineering
33	Dr. Öğr. Üyesi Burcu GÖRKAYA ERDEM	Alternative Uses of Food Waste	Food Engineering	Food Engineering Gastronomy
34	Prof. Dr. Abdulkadir Çevik	Artificial Intelligence Applications in Engineering	Civil Engineering	Mechanical Engineering Electrical and Electronics Eng. Industrial Engineering
35	Prof. Dr. Ali Fırat Çabalar	Sustainable materials for road pavement designs	Civil Engineering	Metallurgical and Materials Eng.
36	Prof. Dr. Aytaç Güven	Artificial Intelligence and Geographical Information Systems Design Applications in Engineering	Civil Engineering	Mechanical Engineering Electrical and Electronics Eng.
37	Prof. Dr. Esra Mete Güneysi	Design of a steel transmission tower based on safety, efficiency and sustainability	Civil Engineering	Electrical and Electronics Eng. Mechanical Engineering Industrial Engineering
38	Prof. Dr. Hamza Güllü	Post-Eartquake Damage Evaluation of Buildings	Civil Engineering	Mechanical Engineering Electrical and Electronics Eng.
39	Prof. Dr. Mehmet İshak Yüce	Design and optimization of renewable energy sources and investigation of structural integrity	Civil Engineering	Mechanical Engineering Industrial Engineering
40	Prof. Dr. Mustafa Günal	Flood Prediction and Disaster Risk Analysis using GIS	Civil Engineering	Mechanical Engineering
41	Prof. Dr. Mustafa Özakça	Design of the future house (Energy efficient, Water efficient, Social responsibility and innovative design)	Civil Engineering	Mechanical Engineering Electrical and Electronics Eng. Industrial Engineering Architecture Students from departments other than those listed can take part in the project with the project advisor's approval.

42	Prof. Dr. Nihat Atmaca	Design of Structural System, Mechanical Installation and Electrical System of Reinforced Concrete Buildings	Civil Engineering	Mechanical Engineering Electrical and Electronics Eng.
43	Prof. Dr. Nildem Tayşı	Analysis and Design of Wind Turbines	Civil Engineering	Mechanical Engineering Electrical and Electronics Eng.
44	Prof. Dr. Talha Ekmekyapar	Design of an Industrial Steel Building with Sprinkler Fire Extinguishing Sytem	Civil Engineering	Industrial Engineering Mechanical Engineering
45	Prof. Dr. Mehmet Eren Gülşan	Design of a reinforced concrete factory by the consideration of both energy savings and vibration resistance	Civil Engineering	Mechanical Engineering Electrical and Electronics Eng.
46	Doç. Dr. Mehmet Tolga Göğüş	Design of extensometer for tensile testing of metals	Civil Engineering	Mechanical Engineering
47	Dr. Öğr. Üyesi Ayşe Yeter Günel	Flood Prediction and Disaster Risk Analysis using Artificial Intelligence	Civil Engineering	Mechanical Engineering
48	Prof.Dr.Bülent GÖNÜL	Quantum Entanglement and its applications in science, technology and in daily life	Engineering Physics	Engineering Physics Optical and Acoustical Engineering Mechanical Engineering Electrical and Electronics Eng.
49	Prof.Dr.Ayda BEDDALL	Development of a Cost-Effective Particle Physics System for Real-Time Atmospheric Muon Visualization	Engineering Physics	Engineering Physics Optical and Acoustical Engineering Electrics and Electronics Eng.
50	Doç. Dr. R.Güler YILDIRIM	Engineering Applications of Excel	Engineering Physics	Food Engineering Optic and Acoustic Engineering Engineering Physics
51	Prof.Dr.Ömer F. Bakkaloğlu	Design of solar cell	Engineering Physics	Engineering Physics Mechanical Engineering Optic and Acoustic Engineering Electrical and Electronics Eng.
52	Assist. Prof. Dr. Mehmet KOÇAK	Wireless Transmission of Electricity	Engineering Physics	Engineering Physics Electrical and Electronics Eng. Optic and Acoustic Engineering
53	Dr. Öğr. Üyesi Serap Çelik	Efficiency calculations of half-cut solar panels under shaded conditions	Engineering Physics	Engineering Physics Optic and Ac. Engineering Electrical and Electronics Eng.
54	Prof. Dr. Okan Özer	Thermodynamic- Based Simulation of Akkuyu Nuclear Power Plant	Engineering Physics	Engineering Physics Mechanical Engineering Industrial Engineering Electrical and Electronics Eng.
55	Prof. Dr.Beşire GÖNÜL	An investigation of band gap tuning in semiconductors for photonic devices	Engineering Physics	Engineering Physics Optic and Ac. Engineering Metallurgical and Materials Eng.
