2023-2024 Academic Year
Faculty of Engineering and Architecture Graduation Project Poster Exhibition: Project Titles and Advisors

No	Department	Project Title	Advisor
1	BME	Detection of Attention Deficit Hyperactivity Disorder using Brain Connectivity Information and Deep Learning	Assist. Prof. Dr. Özlem Karabiber Cura
2	BME	A general and interpretable approach for cell morphology analysis from microscopy images using Deep Learning.	Assist. Prof. Dr. Özlem Karabiber Cura
3	BME	Detection of Dyslexia Using EEG Signal decompositional technique: Variational mode decomposition and derivatives	Assist. Prof. Dr. Özlem Karabiber Cura
4	BME	Automated Diabetic Retinopathy Detection Using Deep Learning with Digital Fundus Images	Assist. Prof. Dr. Özlem Karabiber Cura
5	BME	Deep learning based application design for detection of skin cancer types.	Assist. Prof. Dr. Özlem Karabiber Cura
6	BME	Detection of Dyslexia by Using Multiple Feature Maps of EEG Signals and Deep Learning	Assist. Prof. Dr. Özlem Karabiber Cura
7	BME	Heart rate controlled electric assist level for e-bikes	Assist. Prof. Dr. Ömer Pars Kocaoğlu
8	BME	Machine Learning Assessment of Cold Atmospheric Plasma Efficacy on Breast Cancer: Exploring Receptor Status Correlations for Optimized Treatment Strategies	Assoc. Prof. Dr. Utku Kürşat Ercan
9	BME	Determination of Dual Antimicrobial Effect of Antimicrobial Peptide Conjugated β-TCP based Scaffolds on Multidrug Resistant Bacteria	Assist. Prof. Dr. Günnur Pulat
10	BME	VPP Peptidinin MCF-7 Meme Kanseri Model Hücrelerinde Etkinliğinin Değerlendirilmesi	Assoc. Prof. Dr. Ozan Karaman
11	BME	MCF7 Meme Kanseri Hücrelerinde WXEAAYQkFL peptidinin etkinliğinin belirlenmesi	Assoc. Prof. Dr. Ozan Karaman
12	BME	Meme Kanseri Tedavisinde Çinko Oksit Nanoparçacığı Yüklü Mezoporlu Silika Nanopartiküllerinin Karşılaştırmalı Değerlendirmesi: Fototermal Terapi ve Peptit Konjugasyonlu İkili Tedavi	Assoc. Prof. Dr. Didem Şen Karaman
13	BME	Yenilikçi biyobozunur yara örtüsünün hazırlanması ve düşük seviyeli lazer uygulaması eşliğinde fotobiyomodülasyon etkisinin incelenmesi	Assoc. Prof. Dr. Didem Şen Karaman
14	BME	Screen-Printing Flexible and Disposable Electrodes with Homemade Conductive Inks for Uric Acid Detection in Artificial Sweat	Assoc. Prof. Dr. Mustafa Şen
15	BME	Esnek Ekran Baskı Elektrot Üretimi ve Elektrokimyasal Dopamin Tespiti	Assoc. Prof. Dr. Mustafa Şen
16	BME	Design and fabrication of a portable potentiostat	Assoc. Prof. Dr. Mustafa Şen
17	BME	Dynamic measurement of chloride ions in water using screen printed Ag/AgCl electrodes	Assoc. Prof. Dr. Mustafa Şen
18	BME	Development VEGF mimetic QK peptide on polycaprolactone nanofibers for vascular tissue engineering	Assoc. Prof. Dr. Ozan Karaman
19	BME	Development of Phonescope for automatic cell counting	Assoc. Prof. Dr. Mustafa Şen
20	CE	The effect of discharge on bed morphology in case of a symmetrical confluence with a 45 degree angle guiding wall	Prof. Dr. Gökçen Bombar
21	CE	The equilibrium bed morphology of symmetrical open-channel confluence with 1.25 kg/m sediment load under movable bed condition	Prof. Dr. Gökçen Bombar
22	CE	The effect of guiding wall angle on morphology of a symmetrical confluence	Prof. Dr. Gökçen Bombar
23	CE	Investigation of the Effect of Glass Fiber on the Technical Properties of Gypsum Based Mortars	Prof. Dr. Lütfullah Gündüz
24	CE	Determination of Optimum Value of Polycarboxylate and Melamine Sulfanate Based Superplasticizers in High Strength Mortar Production	Prof. Dr. Lütfullah Gündüz
25	CE	Comparison of Effects of the Use of Water Repellent Additives of Different Origin in Cement Based Mortar Products on Energy Efficiency	Prof. Dr. Lütfullah Gündüz
26	CE	Rainwater harvesting potential of Eng. and Science Building at İzmir Katip Çelebi University	Assoc. Prof. Dr. Erman Ülker
