## FACULTY OF AERONAUTICS AND ASTRONAUTICS

Eskisehir Technical University, Faculty of Aeronautics and Astronautics was established in 1986 in order to train personnel having suitable qualifications that Global Civil Aviation Sector. In the Avionics, Airframe and Powerplant Maintenance, Air Transportation Management, Air Traffic Control, and Flight Training Departments one year of optional Intensive English Language training and 4 years of undergraduate education is offered. Students are accepted to the Air Traffic Control and FlightTraining Departments by an entrance examination conducted by the university following a preliminary registration. Students may get acceptance to the Avionics, Airframe and Powerplant Maintenance, and Air Transportation Management Departmentsby taking centralized examinations run on a national scale: Citizens of Turkey and Turkish Republic of Northern Cyprus shouldtake the ÖSS; Citizens of Other Countries should take the YÖS (Foreign Student Examination).
At the Faculty of Aeronautics and Astronautics, there are an international airport, a SHY- 145 certified maintenance center, 20 aircrafts, 28 laboratories; and flight, airport control, and radar simulators. Via the maintenance center that it has, the Faculty School has the ability to conduct the overall maintenance of aircrafts lighter than 5700 kg . At the Faculty of Aeronautics and Astronautics with its, effectively run, Airport establishment, Air Traffic Control services, flight and maintenance operations, the students find the opportunity to learn in field the subject matters coinciding with their respective area of application.
With this integrated structure, the Faculty continues its cooperation with the national and international aviation institutions and industry. The service provided in the Aviation Sector has international attributes as a result the personnel employed in this Sector and the educational institutions training these personnel have to be properly certified according to the standards. Since the past, the Faculty of Aeronautics and Astronautics is continuing its operation according to the international and national standards while offering education and conducting aviation operations. The Faculty is one of the few Faculty of Aeronautics and Astronautics worldwide with its human resources, available equipment and facilities; and aforementioned attributes.

| Dean | : Prof. Dr. Öznur USANMAZ |
| :--- | :--- |
| Vice-Dean | : Prof. Dr. Enis Turhan TURGUT |
| Vice-Dean | : Asst. Prof. Dr. Sinem KAHVECIOĞLU |
| Secretary to the Faculty | : Recai ÇELİK |

## STAFF

## Professors:

Önder ALTUNTAŞ, Özlem ATALIK, Ender GEREDE, T. Hikmet KARAKOÇ, Mehmet Şerif KAVSAOĞLU, Ayşe KÜÇÜK YILMAZ, Hakan OKTAL, Ferhan ŞENGÜR, Önder TURAN, Dilek TURAN, Enis Turhan TURGUT, Öznur USANMAZ, Tolga BAKLACIOĞLU, Cem ÇETEK

## Associate Professors:

Savaş S. ATEŞ, Ünal BATTAL, Vildan DURMAZ, Nalan ERGÜN, Emre KIYAK, Özlem ŞAHİN, Suat USLU, Gülay ÜNAL, Ebru YAZGAN, Aziz KABA

## Assistant Professors:

Müge ARMATLI KAYRAK, Fulya AYBEK ÇETEK, Emre AYDOĞAN, Kübra Gülnaz BÜLBÜL, Ertan ÇINAR, Hülya ERGÜL, Yasemin IŞIK, Sinem KAHVECiOĞLU, Nevzet KAYA, Hakan KORUL, İlkay ORHAN, Gamze ORHAN, Uğur ÖZDEMİ, Asuman ÖZGER, Metin ÖZGÜR, Ali Emre SARILGAN, Orkun TUNÇKAN, Alper ULUDAĞ, Kadriye YAMAN, A. Akile YILDIRIM, Emircan ÖZDEMIR, Tamer SAVAŞ,

## Lecturers:

Füsun ADAR, Hakan AYDEMİR, Tulga Metin CANDAŞ, Gökhan DURMUŞ, Gülcan GÜNAY, M. Selçuk İRDE, Ramazan KALE, Hasan LİK, Osman ODABAŞI, Erkan ORMAN, Okan SALDOĞAN,Sema SAB, Hasan TíFTíK, Nilgün YILDIRIM, Ali Ozan CANARSLANLAR,

## Research Assistants:

Hakkı AKSOY, Murat AYAR, Emre AYDIN, Demet CANPOLAT TOSUN, Eşref ÇAKIR, Hurşit DEĞíinMENCİ, Ahmet ERMEYDAN, Onur GÜNEY, Cemal IŞILAK, Ferhat İNCE, Barış KARABAYRAK,Mustafa ÖZZDEMIR, Nedim SUNAY, Burak TARHAN, Ümran ÜNDER, Muhammet YiLANLİ, Ece YURDUSEVIMLİ METİN, Enes ÖZÇELİK, Nurşah ÖZ, Hilal Tuğçe LAPÇíN, Merve KINACI, Fatih Kutay AKPINAR, Ali Armağan DİLER

## DEPARTMENT OF AIR TRAFFIC CONTROL

In this department, air traffic controllers are trained according to the International Civil Aviation Organization and EUROCONTROL standards in order to ensure safe, effective and orderly air traffic flow. In our country, it is the first and onlydepartment offering undergraduate education in the field of air traffic control. Besides the theoretical courses, the students aretrained at air traffic control radar simulator, airport control simulator, and flight procedures design laboratory for applications.

