

| 2026-2027 EEE491/492 Project Groups |             |                        |                                  |                                                                                                                                         |
|-------------------------------------|-------------|------------------------|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Project No                          | Student No  | Student Name           | Advisor                          | Projet Name                                                                                                                             |
| 1                                   | 23111010036 | Mustafa USTAÖMEROĞLU   | Prof. Dr. Firat HARDALAÇ         | Autonomous Multi-Agent Air Combat Maneuvering (Dogfight) Simulation Using Deep Reinforcement Learning                                   |
|                                     | 22111012403 | Manı VAKILI            |                                  |                                                                                                                                         |
|                                     | 21111010407 | Aykut USLU             |                                  |                                                                                                                                         |
| 2                                   | 23111012058 | Can Kırış ÖNDER        | Prof. Dr. Erkan AFACAN           | Drone Jammer                                                                                                                            |
|                                     | 21111012019 | Enes ERTEM             |                                  |                                                                                                                                         |
|                                     | 23111012061 | Seha SOYÜNEN           |                                  |                                                                                                                                         |
|                                     | 22111012058 | Sevda OĞRAŞ            |                                  |                                                                                                                                         |
| 3                                   | 22111010764 | Ekrem OLGUN            | Prof. Dr. Erkan AFACAN           | ElGamal Encryption System                                                                                                               |
|                                     | 21111010034 | Ensar POLATTIMUR       |                                  |                                                                                                                                         |
|                                     | 21111010022 | Mustafa Selim SÜMER    |                                  |                                                                                                                                         |
|                                     | 21111012016 | Muhammet SEVINÇER      |                                  |                                                                                                                                         |
|                                     | 191110506   | Hüseyin ÜNAL           |                                  |                                                                                                                                         |
| 4                                   | 22111010058 | Okan DALKIÇ            | Prof. Dr. Erkan AFACAN           | Smart Antenna System                                                                                                                    |
|                                     | 23111010001 | Arda ŞEN               |                                  |                                                                                                                                         |
|                                     | 22111010062 | Ömer Efe FİŞNE         |                                  |                                                                                                                                         |
| 5                                   | 23111010067 | Şüheda Enhar AÇIKEL    | Prof. Dr. Özgül SALOR-DURNA      | Evaluation of Flicker Perceptibility Thresholds in Modern LED and Incandescent Light Sources for Re-Evaluating IEC Std. 61000-4-15      |
|                                     | 23111010061 | Arda İKİNCİ            |                                  |                                                                                                                                         |
|                                     | 23111010060 | Samir HOMSI            |                                  |                                                                                                                                         |
|                                     | 23111010044 | Eren Utku HÜSMEN       |                                  |                                                                                                                                         |
| 6                                   | 22111012059 | Mevlut ÖZEN            | Prof. Dr. Özgül SALOR-DURNA      | Real-Time Polyphonic Music Transcription System via Embedded Constant-Q Transform (CQT) and Automated Notation Alignment                |
|                                     | 23111012030 | Burak Emre ÖVÜÇ        |                                  |                                                                                                                                         |
|                                     | 22111012757 | Mert İŞERİ             |                                  |                                                                                                                                         |
| 7                                   | 21111012409 | Yusuif HIKMET          | Prof. Dr. Saffet AYASUN          | IoT-Enabled Hybrid (Solar/Wind) Microgrid Power Management and Smart BMS Design                                                         |
|                                     | 201110801   | Sahymyrat SATLYKOV     |                                  |                                                                                                                                         |
|                                     | 201110713   | Muhammed Enes SEKME    |                                  |                                                                                                                                         |
|                                     | 23111012406 | Selehaddin KURT        |                                  |                                                                                                                                         |
| 8                                   | 22111012014 | Adil Efe ŞENTÜRK       | Prof. Dr. Hasan Şakir BİLGE      | Real-Time Object Detection on FPGA Using a Custom RISC-V Architecture and AI Accelerator                                                |
|                                     | 23111012057 | Yaren ÖZDEN            |                                  |                                                                                                                                         |
|                                     | 22111012017 | Metin SATI             |                                  |                                                                                                                                         |
