2022-2023 SPRING SEMESTER

ENG 499 MULTI DISCIPLINARY PROJECT LIST

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| **Şube No** | **Akademisyen (Lecturer)** | **Proje Adı  (Project Name)** | **Projeyi Alabilecek Öğrencilerin Bölümleri (Departments of Students Who Will Register for the Project)** |
| 1 | Doç. Dr. Nihat Atmaca | Design of Structural System, Mechanical Installation and Electrical System of Reinforced Concrete Buildings | Civil Engineering |
| Mechanical Engineering |
| Electrical and Electronics Eng |
| 2 | Prof. Dr. Abdulkadir Çevik | Artificial Intelligence Applications in Engineering | Civil Engineering |
| Mechanical Engineering |
| Electrical and Electronics Eng |
| Industrial Engineering |
| 3 | Prof. Dr. Esra Mete Güneyisi | Design of a transmission tower (pylon) | Civil Engineering |
| Electrical and Electronics Eng |
| 4 | Doç. 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 |
| 5 | Prof. Dr. Mehmet İshak Yüce | Design and optimization of renewable energy sources and investigation of structural integrity | Civil Engineering |
| Mechanical Engineering |
| Electrical and Electronics Eng |
| 6 | 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 |
| 7 | Prof. Dr. Hamza Güllü | Post-Eartquake Damage Evaluation of Buildings | Civil Engineering |
| Mechanical Engineering |
| Electrical and Electronics Eng |
| 8 | Doç. Dr. Talha Ekmekyapar | Design of an Industrial Steel Building with Sprinkler Fire Extinguishing Sytem | Civil Engineering |
| Mechanical Engineering |
| 9 | Dr.Öğr.Üyesi Esra Eylem Karataş | Design of ecological and sustaniable buildings | Civil Engineering |
| Mechanical Engineering |
| Electrical and Electronics Eng |
| Industrial Engineering |
| 10 | Prof.Dr.Mustafa Günal | Flood Prediction and Disaster Risk Analysis using GIS | Civil Engineering |
| Mechanical Engineering |
| 11 | Dr. Öğr. Üyesi Ayşe Yeter GÜNAL | Flood Prediction and Disaster Risk Analysis using Artificial Intelligance | Civil Engineering |
| Mechanical Engineering |
| 12 | Doç. Dr. Mehmet Tolga GÖĞÜŞ | Design of extensometer for tensile testing of metals | Civil Engineering |
| Mechanical Engineering |
| 13 | Prof Dr Ali Fırat ÇABALAR | Sustainable materials for road pavement designs | Civil Engineering |
| Metallurgical and Materials Eng |
| 14 | Prof. Dr. Nildem Tayşi | Structural Optimization of 3D Tower Cranes | Civil Engineering |
| Mechanical Engineering |
| Electrical and Electronics Eng |
| Industrial Engineering |
| 15 | Prof.Dr.Ergun ERÇELEBİ | Development o robot arm based on machine learning for product sorting | Electrical and Electronics Eng |
| Mechanical Engineering |
| 16 | Prof. Dr. Arif Nacaroğlu | Rope-jumping robot: The students will design and construct any kind of robot that will detect the motion of, and jump, a skipping rope that rotates at an adjustable speed. | Electrical and Electronics Eng |
| Mechanical Engineering |
| 17 | Prof. Dr. Nuran Doğru | Laser Cutter | Electrical and Electronics Eng |
| Mechanical Engineering |
| 18 | Prof. Dr. Savaş UÇKUN | Design and construction of a project which uses electromagnetic wave for transformation of data | Electrical and Electronics Eng |
| Engineering Physics |
| 19 | Prof. Dr. Gölge Ögücü Yetkin | Multilegged Robots | Electrical and Electronics Eng |
| Mechanical Engineering |