Furthermore, the air traffic control services conducted at Eskişehir Technical University's Hasan Polatkan Airport offers education in real air traffic environment to the students.
Every academic year, fifteen students are accepted to the Air Traffic Control Department by preliminary registration followed by a special aptitude test. In the department, one year of optional Intensive English Language education is followed by four years of undergraduate education. There is 30 workdays internship requirement for the students at the air traffic control units. The graduates work at the Air Traffic Control Units of the General Directorate of State Airports.

| Department Head | : Assoc. Prof.Dr. Cem ÇETEK |
| :--- | :--- |
| Deputy Department Head | : Assoc. Prof.Dr. Özlem SAHİN |
| Deputy Department Head | : Dr. Lecturer Ali Ozan CANARSLANLAR |

## PROGRAM

ARY 205
HTK 227
HTK222
İNG 219
İST 409

MAT 108
PLT 225

TAR 165

HTK 316
HTK 317
HTK 323
HTK 325

| HTK101 | Aircraft Basic Knowledge | $4+0$ | 4,0 | HTK 104 |
| :--- | :--- | :--- | :--- | :--- |
| HTK103 | Air Traffic Services | $4+0$ | 5,5 | HTK 105 |
| HTK205 | Communication and |  |  |  |
| ING117 | Navigation Systems | $3+0$ | 4,0 | HTK 108 |
| MAT119 | Eng) | English Speaking Skills I | $6+0$ | 4,0 |
| SHU102 | Mathematics I | HTK 215 |  |  |
|  | Meteorology | $3+1$ | 5,0 | ING 118 |
|  | Elective Course | $3+0$ | 5,5 | MAT 120 |
|  |  |  | 2,0 | MEK 110 |
|  |  |  |  |  |
|  |  |  | 30,0 |  |

I.Semester

## III.Semester

Research Methods and
Presentation Technique
(Eng)
Aerodrome Control
Simulation I
Aeronautical Information
Management
(Eng)

| English Speaking Skills III | $4+0$ | 2,0 |
| :--- | :---: | :---: |
| Mathematical and Statistical Methods <br> in Decision Making | $4+0$ | 4,0 |
| Linear Algebra and Analytic Geometry | $2+0$ | 3,0 |
| Aerodynamics | $3+0$ | 3,5 |
| Atatürk's Principles and History of <br> Turkish Revolution I | $2+0$ | 2,0 |
| Elective Course |  | 3,0 |

Elective Course
30,0

## II.Semester

| Aerodrome Control $5+0$ 6,0 <br> Procedures <br> Introduction to Air $2+0$ 3,0 <br> Traffic <br> Control <br> Basic Principles of <br> Helicopter $2+0$ 2,5 <br> Aerodromes $3+0$ 4,5 <br> English Speaking <br> Skills II <br> Mathematics II <br> Mechanics for Air <br> Traffic Control <br> Elective Course $3+0$ 4,0 <br>   3,0 <br>   3,0 | 30,0 |
| :--- | :---: | :---: |

## IV.Semester

| Navigation | $3+0$ | 3,5 |
| :--- | :---: | :---: |
| Flight Mechanics and <br> Aircraft Performance | $3+0$ | 3,0 |
| Algorithm and <br> Programming | $2+2$ | 4,5 |
| Non-Radar Control <br> Procedures <br> Aerodrome Control <br> Simulation II | $5+0$ | 6,0 |
| Air Traffic <br> Communication | $3+0$ | 6,0 |
| English Speaking <br> Skills IV <br> Atatürk's Principles <br> andHistory of Turkish <br> Revolution II | $2+0$ | $2+0$ |
|  | 2,0 |  |

VI.Semester

| Aircraft Instruments | $3+1$ | 4,5 |
| :--- | :---: | :---: |
| Human Factors in Air | $3+0$ | 4,0 |
| Traffic Control |  |  |
| Surveillance Systems | $3+0$ | 3,0 |
| Radar Approach $7+1$ | 14,0 |  |
| Control |  |  |


|  |  |  |  |  |  |  | Simulation |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HYO 105 |  | Havayolu Taşımacılığ1 Yönetimi | $3+0$ | 3,0 | HUK 418 |  | Air Law | $2+0$ | 2,5 |
| İNG 321 | (Eng) | English Speaking Skills V (İngilizce Konuşma Becerileri V) | 4+0 | 2,0 | İNG 322 | (Eng) | English Speaking Skills VI | 4+0 | 2,0 |
|  |  |  |  | 30,0 |  |  |  |  | 30,0 |
|  |  | VII.Semester |  |  |  |  | VIII.Semester |  |  |
| HTK 409 |  | Civil-Military Air Traffic Coordination | $2+0$ | 3,0 | HTK 106 |  | Unmanned Aerial Vehicles | $2+0$ | 2,5 |
| HTK 418 |  | Airspace Organization | $2+0$ | 3,0 | HTK 428 |  | Trends, <br> Perspectives and Visions in Air Traffic Management | $2+0$ | 3,0 |
| HTK 423 |  | Air Traffic Flow Management | $3+0$ | 2,5 | HTK 434 |  | Air Traffic Management | $3+0$ | 2,5 |
| HTK 425 | (Eng) | Radar Area Control Simulation | $7+1$ | 12,5 | HTK 436 | (Eng) | Radar Coordination Simulation | 7+1 | 8,5 |
| HTK 426 |  | Safety Management in Air Traffic System | $2+0$ | 2,5 | HTK 438 |  | Air Traffic Practices II | 0+4 | 2,5 |
| HTK 433 |  | Air Traffic Practices I | 0+4 | 2,5 | $\begin{aligned} & \text { HTKSJ } \\ & 402 \end{aligned}$ |  | Internship | 0+2 | 5,0 |
| İNG 423 | (Eng) | English Speaking SkillsVII | 4+0 | 2,0 | İNG 424 | (Eng) | English Speaking SkillsVIII | 4+0 | 2,0 |
| TÜR 125 |  | Turkish Language I | $2+0$ | 2,0 | TÜR 126 |  | Turkish Language II | $2+0$ | 2,0 |
|  |  |  |  |  |  |  | Elective Course |  | 2,0 |
|  |  |  |  | 30,0 |  |  |  |  | 30,0 |

## ELECTIVE COURSES

$\left.\begin{array}{llllllll}\text { BEÖ 155 } & \text { Physical Education } & 2+0 & 2,0 & \text { ESTÜ } 130 & \begin{array}{l}\text { Turkish as a Foreign } \\ \text { Language II } \\ \text { Argentine Tango } \\ \text { Dance }\end{array} & 2+0\end{array}\right) 2,0$

| Gender Equality in Work Life | $2+0$ | 3,0 | SOS 155 |
| :--- | :--- | :--- | :--- |
| Philosophy of Science | $3+0$ | 3,0 | SOS 312 |
| Diction | $1+2$ | 3,0 | THU 203 |
| Turkish as a Foreign Language I | $2+0$ | 2,0 |  |


| Folkdance | $2+0$ | 2,0 |
| :--- | :---: | :---: |
| Organizational | $3+0$ | 4,5 |
| Behavior $0+2$ | 3,0 |  |
| Community Services |  |  |

