

2024-2025 EEE491 Projects		
Project Number	Project Topic	Project Advisor
1	Wireless ECG Measurement Device Design and Simulation	Prof. Dr. Firat HARDALAÇ
2	Design and Implementation of Rocket Flight Control Computer, Ground Station and Ground Station Interface	Prof. Dr. Firat HARDALAÇ
3	Detection and Interpretation of 'Glioma Tumour' with Image Processing and Artificial Intelligence Methods	Prof. Dr. Firat HARDALAÇ
4	Development of a target tracking algorithm using aircraft data captured via a commercial ADS-B receiver with a Raspberry-Pi processor card	Prof. Dr. M. Cengiz TAPLAMACIOĞLU
5	Power Transfer with Laser	Prof. Dr. M. Cengiz TAPLAMACIOĞLU
6	Drone Jammer	Prof. Dr. Erkan AFACAN
7	Smart Antenna System	Prof. Dr. Erkan AFACAN
8	Video Encryption with Elliptic Curves	Prof. Dr. Erkan AFACAN
9	Smart Power Quality Metering Device	Prof. Dr. Özgül SALOR DURNA
10	RAT-Based In-Pod Electrical Power Supply	Prof. Dr. Özgül SALOR DURNA
11	EMI Filter Design for DC-DC Converter	Prof. Dr. Saffet AYASUN
12	Development and Validation of a Main Rotor Model in Simulink Environment for Rotary-Wing Flight Mechanics Applications	Prof. Dr. Saffet AYASUN
13	Radar Detection Medical Alert System (VIPER ASSIST)	Prof. Dr. Hasan Şakir BİLGE
14	Chip Design Using RV32IMAFB_Zicsr ISA	Prof. Dr. Hasan Şakir BİLGE
15	RF Collector	Prof. Dr. Nursel AKÇAM
16	Multiband Microstrip Patch Antenna Design for Automobile Radars	Prof. Dr. Nursel AKÇAM
17	Garbage Collection Robot	Prof. Dr. Nursel AKÇAM
18	Design and Development of Software Defined Radio (SDR) based Wireless Communication Systems for Next Generation Networks (NGN)	Prof. Dr. Ali KARA
19	Design and Development of MIMO Array Antenna for 5G Base Stations	Prof. Dr. Mehmet ÇİYDEM
20	Design and Development of Curved/Sloped Antenna for Helicopters	Prof. Dr. Mehmet ÇİYDEM
21	Classification of Technical Analysis Patterns in the Stock Market	Prof. Dr. Ertuğrul AKSOY
22	A High-Efficiency Bidirectional DC/DC Converter for Future Energy Storage Applications	Prof. Dr. Bünyamin TAMYÜREK
23	An LLC resonant Converter for Space Applications	Prof. Dr. Bünyamin TAMYÜREK
24	Design and Implementation of IEEE802.11b Standard Based WLAN Physical Layer Waveform on DSP	Prof. Dr. Özgür ERTUĞ
25	Air Defense System Vehicle	Prof. Dr. Tuğba Selcen NAVRUZ
26	Deep Learning-Based Autonomous Exploration and Hazard Detection Vehicle	Prof. Dr. Tuğba Selcen NAVRUZ
27	Controller Design for Atomic Force Microscope	Doç. Dr. Müjdat BALANTEKİN
28	Cigarette Stub Detection in Traffic	Doç. Dr. Süleyman Sungur TEZCAN
29	3D Segmentation and Volume Prediction of Bladder	Doç. Dr. Mehmet Feyzi AKŞAHİN
30	3D Segmentation of Lung and Volume Prediction of Cancerous Tissues	Doç. Dr. Mehmet Feyzi AKŞAHİN
31	Development of a Gunshot Detection Sonar Radar Prototype for Use in Helicopters and Drones	Doç. Dr. Mehmet Feyzi AKŞAHİN
32	Automatic Target Recognition (ATR) Algorithm Using Artificial Intelligence and Image Processing Techniques in Aerial Platforms	Doç. Dr. Mehmet Feyzi AKŞAHİN
33	Development of the Hand Exercise Device Prototype for Rehabilitation	Doç. Dr. Derya YILMAZ
34	Automatic flatfoot detection by using deep networks	Doç. Dr. Derya YILMAZ
35	Image Processing Supported Unmanned Aerial Vehicles for Agricultural Automation	Doç. Dr. Uğurhan KUTBAY
36	Li-Fi Based Smart House System	Dr. Öğr. Üyesi Mehmet KARAKAYA
37	Smile-Activated Shop Door: An Interactive Access Control System	Dr. Öğr. Üyesi Mehmet KARAKAYA
38	3D Segmentation with Deep Learning in Dentistry	Dr. Öğr. Üyesi Mahmut Emin ÇELİK
39	Scanner Prototyping for Small Objects Towards Intra Oral Scanners	Dr. Öğr. Üyesi Mahmut Emin ÇELİK
40	Colour Sorting System with an Automatic Robot Arm	Dr. Öğr. Üyesi Bülent DAĞ
41	Solar Inverter System	Dr. Öğr. Üyesi Bülent DAĞ
42	Spectrum Assessment Methods for Cognitive Radio	Dr. Öğr. Üyesi Özgür ERGÜL
43	Follower Unmanned Aerial Vehicle (UAV)	Dr. Öğr. Üyesi Özgür ERGÜL
44	Domestic fuel cell control system circuit design for Teknofest Efficiency Challenge electric vehicle competition	Dr. Öğr. Üyesi Emrah DEMİR
45	Investigation of The Effects of Plasma Dielectric Barrier Discharge (DBD) Activators on Aerodynamics (TAI Lift-Up)	Dr. Öğr. Üyesi Hıdır DÜZKAYA
46	Development of RAT Based Intra-Pod Electrical Power Supply (TAI lift-Up)	Dr. Öğr. Üyesi Hıdır DÜZKAYA
47	EMI Filter Design for DC-DC Converter	Dr. Öğr. Üyesi Funda Ergün YARDIM
48	Design and Implementation of a 5000mAh, 15W Wireless Portable Charger	Doç. Dr. Korhan KAYIŞLI
49	Design and implementation of a 6 DOF Robotic Humanoid Arm	Doç. Dr. Korhan KAYIŞLI
50	High Voltage Power Supply	Dr. Öğr. Üyesi Emrah DEMİR
51	Design and Implementation of a 3-Joint Robotic Fish	Dr. Öğr. Üyesi Emrah DEMİR