| 20 | Prof. Dr. Uğur Cem Hasar | Structural Health Monitoring Using Non-Destructive Microwave Techniques | Electrical and Electronics Eng |
| Civil Engineering |
| 21 | Prof. Dr. Sema Kayhan | Development of Student Attendance System Based on Fingerprint Biometrics | Electrical and Electronics Eng |
| Industrial Engineering |
| 22 | Doç.Dr. Tolgay KARA | Glove-controlled Robotic Hand: The project involves design and construction of a robotic hand with five fingers, similar to a real human hand. | Electrical and Electronics Eng |
| Mechanical Engineering |
| 23 | Doç. Dr. Taner İnce | Automatic Turkish coffee maker | Electrical and Electronics Eng |
| Mechanical Engineering |
| 24 | Doç.Dr. A. Mete VURAL | Design and Implementation of an Electric Crane | Electrical and Electronics Eng |
| Mechanical Engineering |
| 25 | Dr. Öğr. Üyesi Seydi KAÇMAZ | Design and implementation of Computer Vision based 3D printed Robotic Arm controlled by interactive GUI | Electrical and Electronics Eng |
| Mechanical Engineering |
| 26 | Dr. Öğr. Üyesi Musa Bute | Design of solid granule pumping machine | Electrical and Electronics Eng |
| Mechanical Engineering |
| 27 | Dr. Öğr. Üyesi Serkan ÖZBAY | Investigating the conductivity of stretchable fabrics for different bending levels | Electrical and Electronics Eng |
| Textile Engineering |
| 28 | Dr. Öğr. Üyesi Ali Osman ARSLAN | Desing, analysis and costruction of a MAGLEV Car | Electrical and Electronics Eng |
| Mechanical Engineering |
| 29 | Dr. Öğr. Üyesi Mahmut AYKAÇ | Smart Car Transmission | Electrical and Electronics Eng |
| Mechanical Engineering |
| 30 | Dr. Öğr. Üyesi Mehmet DEMİR | A Prototype Design of a rescue boat with a remote controller | Electrical and Electronics Eng |
| Mechanical Engineering |
| 31 | Dr.Öğr. Üyesi Nurdal Watsuji | Pick, sort and place robot | Electrical and Electronics Eng |
| Mechanical Engineering |
| 32 | Prof.Dr.Serap U.SEÇKİNER | Work load balancing in scheduling problems | Industrial Engineering |
| Mechanical Engineering |
| 33 | Doç.Dr. Zeynep D. U. DURMUŞOĞLU | Simulation of different queing systems in a manufacturing or service organization where there are parellel resources. | Industrial Engineering |
| Mechanical Engineering |
| 34 | Doç.Dr. Alptekin DURMUŞOĞLU | A system restructuring study by using lean manufacturing principles to increase manufacturing efficiency | Industrial Engineering |
| Mechanical Engineering |
| 35 | Doç. Dr. Eren ÖZCEYLAN | Electricity consumption forecast | Industrial Engineering |
| Electrical and Electronics Eng |
| 36 | Dr. Öğr. Üy. Pınar KOCABEY ÇİFTÇİ | Investigation of circular economy and symbiotic relationship opportunities to increase the sustainability of the industry | Industrial Engineering |
| Mechanical Engineering |
| Food Engineering |
| 37 | Prof. Dr.ÖMER EYERCİOĞLU | DEVELOPING 3D LATTICE STRUCTURES FOR MECHANICAL DESIGN-A 3D PRINTING ISSUE | Mechanical Engineering |
| Metallurgical and Materials Eng |
| Industrial Engineering |
| 38 | Prof. Dr.ÖMER EYERCİOĞLU | MANUFACTURING OF INDUSTRIAL CERAMIC PARTS BY USING LOW PRESSURE CERAMIC INJECTION | Mechanical Engineering |
| Metallurgical and Materials Eng |
| Industrial Engineering |
| 39 | Prof. Dr.ÖMER EYERCİOĞLU | ABRASIVE FLOW FINISING OF SMALL HOLES | Mechanical Engineering |