Turkish as a Foreign Language I
$2+0$

## DEPARTMENT OF AVIONICS

In this department, highly qualified maintenance approval personnel are educated, according to the international standards, for aviation sector. In the Department of Avionics, education is offered according to European Union Standards, EASA PartAircraft Maintenance Personnel Regulations, and EASA Part-147 Aircraft Maintenance Educational Institutions Regulations. The Faculty has the SHY Part-147 Aircraft Maintenance Education Institution Authorization Certificate from the General Directorate of Civil Aviation of the Ministry of Transportation. Besides the theoretical courses, students get education tailored to the application in the Avionics, High Frequency, Automatic Control, DME, VOR, ILS, Computer, Basic Electricity and Electronics, Electrotechnics, Communication Systems laboratories and SHY-145 certified maintenance facilities.
Sixty students are accepted to the Department of Avionics by centralized nationwide placement examinations. In the department, one year of optional Intensive English Language education is followed by four years of undergraduate education. 40 workdays of internship is required.
The graduates work at Turkish Airlines, Turkish Air Force Air Supply and Maintenance Centers, private airline companies, and at the technical departments of other companies operating in the aviation sector.

Department Head : Assoc. Prof. Dr. Emre KIYAK
Deputy Department Head :
Deputy Department Head :

PROGRAM

|  | I.Semester |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| FiZ 105 | Physics I | $4+0$ | 6,0 | FiZ 231 |
| FiZ 107 | Physics Laboratory I | $0+2$ | 1,5 | HYO 116 |
| HEE 105 | Theory of Flight | $3+0$ | 3,5 | HYO 122 |
| HYO 115 | Introduction to Civil | $2+0$ | 3,0 | MAT 802 |
| MAT 801 | Aviation | $4+0$ | 4,0 | MEK 112 |
| MAT 803 | Mathematics I | $3+0$ | 3,0 | TAR 166 |
| TAR 165 | Linear Algebra |  |  |  |
|  | Atatürk's Principles and | $2+0$ | 2,0 |  |
|  | History of Turkish Revolution I |  | 3,0 |  |
|  | Foreign Language Course |  | 4,0 | 30,0 |

## II.Semester

| Waves and Optics | $4+0$ | 5,0 |
| :--- | :---: | :---: |
| Aviation Legislation | $3+0$ | 4,0 |
| Aircraft Materials I | $2+1$ | 3,0 |
| Mathematics II | $4+0$ | 4,0 |
| Mechanis $3+0$ | 3,0 |  |
| Atatürk's Principles and <br> History of Turkish <br> Revolution II | $2+0$ | 2,0 |
| Foreign Language Course |  | 3,0 |
| Elective Courses | 6,0 |  |

30,0

## III.Semester

HEE 213
HEE 215
Aircraft Structures and $\quad 3+1 \quad 3,0$

## IV.Semester

HEE 214
HEE 222
HEE 226
HEE 230
HEE 234
HEE 236

| Aircraft Structures and | $2+0$ | 2,0 |
| :--- | :--- | :--- |
| Systems II | $0+2$ | 2,0 |
| Non-destructive Inspection | $0+2$ | 2,0 |
| Electronic Fundamentals | $0+2$ | 1,5 |
| Laboratory I | $2+0$ | 3,0 |
| Communication Systems | $2+0$ | 3,0 |


| MAT 208 | Laboratory I | $3+0$ | 3,5 |
| :--- | :--- | :---: | :---: |
| TER 203 | Aircraft Maintenance | $4+0$ | 4,0 |
| TRS 131 | Terminology I | $4+0$ | 4,0 |
| TÜR 125 | English Language Skills III | $2+0$ | 2,0 |


| HYO 222 | Laboratory I | $3+0$ | 3,0 |
| :--- | :--- | :--- | :--- |
| HYO 224 |  | Electronic Fundamentals I | $0+2$ |
| 1,5 |  |  |  |
| HYO 226 |  | $3+0$ | 4,0 |
| ING 210 | (Eng) | Communication Systems I | $3+0$ |
| MEK 218 |  |  | 3,0 |
| TÜR 126 |  | Electrical Fundamentals II | $2+0$ |
|  |  |  | 3,0 |
|  |  |  | 30,0 |

## V.Semester

HEE 313
HEE 315
HEE 325
HEE 327
HEE 329
HYO 313
HYO 315
HYO 319
iNG 309

| Aircraft Hardware | $2+3$ | 4,5 |
| :--- | :---: | :---: |
| Aircraft Structures and | $2+0$ | 3,0 |
| Systems III | $2+4$ | 5,0 |
| Maintenance Practices I | $2+1$ | 3,0 |
| Electronic Fundamentals II | $2+1$ | 3,0 |
| Digital Circuits I | $3+0$ | 3,0 |
| Electrical Machinery | $0+2$ | 1,5 |
| Electrical Machinery | $3+1$ | 4,0 |
| Laboratory | $3+0$ | 3,0 |
| Aircraft Aerodynamics |  | 30,0 |

## VII.Semester

HEE 421
HEE 423
HEE 427
HEE 431
HEE 443
HEE 445
HYO 420
HYO 421

| Communication Systems II | $3+0$ | 3,0 |
| :--- | :--- | :--- |
| Navigation Systems II | $3+0$ | 3,0 |
| Troubleshooting | $2+0$ | 2,0 |
| Methodology | $3+0$ | 3,0 |
| Gas Turbine Engines | $3+1$ | 3,0 |
| Microprocessors | $2+1$ | 3,0 |
| Aircraft Instrument Systems | $2+0$ | 2,5 |
| I Electromagnetic | $3+0$ | 3,0 |
| Environment |  | 7,5 |
| Automatic Flight Systems | 30,0 |  |