27	CE	Zero energy building of hydraulic design in Eng. Building and Science Building	Assoc. Prof. Dr. Erman Ülker
28	CE	Static analysis of rainwater storage at the rooftop at Eng. and Science Building	Assoc. Prof. Dr. Erman Ülker
29	CE	Investigation of steel-concrete composite column behavior	Assoc. Prof. Dr. Mutlu Seçer
30	CE	Deterioration of steel structures under the effects of atmospheric corrosion	Assoc. Prof. Dr. Mutlu Seçer
31	CE	Shaking table modeling and measurement of harmonic seismic waves in the laboratory	Assoc. Prof. Dr. Hasan Fırat Pulat
32	CE	Examining the effect of fine grain content on the liquefaction potential of the soil	Assoc. Prof. Dr. Hasan Fırat Pulat
33	CE	A measure to evaluate the pedestrian safety in urban cities	Assist. Prof. Dr. Oruç Altıntaşı
34	CE	Investigation the road network structure around rail transit stations	Assist. Prof. Dr. Oruç Altıntaşı
35	CE	3D Visualization of Displaced Shape of Buildings Using Accelerometer Sensors	Assist. Prof. Dr. Oğuzhan Toğay
36	CE	Seismic Analysis of Offshore Wind Turbines Supported by Monopile Foundations	Assist. Prof. Dr. Hasan Emre Demirci
37	CE	Seismic Analysis of Offshore Wind Turbines Supported by Gravity Based Foundations	Assist. Prof. Dr. Hasan Emre Demirci
38	CE	Design of Pile Anchors for Floating Wind Turbines	Assist. Prof. Dr. Hasan Emre Demirci
39	CE	Self-Cleaning Properties of Cementless Mortar	Assist. Prof. Dr. Şevket Onur Kalkan
40	CE	Thecnical Properties of Ternary Blended Mortars	Assist. Prof. Dr. Şevket Onur Kalkan
41	CE	Thecnical Properties of Ternary Blended Mortars	Assist. Prof. Dr. Şevket Onur Kalkan
42	CE	Thecnical Properties of Ternary Blended Mortars	Assist. Prof. Dr. Şevket Onur Kalkan
43	CE	Estimation of Friction factor for Turbulent Flow of Newtonian Fluids in Rough Pipe Using Finite Volume and Finite Element Methods	Prof. Dr. Mehmet Sorgun
44	CE	An experimental investigation on turbulent drag reduction in pipes	Prof. Dr. Mehmet Sorgun
45	CE	Prediction of Critical Velocity for Slurry Transport in Pipes Using Machine Learning Algorithms and Nonlinear Regression Method	Prof. Dr. Mehmet Sorgun
46	CE	The effect of discharge on bed morphology in case of a symmetrical confluence with a 45 degree angle guiding wall	Prof. Dr. Gökçen Bombar
47	CE	The equilibrium bed morphology of symmetrical open-channel confluence with 1.25 kg/m sediment load under movable bed condition	Prof. Dr. Gökçen Bombar
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50	CE	Determination of Optimum Value of Polycarboxylate and Melamine Sulfanate Based Superplasticizers in High Strength Mortar Production	Prof. Dr. Lütfullah Gündüz
51	CE	Comparison of Effects of the Use of Water Repellent Additives of Different Origin in Cement Based Mortar Products on Energy Efficiency	Prof. Dr. Lütfullah Gündüz
52	CE	Experimental Investigation of RC-Joints	Assist. Prof. Dr. Mehmet Alper Çankaya
53	CE	Numerical Investigation of RC-Joints	Assist. Prof. Dr. Mehmet Alper Çankaya

54	EEE	Image and Video Captioning for Visually Impaired People	Assoc. Prof. Dr. Volkan Kılıç
55	EEE	PLC Based Anti-Vibration Balance Control System Design for the Spinning Process of Industrial Washing Machine	Prof. Dr. Savaş Şahin
56	EEE	Design of Three-Level Bidirectional DC-DC Buck-Boost Converter for Uninterruptible Power Supplies	Prof. Dr. Savaş Şahin
57	EEE	Design of an Arm Based LORA Module System for The Measurement of Air Quality at Public Bus Stops	Prof. Dr. Savaş Şahin
58	EEE	Arm Based Communication System Design for Agricultural Irrigation Hydrant	Prof. Dr. Savaş Şahin
59	EEE	Warning System Design With Micro-Electromechanical Systems In Case Of External Intervention In Electronic Water Meters And Classification With Machine Learning	Prof. Dr. Savaş Şahin