56	Prof.Dr.Eser OLGAR	Mapping and Analysis of Environmental Noise in the Campus of Gaziantep University	Engineering Physics	Engineering Physics Optic and Ac. Engineering Civil Engineering Mechanical Engineering Architecture Industrial Engineering Electrical and Electronics Eng.
57	Prof.Dr.A.Necmeddin YAZICI	Investigation of luminaire and road properties on uniform lighting in road examples.	Engineering Physics	Optic and Ac. Engineering Engineering Physics Electrical and Electronics Eng.
58	Prof. Dr. Hüseyin TOKTAMIŞ	Investigation of the radiation absorpction capacity of the calcite mineral found in Gaziantep drinking water	Engineering Physics	Engineering Physics Industrial Engineering Food Engineering
59	Prof.Dr.E.Vural KAFADAR	AI-Based Acoustic Anomaly Detection	Engineering Physics	Optic and Ac. Engineering Electrical and Electronics Eng. Mechanical Engineering
60	Prof.Dr.Hayriye TÜTÜNCÜLER	Investigation of dye sensitized solar cells	Engineering Physics	Electrical and Electronics Eng. Food Eng. Optic and Acoustic Engineering Engineering Physics
61	Doç.Dr.Mustafa YILMAZ	Water harvesting from moisture in the air by 3D mesh nets.	Engineering Physics	Optic and Ac. Engineering Mechanical Engineering Engineering Physics

62	Prof. Dr. Mehmet Topalbekiroğlu	Preparation of software for stepper motors for use in textile machines	Textile Engineering	Mechanical Engineering Electrical and Electronics Eng.
63	Prof. Dr. Cem Güneşoğlu	AI assisted textile trend assumption	Textile Engineering	Textile Engineering Electrical and Electronics Eng.
64	Prof. Dr. Hatice Kübra Kaynak	Design and production of textile based sensors	Textile Engineering	Industrial Engineering All Engineering Departments
65	Prof. Dr. H. İbrahim Çelik	Textile-Based Flexible Pressure Sensors	Textile Engineering	Textile Engineering Electrical and Electronics Eng.
66	Prof. Dr. Züleyha Değirmenci	Design of thermal jacket	Textile Engineering	Metallurgical and Materials Eng. Textile Engineering
67	Doç. Dr. Mehmet Erdem İnce	The use of JUMP® statistical software package in engineering data analyses.	Textile Engineering	Electrical and Electronics Eng.
68	Doç. Dr. Halil İbrahim İçoğlu	Production and characterization of electrospun ceramic nanofibers	Textile Engineering	All Engineering Departments
69	Dr. Öğr. Üyesi Hatice İbili	Production of Functional Textile Surfaces	Textile Engineering	Textile Engineering Metallurgical and Materials Eng.
70	Prof.Dr.Serap U.SEÇKİNER	Planning building anddistrict energy systems considering simulate districts with heating and cooling networks,renewable energy	Textile Engineering	Textile Engineering Food Engineering
71	Prof. Dr. Eren ÖZCEYLAN	Disassembly line balancing	Textile Engineering	Mechanical Engineering Industrial Engineering
72	Dr. Öğr. Üyesi Zülal Kenger	Vehicle Routing Problem with mobile additive manufacturing	Industrial Engineering	Mechanical Engineering Industrial Engineering
73	Doç. Dr. Süleyman METE	Modeling a Unified Assembly and Disassembly Line Balancing Problem in an Uncertain Environment	Industrial Engineering	Industrial Engineering Computer Engineering
74	Dr. Öğr. Üyesi Yunus EROĞLU	AI-Based Fabric Defect Detection: This project aims to simulate an artificial intelligence (AI)-based system to detect fabric defects. Students will work with either publicly available datasets or synthetically generated images that represent various types of fabric defects. The students will develop a computer-based image classification model with tools such as Python, OpenCV, or TensorFlow.	Industrial Engineering	Electrical and Electronics Eng.
75	Dr. Öğr. Üyesi Yunus EROĞLU	Multi-Agent Price Optimization in Competitive Markets using Q-Learning and Game Theory: This project involves the development of an AI-powered simulation model where multiple competing firms adjust their prices in a shared market using AI algorithms. The project will model the interaction among firms as a repeated game, where Nash equilibrium concepts are used to analyze final strategic positions. Students will simulate price adjustments over time, observe learning behavior, and visualize how rational competition converges or diverges.	Industrial Engineering	Mechanical Engineering Industrial Engineering Food Engineering Civil Engineering Engineering Physics Textile Engineering Metallurgical and Materials Eng.
76	Dr.Öğrt.Üyesi Ömer Nedim KENGER	Deep Learning–Based Image Processing	Industrial Engineering	Electrical and Electronics Eng.