|                                     | 23111012056 | Rümeysa Eda SOĞANCI    |                                  |                                                                                                                                         |
|                                     | 22111012054 | Samet BAĞATUR          |                                  |                                                                                                                                         |
| 9                                   | 23111012062 | Meryem BÜLBÜL          | Prof. Dr. Hasan Şakir BİLGE      | Reflex Brake: Vision-Triggered Ultra-Low Latency Autonomous Emergency Braking System via FPGA Hardware Acceleration                     |
|                                     | 22111012030 | Yuşa Eren KARACA       |                                  |                                                                                                                                         |
|                                     | 22111012023 | Berkay DEMİR           |                                  |                                                                                                                                         |
|                                     | 22111012050 | Yakup Berat KAYA       |                                  |                                                                                                                                         |
| 10                                  | 181112026   | Cem Kutay NANÇİN       | Prof. Dr. Nursel AKÇAM           | Design of a Multi-Band, Two-Axis Mechanically Steered Antenna Head for Electronic Warfare Direction Finding                             |
|                                     | 23111012022 | Enes SÖKMEN            |                                  |                                                                                                                                         |
|                                     | 23111012042 | Furkan KART            |                                  |                                                                                                                                         |
|                                     | 23111012003 | Muhammed Pusat ÖZÇELİK |                                  |                                                                                                                                         |
|                                     | 23111012054 | Ömer Faruk KOLAYCA     |                                  |                                                                                                                                         |
| 11                                  | 21111012007 | Uğur Atakan DEMİREL    | Prof. Dr. Nursel AKÇAM           | RF Signal Detection System for Electronic Warfare Applications                                                                          |
|                                     | 23111010753 | Bora ÇETKİN            |                                  |                                                                                                                                         |
|                                     | 22111010054 | Eren SARI              |                                  |                                                                                                                                         |
| 12                                  | 23111012001 | Kemal Efe CİRAKOĞLU    | Prof. Dr. Ali KARA               | Continuous and Non-Invasive Heavy Metal Detection in Liquid Media via Microwave Resonator Sensing                                       |
|                                     | 22111010077 | Rıdvan DEMİRHAN        |                                  |                                                                                                                                         |
|                                     | 22111010024 | Muhammet Salih ÖZTÜRK  |                                  |                                                                                                                                         |
|                                     | 22111012047 | Elif ERASLAN           |                                  |                                                                                                                                         |
|                                     | 22111012756 | Tarik Celal YASA       |                                  |                                                                                                                                         |
| 13                                  | 22111010063 | Züleyha ACAR           | Prof. Dr. Mehmet ÇİYDEM          | Antenna System for Satellite Ground Control Station (S-Band)                                                                            |
|                                     | 22111010072 | Hatice Yaren KEL       |                                  |                                                                                                                                         |
|                                     | 22111010076 | Sait AYDIN             |                                  |                                                                                                                                         |
|                                     | 22111012046 | İrem Rana AKOL         |                                  |                                                                                                                                         |
| 14                                  | 201110083   | Ali Salih ACAR         | Prof. Dr. Mehmet ÇİYDEM          | Antenna System for Satellite Ground Control Station (X-Band)                                                                            |
|                                     | 22111010029 | Emre Can KURT          |                                  |                                                                                                                                         |
|                                     | 21111010027 | Erkay Enes KARAKUŞ     |                                  |                                                                                                                                         |
|                                     | 21111010029 | Koray CEBRAİHOĞULLARI  |                                  |                                                                                                                                         |
| 15                                  | 22111010068 | Yağmur ÖZTÜRK          | Prof. Dr. Bünyamin TAMYÜREK      | Design of a Compact DCDC Converter for Supercapacitor Integration in Missile Applications                                               |
|                                     | 22111012044 | Hakan KARAGÜLLE        |                                  |                                                                                                                                         |
|                                     | 22111010015 | Betül TÜYSÜZ           |                                  |                                                                                                                                         |
| 16                                  | 22111012011 | Hakan TOPÇUOĞLU        | Prof. Dr. Özgür ERTUĞ            | Deep Learning Based Modulation Recognition on ADALM-PLUTO SDRs                                                                          |
|                                     | 22111010046 | Mustafa Alper ÇAY      |                                  |                                                                                                                                         |