| Electrical and Electronics Eng |
| 40 | Dr.Öğr.Üyesi N. FURKAN DOĞAN | Climatic chamber design for the drop-weight impact test device | Mechanical Engineering |
| Electrical and Electronics Eng |
| 41 | Prof. Dr. EMRAH ÖZAHİ | A System Restructuring Study by Using Lean Manufacturing Principles to Increase Production Efficiency by Reducing Waste Energy. | Mechanical Engineering |
| Industrial Engineering |
| 42 | Dr.Öğr.Üyesi M. ERKAN KÜTÜK | Manufacturing and Control of a 2 DOF Press Mechanism Prototype | Mechanical Engineering |
| Electrical and Electronics Eng |
| 43 | Dr.Öğr.Üyesi SADIK OLGUNER | Static structural and harmonic response analyses of a highway bridge using ANSYS Workbench | Mechanical Engineering |
| Civil Engineering |
| 44 | Dr.Öğr.Üyesi SADIK OLGUNER | Mass/Volume optimisation of a planetary gearbox for wind turbine applications | Mechanical Engineering |
| Industrial Engineering |
| 45 | Dr.Öğr.Üyesi SADIK OLGUNER | Experimental investigation of process parameters in friction welding | Mechanical Engineering |
| Metallurgical and Materials Eng |
| 46 | Prof.Dr. SADETTİN KAPUCU | Design a tremor reduction device | Mechanical Engineering |
| Electrical and Electronics Eng |
| 47 | Doç.Dr. Hüseyin YAĞLI | Off-grid smart green city design | Mechanical Engineering |
| Electrical and Electronics Eng |
| Civil Engineering |
| 48 | Prof.Dr. Nihat YILDIRIM Prof.Dr. A. İhsan KUTLAR | Design and contruction of a prototype solar air heater with measurement and control of input and output parameters | Mechanical Engineering |
| Electrical and Electronics Eng |
| Food Engineering |
| 49 | Prof.Dr. Nihat YILDIRIM Prof.Dr. A. İhsan KUTLAR | Design and contruction of a solar tracker unit with measurement and control of input and output parameters | Mechanical Engineering |
| Electrical and Electronics Eng |
| Industrial Engineering |
| 50 | Prof.Dr. Nihat YILDIRIM Prof.Dr. A. İhsan KUTLAR | Design of innovative energy saving projects for housing and building applications | Mechanical Engineering |
| Civil Engineering |
| Engineering Physics |
| 51 | Prof. Dr. Ahmet KAYA | Design of Pistahio Paste Grinder | Food Engineering |
| Mechanical Engineering |
| 52 | Prof. Dr. Esra İBANOĞLU | Particle Size Determinatination by Light Scattering Method | Food Engineering |
| Optic Acoustical Engneering |
| Industrial Engineering |
| 53 | Prof. Dr. Şenol İBANOĞLU | Design of a milling device suitable for grinding oily nuts without severe heat accumulation due to friction | Food Engineering |
| Mechanical Engineering |
| Electrical and Electronics Eng |
| 54 | Prof. Dr. Hüseyin BOZKURT | Mathematical modelling of experimental data | Food Engineering |
| Mechanical Engineering |
| Electrical and Electronics Eng |
| Industrial Engineering |
| 55 | Prof. Dr. Medeni MASKAN | Use of ultrasound in detection of maturity level of fruits and vegetables. | Food Engineering |
| Engineering Physics |
| Optic Acoustical Engneering |
| 56 | Dr. Öğr. Üyesi Fatih BALCI | Design of Artificial Intelligence assisted process model for Bulgur plants | Food Engineering |
| Mechanical Engineering |
| Industrial Engineering |
| 57 | Dr. Öğr. Üyesi  Abdulaziz KAYA | Determination of Sustainable Polymer Usage in Plastic Industry of Gaziantep Province | Metallurgical and Materials Eng |
| Textile Engineering |