60	EEE	Design and Implementation of Nonlinear Ball and Beam System with PID Controller	Prof. Dr. Savaş Şahin
61	EEE	Effects and Applications of PEMF System in Cancer Cell Therapy's interface and embedded system design	Prof. Dr. Adnan Kaya
62	EEE	Machine Learning Supported RFID Phase Array Antenna Design for Smart Factories	Prof. Dr. Adnan Kaya
63	EEE	Machine Learning Supported UHF RFID Indoor Positioning System for Smart Factories with TDoA Method	Prof. Dr. Adnan Kaya
64	EEE	Development of Sensor Network System for Digital Transformation Transfer Laboratory	Prof. Dr. Merih PALANDÖKEN
65	EEE	3-dof Robot Arm Design and Control Application for a Mobile Robot with Four Mechanum Wheels	Asst. Prof. Dr. Kamil ÇETİN
66	EEE	Autonomous Movement Planning and Application of a Robot Armed Mobile Robot with Image Processing	Asst. Prof. Dr. Kamil ÇETİN
67	EEE	Developing a Digital Twin of the Smart Factory Model with Coppeliasim and Performing Product Performance Analysis	Asst. Prof. Dr. Kamil ÇETİN
68	EEE	Machine Learning Supported RFID Antenna Design and Stock Tracking System For Smart Factories	Prof. Dr. Merih PALANDÖKEN
69	EEE	Simulation and Design of Bi-directional DC-DC Converter for Stand Alone Photovoltaic (PV) AC Power System	Asst. Prof. Dr. Erhan DEMİROK
70	EEE	Digital Twin of a Marble Factory	Assoc. Prof. Dr. M. Erdal Özbek
71	GE	Trend analysis of real estate acquisition by foreigners / Yabancıların taşınmaz ediniminin trend analizi	Assoc. Prof. Dr. Zeynel Abidin Polat
72	GE	Informative Web-Site About Earthquakes in Turkey in the Last 20 Years	Assist. Prof. Dr. Osman Sami Kırtıloğlu
73	GE	İzmir Kâtip Çelebi University Web-Based Campus Information System	Assist. Prof. Dr. Osman Sami Kırtıloğlu
74	GE	Analysis of Sea Surface Temperature in the Black Sea	Assist. Prof. Dr. Nevin Betül Avşar
75	GE	Volume Calculations of Cultural Heritage Using Airborne LiDAR Data	Assist. Prof. Dr. Müge Ağca
76	GE	Examining the Effects of Universities on Urbanization with Photogrammetric Data: The Example of İzmir Kâtip Çelebi University	Assist. Prof. Dr. Müge Ağca
77	ME	Android Controlled RC Car	Assist. Prof. Dr. Caglar Uyulan
78	ME	Modeling and Control of Robotic Arm	Assist. Prof. Dr. Caglar Uyulan
79	ME	Enhancing Heat Transfer and Reducing Compressed Air Usage in Low-Pressure Die Casting of Aluminum Wheels	Assoc. Prof. Dr. Sercan Acarer
80	ME	Investigation and the Usability of Thermoplastic Composite Materials as Steering Gear	Prof. Dr. Kutlay Sever
81	ME	Wind turbine	Prof. Dr. Mehmet Çevik
82	MEE	Design and Navigation Control of Autonomous Mobile Robots (AMR).	Assist. Prof. Dr. Özgün Başer
83	MEE	Design and Control of Active Knee Joints.	Assist. Prof. Dr. Özgün Başer
84	MEE	Hardware in the Loop (HIL) Controller Design for Robot Manipulators.	Assist. Prof. Dr. Özgün Başer
85	MEE	Design and Control of a Serial Robot Arm using ROS	Assist. Prof. Dr. Fatih Cemal Can
86	MEE	Design and Control of a Serial Robot Arm using ROS	Assist. Prof. Dr. Fatih Cemal Can
87	MEE	Design and Control of a mobile robot using SLAM and navigation stack in ROS	Assist. Prof. Dr. Fatih Cemal Can
88	MEE	Automatic Liquid Dosing System Design and Implementation in Microliter Level	Assist. Prof. Dr. Serkan Doğanay
89	MEE	3D Helmholtz Coil Design	Assist. Prof. Dr. Serkan Doğanay
90	MEE	CNC Design for Microfluidic Chip Manufacturing	Assist. Prof. Dr. Serkan Doğanay
91	MEE	Design and production of fully autonomous measurement system for pedal vehicles used for support purposes in physiotheraphy treatments.	Assist. Prof. Dr. Barış Bıdıklı
92	MEE	Ball Balancing Robot	Assist. Prof. Dr. Nail Akçura
93	MEE	PLA Recycling Machine	Assist. Prof. Dr. Nail Akçura
94	MEE	Smart Tool Cabinet	Assist. Prof. Dr. Nail Akçura