|                                     | 22111012016 | Yavuz Arda KADİROĞLU   |                                  |                                                                                                                                         |
|                                     | 22111012060 | Kutluhan YILMAZ        |                                  |                                                                                                                                         |
| 17                                  | 22111010061 | Abdullah PINARBAŞI     | Prof. Dr. Tuğba Selcen NAVRUZ    | Amphibious Drone Capable of Aerial Flight and Surface Navigation                                                                        |
|                                     | 23111010754 | Abdulsamed GÜNER       |                                  |                                                                                                                                         |
|                                     | 22111010082 | Hasan Baran CAN        |                                  |                                                                                                                                         |
|                                     | 22111010002 | Cuma Deniz IŞIK        |                                  |                                                                                                                                         |
| 18                                  | 23111010027 | Zübeyir Şamil KESKİN   | Prof. Dr. Tuğba Selcen NAVRUZ    | Design and Implementation of a Gesture-Controlled Transformable Aerial-Ground Robotic Platform for Search and Exploration               |
|                                     | 23111010075 | Cemile Eda KAYA        |                                  |                                                                                                                                         |
|                                     | 22111012056 | Hümeyra ÖZYALÇIN       |                                  |                                                                                                                                         |
|                                     | 22111012021 | Aysun AKSOY            |                                  |                                                                                                                                         |
| 19                                  | 201112036   | Yasin MEŞE             | Prof. Dr. Hüsnü Deniz BAŞDEMİR   | Software Based Radar Cross Section (RCS) Classification for Unmanned Air Vehicles                                                       |
|                                     | 22111010004 | Ahmet Meriç ÇANLI      |                                  |                                                                                                                                         |
|                                     | 22111010047 | Barış KARADOĞAN        |                                  |                                                                                                                                         |
| 20                                  | 23111012060 | Berkay TAYMAZ          | Prof. Dr. Hüsnü Deniz BAŞDEMİR   | Fundamental Trans/Receiver Prototype Design For Free Space Optical Communication                                                        |
|                                     | 23111010652 | Fatma Rana BAYSAL      |                                  |                                                                                                                                         |
|                                     | C201140022  | Ece GÖL                |                                  |                                                                                                                                         |
| 21                                  | 22111010051 | Beyza HAŞLAK           | Prof. Dr. Süleyman Sungur TEZCAN | "Regional Micro-Spray and Sludge-Prevention" Smart Washing System for Agricultural Dust, Pollination Residue, and Bird Droppings        |
|                                     | 22111010501 | Coşkun YARDIMCI        |                                  |                                                                                                                                         |
|                                     | 22111010003 | Abdulkahim BABUR       |                                  |                                                                                                                                         |
| 22                                  | 21111010044 | Feyza YURTTAŞ          | Prof. Dr. Mehmet Feyzi AKŞAHİN   | AI-Supported Real-Time Health Monitoring and Early Fault Detection System for UAV Avionics                                              |
|                                     | 23111010024 | Edanur DEMİRCİ         |                                  |                                                                                                                                         |
|                                     | 22111010006 | Hatice Esra KÖROĞLU    |                                  |                                                                                                                                         |
|                                     | 23111010018 | İrem Gül BAYRAKTAROĞLU |                                  |                                                                                                                                         |
| 23                                  | 22111010031 | Begüm BEŞKALE          | Prof. Dr. Mehmet Feyzi AKŞAHİN   | Autonomous BLDC Motor-Driven Model Satellite: Industrial Flight Control, Telemetry, IoT And Interference-Resilient Communication System |
|                                     | 21111010048 | Hüseyin KUTLUTÜRKAN    |                                  |                                                                                                                                         |
|                                     | 21111010035 | Halil Mert COŞKUN      |                                  |                                                                                                                                         |
|                                     | 22111010503 | Halil YURUCU           |                                  |                                                                                                                                         |
|                                     | 21111010062 | Ömer Faruk ÇİFTÇİ      |                                  |                                                                                                                                         |
| 24                                  | 24111010771 | Mustafa Selçuk SOYÖZ   | Doç. Dr. Mijdat BALANTEKİN       | Footsteps into Electricity                                                                                                              |
|                                     | 22111010067 | Mustafa Berat ÖZTÜRK   |                                  |                                                                                                                                         |
|                                     | 21111010036 | Mehmet Yamaç SERİN     |                                  |                                                                                                                                         |
|                                     | 191112006   | Harun Raşit ASLAN      |                                  |                                                                                                                                         |