| Industrial Engineering |
| 58 | Doç. Dr.  Abdulcabbar YAVUZ | Formation and Application of Flexible Electrodes | Metallurgical and Materials Eng |
| Textile Engineering |
| Electrical and Electronics Eng |
| 59 | Doç. Dr.  Abdulcabbar YAVUZ | Design and manufacture of digital scale | Metallurgical and Materials Eng |
| Mechanical Engineering |
| Electrical and Electronics Eng |
| Industrial Engineering |
| 60 | Dr. Öğr. Üyesi  Azmi Mert ÇELİK | Synthesis of flame retardant zinc borate powders using thermochemical methods | Metallurgical and Materials Eng |
| Textile Engineering |
| Industrial Engineering |
| 61 | Doç. Dr. Derya K. YAVUZ | Design and cost analysis of a dental restorative production plant based on QCD principles | Metallurgical and Materials Eng |
| Mechanical Engineering |
| Industrial Engineering |
| 62 | Dr. Öğr. Üyesi  Halil İbrahim İÇOĞLU | Production of Glass Fiber Reinforced Polyester Composites via Vacuum Infusion Method | Metallurgical and Materials Eng |
| Textile Engineering |
| Industrial Engineering |
| 63 | Doç. Dr. Mikail ASLAN | Nanoparticle reinforced polymer composites | Metallurgical and Materials Eng |
| Textile Engineering |
| Industrial Engineering |
| 64 | Doç. Dr. Mustafa Güven GÖK | Investigation of the effect of heat treatment on the mechanical properties of polymeric 3D lattice structures | Metallurgical and Materials Eng |
| Mechanical Engineering |
| Industrial Engineering |
| 65 | Prof.Dr.Bülent GÖNÜL | A search on viability of fusion reactors | Physics Engineering |
| Mechanical Engineering |
| Electrical and Electronics Engineering |
| 66 | Doç. Dr. R.Güler YILDIRIM | Engineering Applications of Excel | Electrical and Electronics Engineering |
| Mechanical Engineering |
| Civil Engineering |
| Industrial Engineering |
| Textile Engineering |
| Metallurgical and Materials Eng |
| 67 | Prof.Dr.Ömer F. Bakkaloğlu | Design of solar cell | Engineering Physics |
| Mechanical Engineering |
| Electrical and Electronics Eng |
| 68 | Assist. Prof. Dr. Mehmet KOÇAK | Wireless Transmission of Electricity | Physics Engineering |
| Electrical and Electronics Engineering |
| Optic and Acoustical Engineering |
| 69 | Dr. Öğr. Üyesi Serap Çelik | Efficiency calculations of half-cut solar panels under shaded conditions | Engineering of Physics |
| Optic and Acoustical Engineering |
| Electrical and Electronics Engineering |
| 70 | Prof. Dr. Okan Özer | Applications of Monte Carlo Method (MCM) in Reactor Safety&Security Systems | Engineering Physics |
| Mechanical Engineering |
| Electrical and Electronics Engineering |
| 71 | Prof. Dr.Beşire GÖNÜL | An investigtion of band gap tuning in seminconductors for photonic devices | Engineering Physics |
| Optic and Acoustical Engineering |
| Metallurgical and Materials Eng |
| 72 | Prof.Dr.Ahmet BİNGÜL | Bidirectional optical communication | Optic and Acoustical Eng |
| Engineering Physics |
| Mechanical Engineering |
| Electrical and Electronics Eng |
| 73 | Prof.Dr.Zihni ÖZTÜRK | The ınvestigation of fusion energy | Engineering Physics |
| Mechanical Engineering |
| Electrical and Electronics Eng |
| 74 | Prof.Dr.Eser OLĞAR | Design and construction of absorptive Acoustical panels | Engineering of Physics |
| Optic and Acoustical Engineering |
| Civil Engineering |
| Mechanical Engineering |