## VI.Semester

HEE 318
HEE 320
HEE 324
HEE 326
HEE 328
HYO 336
HYO 338
MEK 318

## VIII.Semester

| HEE 428 | Maintenance Practices II | $2+4$ | 3,5 |
| :--- | :--- | :--- | :--- |
| HEE 432 | Gas Turbine Engines | $0+3$ | 1,5 |
| HEE 444 | Workshop | Aircraft Instrument | $2+0$ |
| HEE 446 | Systems II | 2,0 |  |
| HEESJ 402 | Applications of Avionics | $0+3$ | 3,0 |
| HYO 419 | Internship I | $0+2$ | 5,0 |
| HYO 422 | Modern Avionic Systems | $2+0$ | 2,5 |
| HYO 436 | Human Factors | $3+0$ | 3,0 |
|  | Flight Controls | $2+0$ | 2,0 |
|  | Area Elective Courses |  | 7,5 |
|  |  |  | 30,0 |


| Electronic Fundamentals | $2+0$ | 2,0 |
| :--- | :--- | :--- |
| III | $2+1$ | 3,0 |
| Digital Circuits II | $3+0$ | 4,0 |
| Navigation Systems I | $2+4$ | 5,0 |
| Aircraft Electricity | $2+0$ | 2,0 |
| Workshop | $3+0$ | 4,0 |
| Digital Data Transmission | $2+0$ | 3,0 |
| Aircraft Electrical Systems | $4+0$ | 4,0 |
| Electronic Instrument <br> Systems | 3,0 |  |
| Flight Mechanics |  | 30,0 |

## AREA ELECTIVE COURSES

ESTÜ 305
ESTÜ 403
ESTÜ 405

| Sustainable Marketing | $3+0$ | 5,0 |
| :--- | :--- | :--- |
| Basic Computer Utilization | $3+0$ | 4,0 |
| Computer Programming | $3+0$ | 5,0 |

## HYO 406

HYO 409
HYO 411

$3+0 \quad 5,0$

| Helicopter Theory and | $3+0$ | 4,5 |
| :--- | :---: | :---: |
| Systems |  |  |
| Case Studies in Aviation | $2+0$ | 3,0 |
| Safety <br> Vibration Analysis in <br> Aircrafts | $2+1$ | 3,0 |

HEE 322

HEE 419

HEE 434

HEE 440
HEE 441
HEE 442
HEE 447
HEE 448
HEE 449
HEE 452
HEE 454
HEESJ 404
HYO 105
HYO 114
HYO 304

Unmanned Aerial Vehicle
Design, Control Systems and 2+2 4,5 Workshop Applications
$\begin{array}{lll}\text { Maintenance and Repair in } & 2+1 & 3,0 \\ \text { Aircraft Electric Systems }\end{array}$ Automatic Control $2+2 \quad 4,5$

|  | Unmanned Aerial Vehicle |  |  |
| :---: | :---: | :---: | :---: |
|  | Design, Control Systems and Workshop Applications | $2+2$ | 4,5 |
|  | Maintenance and Repair in Aircraft Electric Systems | $2+1$ | 3,0 |
|  | Automatic Control | $2+2$ | 4,5 |
|  | Maintenance Practices-M13 II | $0+3$ | 3,0 |
|  | Maintenance Workshop Applications-M13 I | 0+5 | 3,0 |
|  | Maintenance Workshop Applications-M13 II | 0+5 | 4,5 |
|  | Aircraft Structures and Systems Applications-M11 | 0+3 | 3,0 |
| (Eng) | Microwave Theory | $3+0$ | 3,0 |
|  | Maintenance Practices-M13 I | $0+5$ | 4,5 |
| (Eng) | I.L.S./V.O.R./D.M.E. | $3+0$ | 3,0 |
|  | Vocational Training in Workplace | 0+18 | 18,0 |
|  | Internship II | 0+2 | 2,5 |
|  | Air Transportation Management | $3+0$ | 3,0 |
|  | Ergonomics in Aviation | $4+0$ | 5,0 |
|  | Aircraft Manufacturing Technologies | $3+0$ | 4,5 |


| HYO 413 | (Eng) | Aircraft Systems Design | $2+2$ | 4,5 |
| :---: | :---: | :---: | :---: | :---: |
| HYO 415 |  | Academic and Technological Progresses in Aviation | $3+0$ | 4,5 |
| HYO 416 |  | Reciprocating Engine <br> Theory, Systems and Maintenance | $3+0$ | 3,0 |
| HYO 425 |  | Safety Management System | $2+0$ | 3,0 |
| HYO 428 |  | Aviation Meteorology | $3+0$ | 3,0 |
| İNG 145 | (Eng) | Business English I | $2+0$ | 2,0 |
| İNG 146 | (Eng) | Business English II | $2+0$ | 2,0 |
| iNG 310 | (Eng) | English Language Skills VI | $3+0$ | 3,0 |
| íşL 301 |  | Human Resources Management | $3+0$ | 4,0 |
| SHU 221 |  | Sustainability in Aviation | $3+0$ | 6,0 |
| SHU 308 |  | Aviation Ethics | $2+0$ | 4,5 |
| SHU 424 |  | Aircraft Maintenance and Reliability Management | $3+0$ | 3,0 |
| UGB 422 |  | Environmental Impact Assessment in Aviation | $3+0$ | 4,5 |
| UGB 424 |  | Reciprocating Engines | 1+3 | 4,5 |
| UMB 407 |  | Heat Transfer and Aircraft Engine Applications Environmental Impact Assessment in Aviation | $3+0$ | 4,5 |