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| Project No                          | Student No   | Student Name             | Advisor                           | Projet Name                                                                                                                       |
| 25                                  | 22111010057  | Abrek Emir TAŞDEMİR      | Doç. Dr. Derya YILMAZ             | AI-Powered Food Waste Management System                                                                                           |
|                                     | 21111010005  | Rafet Melih KÜÇÜKKAĞNICI |                                   |                                                                                                                                   |
|                                     | 22111010065  | Yiğit ATAR               |                                   |                                                                                                                                   |
|                                     | 23111010020  | Zühal GÜNEY              |                                   |                                                                                                                                   |
|                                     | 23111010766  | Umut EKER                |                                   |                                                                                                                                   |
| 26                                  | 21111010024  | Semih SABUR              | Doç. Dr. Derya YILMAZ             | Camera-Based Contactless Vital Sign Monitoring System                                                                             |
|                                     | 191112406    | Resulberdi SUVLYYEV      |                                   |                                                                                                                                   |
| 27                                  | 22111012501  | Nilsu ATA                | Doç. Dr. Korhan KAYIŞLI           | Intelligent Fault-Tolerant Flight Control Computer with Adaptive Sensor Fusion and On-Board Anomaly Detection for Autonomous UAVs |
|                                     | 22111010048  | Emre ÇIVAK               |                                   |                                                                                                                                   |
|                                     | 23111010063  | Bayram Hasan URUN        |                                   |                                                                                                                                   |
|                                     | 22111012032  | Ayla Tuğba AKKUL         |                                   |                                                                                                                                   |
| 28                                  | 21111010007  | Kamil ÖZKILIÇ            | Doç. Dr. Korhan KAYIŞLI           | Solar-Powered Water Purification & Pumping System with MPPT and Inverter Integration                                              |
|                                     | 21111010037  | Mustafa Buğra KESKİNOĞLU |                                   |                                                                                                                                   |
|                                     | 22111010760  | Oğuz Efe ÇAMUR           |                                   |                                                                                                                                   |
|                                     | 22111010758  | Yiğit CANBAZ             |                                   |                                                                                                                                   |
| 29                                  | 22111010074  | Yusuf ÇELİK              | Doç. Dr. Korhan KAYIŞLI           | AI-Assisted Fault-Tolerant Power Management and Distribution Unit for Autonomous UAVs                                             |
|                                     | 22111010070  | Melih ULUBAŞ             |                                   |                                                                                                                                   |
|                                     | 22111010027  | Ahmet Efe GÜRSOY         |                                   |                                                                                                                                   |
|                                     | 23111010056  | Göktaş Eren KURUKAN      |                                   |                                                                                                                                   |
| 30                                  | 22111010033  | Muhammed Furkan ÜNÜVAR   | Doç. Dr. Korhan KAYIŞLI           | AI-Assisted Edge-Based Predictive Maintenance and Fault Diagnosis System for Photovoltaic Power Plants                            |
|                                     | 22111010056  | Mert Can KOKTAY          |                                   |                                                                                                                                   |
|                                     | 22111010075  | Furkan ÖZBEK             |                                   |                                                                                                                                   |
|                                     | 23111010069  | Aykut TAVAZAR            |                                   |                                                                                                                                   |
| 31                                  | 22111012019  | Hasan Berke KURUBAŞ      | Doç. Dr. Korhan KAYIŞLI           | Bio-Inspired Amphibious/Underwater Robot                                                                                          |
| 32                                  | 22111010759  | Esra BAĞCI               | Doç. Dr. Mahmut Emin ÇELİK        | FPGA-Based UAV Detection and Real-Time Video Processing System                                                                    |
|                                     | 22111010081  | Zühal Neda ÖZMEN         |                                   |                                                                                                                                   |
| 33                                  | 22111010053  | Umut ÖZEN                | Doç. Dr. Mahmut Emin ÇELİK        | Smart Unmanned Surface Surveillance and Patrol Platform                                                                           |
|                                     | 22111012005  | Mustafa HİLAL            |                                   |                                                                                                                                   |
|                                     | 22111012007  | Bera FANSA               |                                   |                                                                                                                                   |
| 34                                  | 22111010035  | Esengül ALTINOK          | Doç. Dr. Hıdır DÜZKAYA            | Communication Kit for Forest Fire Detection                                                                                       |
|                                     | 201110057    | Oznuur SAVAŞ             |                                   |                                                                                                                                   |