| 75 | Prof.Dr.Metin BEDİR | Investigation of the corrosion behaviour of the metallic materials by the way different methods | Engineering of Physics |
| Mechanical Engineering |
| Metallurgical and Materials Eng |
| 76 | Prof.Dr.A.Necmeddin YAZICI | Investigation of luminaire and road properties on uniform lighting in road examples. | Optic and Acoustical Eng |
| Engineering Physics |
| Electrical and Electronics Engineering |
| 77 | Prof. Dr. Hüseyin TOKTAMIŞ | The most common composite materials and their application areas | Civil Engineering |
| Mechanical Engineering |
| Industrial Engineering |
| Physics Engineering |
| 78 | Prof.Dr.E.Vural KAFADAR | Ultrasonic Computer Tomography | Optic and Acoustical Eng |
| Engineering Physics |
| Electrical and Electronics Engineering |
| 79 | Prof.Dr.Hayriye TÜTÜNCÜLER | Investigation of dye sensitized solar celles | Electrical and Electronics Engineering |
| Food Engineering |
| Engineering Physics |
| 80 | Prof.Dr.Ayda BEDALL | Prototype automatic glass-plastic bottle sorter for a recycling plant. | Electrical and Electronics Engineering |
| Engineering Physics |
| 81 | Doç.Dr.Mustafa YILMAZ | Water harvesting from moisture in the air by 3D mesh nets. | Optic and Acoustical Eng |
| Mechanical Engineering |
| Engineering Physics |
| 82 | Prof.Dr.Ramazan KOÇ | Investigation of enzyme battery | Engineering Physics |
| Food Engineering |
| 83 | Prof. Dr. Mehmet Topalbekiroğlu | Preparation of software for stepper motors for use in textile machines | Textile Engineering |
| Mechanical Engineering |
| Electrical and Electronics Eng |
| 84 | Prof. Dr. Cem Güneşoğlu | Web based testing laboratory search portal | Textile Engineering |
| Electrical and Electronics Eng |
| 85 | Doç. Dr. Halil İbrahim Çelik | Design and production of conductive knitted fabric | Textile Engineering |
| Electrical and Electronics Eng |
| 86 | Doç. Dr. Hatice Kübra Kaynak | Investigation of conductive yarn production | Textile Engineering |
| Metallurgical and Materials Eng |
| 87 | Doç. Dr. Züleyha Değirmenci | Designing of thermoregulated textile structures | Textile Engineering |
| Electrical and Electronics Eng |
| 88 | Dr. Öğr. Üyesi Mehmet Erdem İNCE | The design and the production of green composite material from linen yarn weft-knitted reinforcement fabric and pine resin matrix (TÜBİTAK 2209 applied). | Textile Engineering |
| Metallurgical and Materials Eng |
| Civil Engineering |
| Engineering Physics |
| Industrial Engineering |
| Mechanical Engineering |
| 89 | Dr. Öğr. Üyesi Mehmet Erdem İNCE | The use of JUMP® statistical software package in engineering data analyses. | Textile Engineering |
| Metallurgical and Materials Eng |
| Civil Engineering |
| Engineering Physics |
| Industrial Engineering |
| Mechanical Engineering |
| Electrical and Electronics Eng |
| Food Engineering |
| Optic and Acoustical Eng |
| 90 | Dr. Öğr. Üyesi Hatice İbili | Nanoparticle Production via Electrohydrodynamic Atomization for Functional Surfaces | Textile Engineering |
| Food Engineering |
| Metallurgical and Materials Eng |
| Mechanical Engineering |
| 91 | Dr. Öğr. Üyesi Hatice İbili | Parameters Affect on Nanoparticle Formation via Electrohydrodynamic Atomization | Textile Engineering |
| Food Engineering |
| Metallurgical and Materials Eng |
| Mechanical Engineering |