## ELECTIVE COURSES

| BEÖ 155 | Physical Education | $2+0$ | 2,0 |
| :--- | :--- | :--- | :--- |
| BIL 303 | Visual Programming | $3+0$ | 3,0 |
| ESTÜ 101 | Introduction to University Life | $0+1$ | 2,0 |
| ESTÜ 104 | Academic and Life Skills | $2+1$ | 3,0 |
| ESTÜ 106 | Project Management | $2+1$ | 3,0 |
| ESTÜ 111 | Volunteering Works | $1+2$ | 4,0 |
| ESTÜ 112 | Cyber Security for Everyone | $2+0$ | 2,0 |
| ESTÜ 113 | Design Thinking | $3+0$ | 3,0 |
| ESTÜ 114 | Visual Thinking | $3+0$ | 3,0 |
| ESTÜ 115 | Photographic Viewpoint | $2+1$ | 3,0 |
| ESTÜ 116 | Computer Aided Design I | $3+0$ | 3,0 |
| ESTÜ 117 | Computer Aided Design II | $3+0$ | 3,0 |
| ESTÜ 118 | Visual Thinking with Concepts | $3+0$ | 3,0 |
| ESTÜ 119 | Flute | $3+1$ | 3,0 |
| ESTÜ 120 | Solfege | $3+1$ | 3,0 |
| ESTÜ 121 | Piano | $3+1$ | 3,0 |


| ESTÜ 203 |  | Introduction to Sociology | $3+0$ | 3,0 |
| :---: | :---: | :---: | :---: | :---: |
| ESTÜ 204 |  | Effective Reading and Writing Skills | $3+0$ | 4,0 |
| ESTÜ 301 |  | Science Communication | $2+0$ | 3,0 |
| ESTÜ 307 |  | Children Rights and Family Education | $2+0$ | 2,0 |
| ESTÜ 401 |  | Introduction to Professional Life | $1+1$ | 2,0 |
| ESTÜ 402 |  | Coaching and Leadership | $3+0$ | 3,0 |
| FRA 255 | (Fra.) | French I | $3+0$ | 4,0 |
| FRA 256 | (Fra.) | French II | $3+0$ | 4,0 |
| HYO 113 |  | Aviation History | $2+0$ | 2,0 |
| HYO 120 |  | Basics of Rescue and Fire Fighting | $2+0$ | 3,0 |
| HYO 334 |  | Sustainable Aviation Technologies | $2+0$ | 2,0 |
| iLT 307 |  | Communication | $3+0$ | 3,0 |
| iSG 401 |  | Occupational Health and Safety I | $2+0$ | 2,0 |
| iSG 402 |  | Occupational Health and Safety II | $2+0$ | 2,0 |
| MÜZ 155 |  | Turkish Folk Music | $2+0$ | 2,0 |
| MÜZ 157 |  | Traditional Turkish Art Music | $2+0$ | 2,0 |

ESTÜ 201

| Guitar | $3+1$ | 3,0 |
| :--- | :---: | :---: |
| Gender Equality in Work Life | $2+0$ | 3,0 |
| Philosophy of Science | $3+0$ | 3,0 |
| Diction | $1+2$ | 3,0 |
| Turkish as a Foreign Language | $2+0$ | 2,0 |
| I |  |  |
| Turkish as a Foreign Language | $2+0$ | 2,0 |
| II | $0+2$ | 2,0 |
| Argentine Tango Dance | $3+0$ | 3,0 |
| History of Political Thought | $3+0$ | 3,0 |
| Disability and Awareness | $3+0$ | 3,0 |
| Turkish Sign Language |  |  |

REK 242
RUS 255
RUS 256
SAĞ 102
SAN 155
SNT 155
SOS 155
THU 203
TKY 304

|  | Sports Aviation | $1+2$ | 3,0 |
| :--- | :--- | :--- | :--- |
| (Rus.) | Russian I | $3+0$ | 4,0 |
| (Rus.) | Russian II | $3+0$ | 4,0 |
|  | First Aid | $2+0$ | 2,5 |
|  | Hall Dances | $0+2$ | 2,0 |
|  | History of Art | $2+0$ | 2,0 |
|  | Folkdance | $2+0$ | 2,0 |
|  | Community Services | $0+2$ | 3,0 |
| Quality Assurance | $2+0$ | 3,0 |  |
|  | Systems |  |  |

## FOREİGN LANGUAGE COURSES

ING 111
ING 112

| (Eng) | English Language Skills I | $3+0$ | 3,0 |
| :--- | :--- | :--- | :--- |
| (Eng) | English Language Skills II | $3+0$ | 3,0 |


| English for General | $4+0$ | 3,0 |
| :--- | :--- | :--- |
| Purposes I <br> English for General <br> Purposes II | $4+0$ | 3,0 |

## DEPARTMENT OF AVIATION ADMINISTRATION

In this department, highly qualified personnel in the field of management demanded by government and private institutions operating in the aviation sector is educated according to international requirements. Professional courses such as Air Transportation Management, Aviation Management, Airport Management, Operational Performance, Aviation Safety and Security; theoretical management courses such as Financial Management, Marketing, Human Resource Management, Logistics; and, IATA certified courses providing certificates such as Ground Handling, Passenger Handling Services, Air Cargo, and Dangerous Goods take part in the curriculum of the Department of Air Transportation Management. Every academic year, 60 students are accepted by centralized nationwide entry examinations. In the department, one year of optional Intensive English Language education is followed by four years of undergraduate education. Optional internship period is 20 workdays. The graduates work at Turkish Airlines, private airline companies, airports, airport ground services, catering and cargo shipping companies and other aviation institutions.

Department Head : Prof. Dr. Ferhan ŞENGÜR
Deputy Department Head : Asst. Prof. Dr. Gamze ORHAN
Deputy Department Head : Asst. Prof. Dr. Emircan ÖZDEMİR

PROGRAM

## I.Semester

HYO 451
İKT 151
İNG 127 (Eng) English I
İŞL 101
MAT 129
MUH 151
SHU 101

| General Aviation | $3+0$ | 4,5 | ING 128 |
| :--- | :--- | :--- | :--- |
| Economics | $3+0$ | 3,0 | MAT 172 |
| English I | $4+0$ | 4,0 | SHU 103 |
| Introduction to Business | $3+0$ | 4,5 | SHU 108 |
| Mathematics I | $2+0$ | 4,0 | SHU 112 |
| Introduction to Accounting | $3+0$ | 4,5 | SHU 244 |
| Introduction to Civil | $2+0$ | 3,5 |  |
| Aviation |  | 2,0 |  |
| Elective Course |  |  |  |

## II.Semester

| (Eng) | English II | $4+0$ | 4,0 |
| :--- | :--- | :--- | :--- |
| Mathematics II | $2+0$ | 3,0 |  |
| Flight Theory | $2+0$ | 3,5 |  |
| Air Transportation | $3+0$ | 4,5 |  |
| Meteorology I | $3+0$ | 6,0 |  |
| Ground Handling I | $4+0$ | 5,0 |  |
|  | Area Elective Course |  | 4,0 |