|                                     | 22111010020  | Eren SARIOĞLU            |                                   |                                                                                                                                   |
|                                     | 22111010009  | Cansu CEVİZ              |                                   |                                                                                                                                   |
|                                     | 22111012057  | Zeynep Süde ÖZTÜRK       |                                   |                                                                                                                                   |
| 35                                  | 22111012502  | Cafer Alperen ARTUN      | Dr. Öğr. Üyesi Bülent DAĞ         | A GaN/SiC Based Bidirectional Battery Charging System for DC Microgrids                                                           |
|                                     | 22111012061  | Muhammet Said ÇAKAR      |                                   |                                                                                                                                   |
| 36                                  | 23111010049  | Buğra Eren SAYMA         | Dr. Öğr. Üyesi Özgür ERGÜL        | Follower Unmanned Aerial Vehicle (UAV)                                                                                            |
|                                     | 23111010025  | Taha Hüseyin KOÇASLAN    |                                   |                                                                                                                                   |
|                                     | 21111010058  | Kudret Gürkan AYNUR      |                                   |                                                                                                                                   |
| 37                                  | C21113032034 | Zeynep ÖZTÜRK            | Dr. Öğr. Üyesi Funda ERGÜN YARDIM | Metasurface-Supported Microstrip Antenna                                                                                          |
|                                     | 21111010061  | Nefise EKİZ              |                                   |                                                                                                                                   |
|                                     | 22111010064  | Aybala KILIÇ             |                                   |                                                                                                                                   |
| 38                                  | 22111010071  | Gökalep SAVAŞIR          | Dr. Öğr. Üyesi Funda ERGÜN YARDIM | Wireless Power Transfer                                                                                                           |
|                                     | 23111010068  | Yağız HAYIRLIOĞLU        |                                   |                                                                                                                                   |
|                                     | 22111010069  | Kadirhan YAMAN           |                                   |                                                                                                                                   |
|                                     | 22111010025  | Battal Kaan EROL         |                                   |                                                                                                                                   |
| 39                                  | 21111012021  | Eren AÇIKGÖZ             | Dr. Öğr. Üyesi Funda ERGÜN YARDIM | Design and Implementation of a Vision-Guided Modular Fixed-Wing UAV for Precision Multi-Payload Drop Operations                   |
|                                     | 22111012401  | Ravan JABIYEV            |                                   |                                                                                                                                   |
| 40                                  | 22111010030  | İbrahim Emre BACAKOĞLU   | Dr. Öğr. Üyesi Funda ERGÜN YARDIM | Kamikaze Drone Design                                                                                                             |
|                                     | 22111010060  | Kıvanç OYDU              |                                   |                                                                                                                                   |
|                                     | 22111010044  | Tolga KARAPINAR          |                                   |                                                                                                                                   |
|                                     | 22111010059  | Sudenaz BİLGİN           |                                   |                                                                                                                                   |
| 41                                  | 21111012015  | Nuh Furkan OLGUN         | Dr. Öğr. Üyesi İhsan KANBAZ       | Design and Implementation of an FPGA-Based Multi-Channel DRFM and Digital Beamforming Architecture for Radar Deception            |
|                                     | 23111012045  | Talha ERASLAN            |                                   |                                                                                                                                   |
|                                     | 22111012024  | Muhammet Ali KARA        |                                   |                                                                                                                                   |
|                                     | 22111012004  | Hacı Kerem KARAÜZÜM      |                                   |                                                                                                                                   |
| 42                                  | 23111012700  | Onur Berkay KARAKOÇ      | Dr. Öğr. Üyesi İhsan KANBAZ       | Reconfigurable S-Band Antenna Array Design for UAV and Drone Telemetry                                                            |
|                                     | 23111012757  | Haluk ÜNLÜ               |                                   |                                                                                                                                   |
|                                     | 23111012008  | Melih Mustafa MOLDUR     |                                   |                                                                                                                                   |
|                                     | 22111012043  | Hikmet Korkut PEKER      |                                   |                                                                                                                                   |
| 43                                  | C21115050410 | Hazel Nur ŞENTÜRK        | Dr. Öğr. Üyesi İhsan KANBAZ       | SWaP-Optimized Super-Directive Antenna Array for LPI/LPD and Anti-Jamming Tactical Communications                                 |
|                                     | 22111010504  | Batuhan YILDIZ           |                                   |                                                                                                                                   |
|                                     | C201150017   | Mert ÖZCAN               |                                   |                                                                                                                                   |

\*Projects highlighted in red have been assigned to students before the selection.