77	Doç. Dr. Abdulaziz KAYA	Design Of A Water Treatment Plant For The Removal Of Anionic Dyes From Textile Wastewater With The Use Of Cationic Adsorbent Materials	Industrial Engineering	Metallurgical and Materials Eng. Computer Engineering Electrical and Electronics Eng.
78	Doç. Dr. Abdulcabbar YAVUZ	Flexible Electrode for Water Purification	Metallurgical and Materials Engineering	Metallurgical and Materials Eng. Textile Engineering Industrial Engineering
79	Doç. Dr. Derya KAPUSUZ YAVUZ	Designing materials for DNA-based data storage	Metallurgical and Materials Engineering	Metallurgical and Materials Eng. Engineering Physics Food Engineering
80	Doç. Dr. Mikail ASLAN	Nanoparticle reinforced Mg composites	Metallurgical and Materials Engineering	Metallurgical and Materials Eng. Food Engineering Industrial Engineering
81	Doç. Dr. Mustafa Güven GÖK	Experimental Calibration of Sintering Shrinkage in 316L Cylindrical Specimens Produced by FFF Method	Metallurgical and Materials Engineering	Metallurgical and Materials Eng. Mechanical Engineering
82	Doç. Dr. Sefa Emre SÜNBÜL	Production and Analysis of Various Alloys Using the Vacuum Induction Method	Metallurgical and Materials Engineering	Metallurgical and Materials Eng. Mechanical Engineering Industrial Engineering
83	Prof.Dr. Tolgay KARA	Autonomous mobile robot navigation and control via visual feedback	Electrical and Electronics Eng.	Electrical and Electronics Eng. Mechanical Engineering Computer Engineering
84	Prof.Dr. Tolgay KARA	Electrical conductivity measurement techniques for textile fibers	Electrical and Electronics Eng.	Electrical and Electronics Eng. Textile Engineering

				Engineering Physics
85	Doç.Dr. Taner İnce	Autonomous Solar Panel Cleaner	Electrical and Electronics Eng.	Mechanical Engineering
86	Dr. Öğr. Üyesi Musa Bute	Design of solid granule pumping machine	Electrical and Electronics Eng.	Mechanical Engineering
				Electrical and Electronics Eng.
87	Prof. Dr. Uğur Cem Hasar	Olive Oil Characterization by Microwave Signals	Electrical and Electronics Eng.	Electrical and Electronics Eng.
				Food Engineering
88	Dr.Öğrt. Üyesi Mehmet DEMİR	Rooftop Solar Power Plant Conceptual Design	Electrical and Electronics Eng.	Electrical and Electronics Eng.
				Civil Eng.
89	Prof. Dr. Ergun ERÇELEBİ	Design and Development of a Permanent Magnet DC Motor for Drone Propulsion Systems	Electrical and Electronics Eng.	Mechanical Eng
90	Prof. Dr. Ergun ERÇELEBİ	Electromagnetic and Mechanical Design of a High-Efficiency Permanent Magnet DC Motor for Unmanned Aerial Vehicles	Electrical and Electronics Eng.	Mechanical Eng
91	Prof. Dr. Ergun ERÇELEBİ	Autonomous Agricultural Vehicle and Smart Greenhouse Monitoring System	Electrical and Electronics Eng.	Mechanical Engineering
				Industrial Engineering
				Food Engineering
92	Prof. Dr. Ergun ERÇELEBİ	Intelligent Waste Sorting and Recycling System Using Sensors and Machine Vision	Electrical and Electronics Eng.	Mechanical Engineering
				Industrial Engineering
93	Prof. Dr. Ergun ERÇELEBİ	Smart Occupational Safety and Worker Monitoring System for Industrial Environments	Electrical and Electronics Eng.	Mechanical Engineering
94	Doç. Dr. Serkan ÖZBAY	Harnessing energy from vehicle movements on roadways	Electrical and Electronics Eng.	Electrical and Electronics Eng.
				Civil Eng.
95	Dr. Öğr. Üyesi SEYDİ KAÇMAZ	Smart Food Storage and Inventory Optimization System	Electrical and Electronics Eng.	Industrial Engineering
				Electrical and Electronics Eng.
96	Dr. Öğr. Üyesi SEYDİ KAÇMAZ	Structural Health Monitoring	Electrical and Electronics Eng.	Civil Eng.
				Electrical and Electronics Eng.
97	Dr. Öğr. Üyesi Mahmut AYKAÇ	Smart Transmission	Electrical and Electronics Eng.	Mechanical Engineering
98	Prof.Dr. A. Mete VURAL	Development of a Monolithic Perovskite-Based Photocapacitor for Self-Powered Electronics	Electrical and Electronics Eng.	Metallurgical and Materials Eng.
				Engineering Physics
99	Prof.Dr. A. Mete VURAL	Techno-Economic Optimization of Wind Farms	Electrical and Electronics Eng.	Industrial Engineering
				Mechanical Engineering
				Engineering Physics