## III.Semester

İNG 229
İŞL 102
SHU 213
SHU 217

SHU 219

SOS 107
TAR 165
TÜR 125

FIN 202
İNG 307
PZL 302
SHU 405

HYO 417
İNG 401
NÜM 305
SHU 403
SHU 404
SHU 411

| (Eng) | English III | 4+0 | 3,5 |
| :---: | :---: | :---: | :---: |
|  | Management and Organization | $3+0$ | 4,0 |
|  | Flight Operations | $3+0$ | 4,5 |
|  | Airport Operations and Equipment | $3+0$ | 4,0 |
|  | Navigation and Navigationof Aids | $3+0$ | 4,0 |
|  | Behavioral Sciences | $2+0$ | 3,0 |
|  | Atatürk's Principles andHistory of Turkish Revolution I | $2+0$ | 2,0 |
|  | Turkish Language I | $2+0$ | 2,0 |
|  | Area Elective Course |  | 3,0 |
|  |  |  | 30,0 |

## V.Semester

|  | Financial Management | $3+0$ | 4,5 |
| :--- | :--- | :---: | :---: |
| (Eng) | Aviation English I | $4+0$ | 5,0 |
| Marketing Management | $3+0$ | 4,5 |  |
| Aviation Safety | $3+0$ | 4,5 |  |
| Area Elective Courses |  | 11,5 |  |
|  |  |  |  |

IV.Semester

HYO 230
İNG 230
SHU 236
SHU 242

TAR 166

TÜR 126


|  | Aviation Security | $3+0$ | 5,0 |
| :--- | :--- | :---: | :---: |
| (Eng) | English IV | $4+0$ | 4,0 |
|  | Flight Performance | $2+0$ | 3,0 |
| Operation and | $4+0$ | 6,0 |  |
| Performance I |  |  |  |
| Atatürk's Principles and <br> History of Turkish <br> Revolution II | $2+0$ | 2,0 |  |
|  |  | $2+0$ | 2,0 |
| Turkish Language II |  | 8,0 |  |

30,0
VI.Semester
(Eng)

| Aviation English II | $4+0$ | 5,0 |
| :--- | :---: | :---: |
| Management Information $3+0$ 4,5 <br> Systems   | $3+0$ | 4,5 |
| Airline Management | $3+0$ | 4,5 |
| Organizational Behavior |  | 9,0 |

Elective Course 2,5
30,0
VIII.Semester

| Air Law | $2+0$ | 2,5 |
| :--- | :---: | :---: |
| Advanced English II | $4+0$ | 3,0 |
| Airline Marketing | $2+0$ | 3,0 |
| Airline Fleet Planning | $2+0$ | 3,0 |
| Aircraft Maintenance | $2+0$ | 3,0 |
| Management |  | 12,5 |
| Area Elective Courses |  |  |

Elective Course

30,0

## area elective courses

| Passenger Handling | $4+0$ | 6,0 |
| :--- | :--- | :--- |
| Services I | $4+0$ | 6,0 |

HUK 153
HUK 154
HUK 252

HYO 432

HYO 434
İNG 145

İNG 146
İSN 409
İŞL 301
İŞL 406
MUH 302
SHU 205
SHU 221
SHU 232

SHU 234

| Fundamentals Concepts of Law | 2+0 | 3,0 | SHU 301 |
| :---: | :---: | :---: | :---: |
| Commercial Law | 2+0 | 3,0 | SHU 303 |
| Labor Law | 2+0 | 2,5 | SHU 304 |
| Customer Relationship <br> Management in Aviation | $3+0$ | 6,0 | SHU 305 |
| Aviation Management Practices | 0+6 | 10,0 | SHU 308 |
| Business English I | 2+0 | 2,0 | SHU 310 |
| Business English II | 2+0 | 2,0 | SHU 311 |
| Organizational Communication | $3+0$ | 4,5 | SHU 341 |
| Human Resources <br> Management | $3+0$ | 4,0 | SHU 343 |
| Strategic Management | $3+0$ | 4,5 | SHU 345 |
| Analysis of Financial Reports | $3+0$ | 4,5 | SHU 426 |
| Management Statistics | $3+0$ | 6,0 | SHU 428 |
| Sustainability in Aviation | $3+0$ | 6,0 | SHU 432 |
| Air Cargo | $3+0$ | 6,0 | SHU 436 |
| Flight Planning and | $3+0$ | 6,0 | SHUSJ 402 |

$\left.\begin{array}{lll}\text { Production Management } & 3+0 & 6,0 \\ \text { in Service Companies }\end{array}\right)$

## ELECTIVE COURSES

BEÖ 155
ESTÜ 101
ESTÜ 104
ESTÜ 106
ESTÜ 111
ESTÜ 112
ESTÜ 113
ESTÜ 114
ESTÜ 115
ESTÜ 116
ESTÜ 117
ESTÜ 118
ESTÜ 119
ESTÜ 120
ESTÜ 121
ESTÜ 122
ESTÜ 123
ESTÜ 125
ESTÜ 127

| Physical Education | $2+0$ | 2,0 |
| :--- | :--- | :--- |
| Introduction to University Life | $0+1$ | 2,0 |
| Academic and Life Skills | $2+1$ | 3,0 |
| Project Management | $2+1$ | 3,0 |
| Volunteering Works | $1+2$ | 4,0 |
| Cyber Security for Everyone | $2+0$ | 2,0 |
| Design Thinking | $3+0$ | 3,0 |
| Visual Thinking | $3+0$ | 3,0 |
| Photographic Viewpoint | $2+1$ | 3,0 |
| Computer Aided Design I | $3+0$ | 3,0 |
| Computer Aided Design II | $3+0$ | 3,0 |
| Visual Thinking with Concepts | $3+0$ | 3,0 |
| Flute | $3+1$ | 3,0 |
| Solfege | $3+1$ | 3,0 |
| Piano | $3+1$ | 3,0 |
| Guitar | $3+1$ | 3,0 |
| Gender Equality in Work Life | $2+0$ | 3,0 |
| Philosophy of Science | $3+0$ | 3,0 |
| Diction | $1+2$ | 3,0 |