95	MEE	Design of an Actuated Compact Omni-wheel	Prof. Dr. Levent Çetin
96	MEE	PCB Based Actuator Deployed Planar Mechanism Design	Prof. Dr. Levent Çetin
97	MEE	Design and Development of an Elbow Joint Rehabilitation Robot	Assist. Prof. Dr. Duygu Atcı
98	MEE	Design and Prototyping of a Carrier Ground Vehicle	Assist. Prof. Dr. Duygu Atcı
99	MEE	Development of a Backdrivable 3 DoF Parallel Manipulator	Assoc. Prof. Dr. Erkin Gezgin
100	MEE	Development of a 2 DoF Gamified Planar Parallel Manipulator for Upper Arm Rehabilitation	Assoc. Prof. Dr. Erkin Gezgin
101	MEE	Development of a Collaborative Parallel Platform for an Omnidirectional Mobile Robot	Assoc. Prof. Dr. Erkin Gezgin
102	MEE	MobileMapGen: HD Map Generation Through Smartphone Sensing	Assist. Prof. Dr. Çağdaş Karataş
103	MSE	Sol Jel Metoduyla Hidrofobik Çinko Oksit (ZnO) Sentezi Ve Kil Esaslı Kiremit Yüzeylere Uygulanması	Prof. Dr. Cem Tozlu
104	MSE	Production and characterization of carbon fiber reinforced MIL composites	Prof. Dr. Gül Yılmaz Atay, Assist. Prof. Dr. Saadet Güler
105	MSE	Growth of TiO2 Nanotubes by Electrochemical Anodization on the Surface of Titanium Plates with Different Surface Roughness	Prof. Dr. Gül Yılmaz Atay
106	MSE	Aluminyum dökümde metal kalitesinin malzeme özelliklerine etkisinin istatiksel analizi	Prof. Dr. Gül Yılmaz Atay
107	MSE	The Use of Balsa in Thermoplastic Composites	Prof. Dr. M. Özgür Seydibeyoğlu
108	MSE	The Use of PET Waste in Value Added Products	Prof. Dr. M. Özgür Seydibeyoğlu

109	MSE	PP-Glass Fiber Composites	Prof. Dr. M. Özgür Seydibeyoğlu
110	MSE	The Use of Waste Composites in PU Foams	Prof. Dr. M. Özgür Seydibeyoğlu
111	MSE	The Use of Waste Composites in Asphalt	Prof. Dr. M. Özgür Seydibeyoğlu
112	MSE	Biocomposites with Natural Colorants	Prof. Dr. M. Özgür Seydibeyoğlu
113	MSE	Civata Kaplama Sektöründe Kullanılan Boya Kazanlarının PTFE ile kaplanmasında Karbonnanotüp İlavesinin Etkisinin İncelenmesi	Assoc. Prof. Dr. Onur Ertuğrul
114	MSE	Alüminyum A356 AlaşımınınT6 Isıl İşleminde Bakır ve Manganın Mekanik Özelliklere ve Mikroyapıya Etkisi	Assoc. Prof. Dr. Onur Ertuğrul
115	MSE	Production and characterization of oxide reinforced aluminum matrix composites	Assist. Prof. Dr. Gökhan Polat
116	MSE	Investigation of grain refinement in aluminum and aluminum alloys	Assist. Prof. Dr. Gökhan Polat
117	MSE	Investigation of the effect of weld bead and preheating on steels joined by MIG welding method	Assoc. Prof. Dr. Saadet Güler, Prof. Dr. Fetullah Güneş
118	MSE	Boronizing of Monel 400 alloy by pack boriding method and investigation of diffusion kinetics	Assoc. Prof. Dr. Saadet Güler, Prof. Dr. Fetullah Güneş
119	MSE	Characterisation of hybrid nanostructures obtained by electrochemical anodizing and sol-gel method	Assoc. Prof. Dr. Saadet Güler, Prof. Dr. Fetullah Güneş
120	MSE	Recycling of zinc powder from waste from lamellar coating line to obtain zinc ingot and reuse as anode in electrolytic coating.	Dr. Res. Asst. Metehan Atagür, Assist. Prof. Dr. Nusret Kaya
121	MSE	Development of an Innovative Fluoropolymer Based Coating Solution for Improving the Properties of Fasteners	Dr. Res. Asst. Metehan Atagür, Assist. Prof. Dr. Nusret Kaya
122	MSE	Development of Visible Light-Active Silver Oxide Coated Carbon Fiber Photocatalysts	Dr. Res. Asst. Metehan Atagür, Prof. Dr. Cem Tozlu
123	MSE	Manufacturing of composite reinforced with aramid	Assist. Prof. Dr. İsmail Doğan Külcü
124	MSE	Reducing heat losses by insulating the mantle surface of cement rotary kilns with innovative material	Assist. Prof. Dr. İsmail Doğan Külcü
125	MSE	Fabrication of nanometal titanium reinforced composites with SLA 3D printing technology and investigation of their biocompatibility	Assist. Prof. Dr. İsmail Doğan Külcü

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