| ESTÜ 133 |  | Disability and Awareness | $3+0$ | 3,0 |
| :---: | :---: | :---: | :---: | :---: |
| ESTÜ 201 |  | Türk İşaret Dili | $3+0$ | 3,0 |
| ESTÜ 203 |  | Sosyolojiye Giriş | $3+0$ | 3,0 |
| ESTÜ 301 |  | Bilim İletişimi | 2+0 | 3,0 |
| ESTÜ 307 |  | Children Rights and Family Education | $2+0$ | 2,0 |
| ESTÜ 401 |  | Introduction to Professional Life | 1+1 | 2,0 |
| ESTÜ 402 |  | Coaching and Leadership | $3+0$ | 3,0 |
| ESTÜ 403 |  | Basic Computer Utilization | $3+0$ | 4,0 |
| FRA 255 | (Fra.) | French I | $3+0$ | 4,0 |
| FRA 256 | (Fra.) | French II | $3+0$ | 4,0 |
| HYO 120 |  | Basics of Rescue and Fire Fighting | $2+0$ | 3,0 |
| İSG 401 |  | Occupational Health and Safety I | 2+0 | 2,0 |
| İSG 402 |  | Occupational Health and Safety II | $2+0$ | 2,0 |
| MÜZ 155 |  | Turkish Folk Music | 2+0 | 2,0 |
| MÜZ 157 |  | Traditional Turkish Art Music | 2+0 | 2,0 |
| REK 242 |  | Sports Aviation | 1+2 | 3,0 |
| RUS 255 | (Rus.) | Russian I | $3+0$ | 4,0 |
| RUS 256 | (Rus.) | Russian II | $3+0$ | 4,0 |
| SAĞ 102 |  | First Aid | 2+0 | 2,5 |


| Turkish as a Foreign Language | $2+0$ | 2,0 | SAN 155 |
| :--- | :--- | :--- | :--- |
| I |  |  |  |
| Turkish as a Foreign Language | $2+0$ | 2,0 | SNT 155 |
| II | $0+2$ | 2,0 | SOS 155 |
| Argentine Tango Dance | $3+0$ | 3,0 | THU 203 |
| History of Political Thought | 3 |  |  |


| Hall Dances | $0+2$ | 2,0 |
| :--- | :--- | :--- |
| History of Art | $2+0$ | 2,0 |
| Folkdance | $2+0$ | 2,0 |
| Community Services | $0+2$ | 3,0 |

## DEPARTMENT OF FLIGHT TRAINING

In this department, highly qualified pilots are educated, according to the international standards, for aviation sector. In our country, it is the first and only department offering undergraduate education in the field of flight training. After the training conducted according to the standards of International Civil Aviation Organization, ICAO, European Aviation Standard and national requirements, the students can be graduated as pilots having ATP(A) credit and $\operatorname{CPL}(\mathrm{A}) / \operatorname{IR}(\mathrm{A})$ license. Students starting their education, receive theoretically based ground training in the first 3 semesters (one and a half year). Following that, they receive their flight training in general purpose flight simulators and 8 SOCATA TB 20 TRINIDAD, 5 CESSNA 172SP, 2 BEECH CRAFT C 90 GTI a fleet of 15 airplanes consisting of different types.Every academic year, 5 students are accepted to the Flight Training Department by centralized nationwide entry examinations.In the department, one year of optional Intensive English Language education is followed by four years of undergraduate education. Optional internship period is 20 workdays.
The graduates work at Turkish Airlines, Private airline companies, air-taxi companies, and at fight training schools.

| Department Head | : Asst. Prof. Dr. Uğur ÖZDEMİR |
| :--- | :--- |
| Deputy Department Head | : Asst. Prof. Dr. Kübra Gülnaz BÜLBÜL |
| Deputy Department Head | : |

## PROGRAM

| FiZ 119 | Aeronautical Physics I | $3+0$ | 3,0 | FiZ 120 |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| HUK 147 |  Air Law I (International <br> Agreements and  <br> Aerodromes)  | $2+0$ | 2,5 | iNG 130 | (Eng) |
| ING 125 | (Eng) | Aviation English I | $6+0$ | 4,0 | PLT 114 |


| I. Period / II. Phase |  |  |
| :--- | :---: | :---: |
| Aeronautical Physics II | $3+0$ | 3,0 |
| Aviation English II | $6+0$ | 4,0 |
| Aircraft General <br> Knowledge I (Airframe <br> andSystems) | $3+0$ | 4,0 |
| Meteorology II <br> Aircraft General | $2+0$ | 3,0 |
| Knowledge II (Electrics) | $1+0$ | 1,0 |
| Flight Operations | $3+0$ | 3,0 |
| Knowledge, Skills and <br> Attitudes <br> Aircraft General <br> Knowledge III (Aircraft <br> Engines) <br> Atatuirk's Principles <br> andHistory of <br> Turkish <br> Revolution II <br> Turkish Language II | $2+0$ | 5,0 |
|  | $2+0$ | 2,0 |

## II. Period / I. Phase

| Avionics I | $12+0$ | 1,5 |
| :--- | :--- | :--- |
| Normal Procedures I | $18+0$ | 1,5 |
| Emergency Procedures I | $18+0$ | 1,5 |
| Introduction to Aircraft <br> Types I | $24+0$ | 3,0 |


| PLT 253 | Air Traffic Communication I | $2+0$ | 4,5 | PLT 262 |
| :--- | :--- | :--- | :--- | :--- |
| PLT 255 | Aircraft General Knowledge <br> IV (Fligt Instrument) | $3+0$ | 4,0 | PLT 264 |
| PLT 257 | Radio Navigation I (Basic <br> Radio Aids) | $4+0$ | 5,0 | PLT 266 |
|  |  |  |  | PLT 268 |
|  |  |  |  | PLT 270 |
|  |  |  | PLT 272 |  |

## II. Period / II. Phase

## PLT344

PLT348
PLT350

| Mass and Balance | $30+0$ | 4,5 |
| :--- | :--- | :--- |
| Performance | $40+0$ | 5,0 |
| Radio Navigation II <br> (Radar, RNAV) | $28+0$ | 5,5 |
|  |  |  |
|  |  |  |
|  |  | 15,0 |

## III. Period / I. Phase

|  | III. Period / I. Phase |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| iNG 331 | (Eng) | Aviation English V | $60+0$ | 3,0 | PLT 372 |
| PLT 362 |  | Practice in Flight IV | $0+20$ | 7,0 | PLT 374 |
| PLT 364 | Safety Management <br> System III <br> Radio Instrument and <br> Radio Instrument Cross <br> Country | $12+0$ | 1,5 | PLT 388 |  |
| PLT 366 | Simulator Application I | $0+15$ | 4,5 | PLT 456 |  |
| PLT 368 | Practice in Flight V | $0+16$ | 6,0 | SAĞ 401 |  |
| PLT 370 | Instrument Flight Charts | $18+0$ | 2,5 |  |  |
| PLT 387 |  |  | 30,0 |  |  |

.

## III. Period / III. Phase

Multy Crew Cooperation (MCC)

| Avionics II | $30+0$ | 4,0 |
| :--- | :--- | :--- |
| MCC Simulator Application | $0+15$ | 4,5 |

PLT 462
PLT 464
PLT 468

PLT 470
PLT 472

| VFR Navigation and | $18+0$ | 3,0 |
| :--- | :--- | :--- |
| Flight Planning <br> Standard Operation <br> Procedures I | $30+0$ | 2,5 |
| Safety Management <br> System II | $18+0$ | 2,0 |
| Practice in Flight I | $0+15$ | 3,5 |
| Practice in Flight II | $0+46$ | 7,0 |
| Practice in Flight III | $0+24$ | 4,5 |
|  |  | 30,0 |

## II. Period / III. Phase

| Aviation English IV | 60+0 | 3,0 |
| :---: | :---: | :---: |
| Emergency Procedures II | 15+0 | 1,5 |
| Normal Procedures II | 15+0 | 1,5 |
| Air Traffic Communication II | $12+0$ | 1,5 |
| Basic Instrument | 18+0 | 4,5 |
| Radio Navigation III (FMS) | 18+0 | 6,0 |
| Flight Planning and <br> Monitoring | 48+0 | 7,5 |
| Introduction to Aircraft Types II | 24+0 | 3,0 |
| Standard Operation Procedures II | 15+0 | 1,5 |

## III. Period / II. Phase

| Simulator Application II | $0+14$ | 4,0 |
| :--- | :--- | :--- |
| Practice in Flight VI | $0+22$ | 6,0 |
| Simulator Application III | $0+8$ | 2,0 |
| Night Flight | $12+0$ | 3,0 |
| First Aid | $18+0$ | 3,0 |

## III. Period / IV. Phase

| Normal Procedures III | $18+0$ | 2,0 |
| :--- | :--- | :--- |
| Emergency Procedures | $12+0$ | 1,5 |
| III |  |  |
| Introduction to Aircraft <br> Types III | $24+0$ | 1,5 |
| Standard Operation $18+0$ <br> Procedures III 3,0 <br> Practice in Flight VII $0+11$ | 2,0 |  |
| Area Elective Course |  | 5,0 |
|  |  | 15,0 |

## AREA ELECTIVE COURSES

ESTÜ 305
PLT 478

| Sustainable Marketing | $3+0$ | 5,0 |
| :--- | :--- | :--- |
|  |  |  |

PLT 480
PLTSJ402

| Situational Awareness in | $2+0$ | 5,0 |
| :--- | :--- | :--- |
| Pilots |  |  |
| Internship | $0+2$ | 5,0 |

## ELECTIVE COURSES

| BEÖ 155 | Physical Education | $2+0$ | 2,0 | ESTÜ 131 | Argentine Tango Dance | 0+2 | 2,0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ESTÜ 101 | Introduction to University Life | 0+1 | 2,0 | ESTÜ 132 | History of Political Thought | $3+0$ | 3,0 |
| ESTÜ 104 | Academic and Life Skills | $2+1$ | 3,0 | ESTÜ 133 | Disability and Awareness | $3+0$ | 3,0 |
| ESTÜ 106 | Project Management | $2+1$ | 3,0 | ESTÜ 201 | Turkish Sign Language | $3+0$ | 3,0 |
| ESTÜ 111 | Volunteering Works | $1+2$ | 4,0 | ESTÜ 203 | Introduction to Sociology | $3+0$ | 3,0 |
| ESTÜ 112 | Cyber Security for Everyone | $2+0$ | 2,0 | ESTÜ 301 | Science Communication | $2+0$ | 3,0 |
| ESTÜ 113 | Design Thinking | $3+0$ | 3,0 | ESTÜ 307 | Children Rights and Family Education | $2+0$ | 2,0 |
| ESTÜ 114 | Visual Thinking | $3+0$ | 3,0 | ESTÜ 401 | Introduction to Professional Life | $1+1$ | 2,0 |
| ESTÜ 115 | Photographic Viewpoint | $2+1$ | 3,0 | ESTÜ 402 | Coaching and Leadership | $3+0$ | 3,0 |
| ESTÜ 116 | Computer Aided Design I | $3+0$ | 3,0 | ESTÜ 403 | Basic Computer Utilization | $3+0$ | 4,0 |
| ESTÜ 117 | Computer Aided Design II | $3+0$ | 3,0 | HYO 409 | Case Studies in Aviation Safety | $2+0$ | 3,0 |
| ESTÜ 118 | Visual Thinking with Concepts | $3+0$ | 3,0 | MÜZ 155 | Turkish Folk Music | $2+0$ | 2,0 |
| ESTÜ 123 | Gender Equality in Work Life | $2+0$ | 3,0 | MÜZ 157 | Traditional Turkish Art Music | $2+0$ | 2,0 |
| ESTÜ 125 | Philosophy of Science | $3+0$ | 3,0 | SAN 155 | Hall Dances | 0+2 | 2,0 |
| ESTÜ 127 | Diction | 1+2 | 3,0 | SNT 155 | History of Art | $2+0$ | 2,0 |
| ESTÜ 129 | Turkish as a Foreign Language I | $2+0$ | 2,0 | SOS 155 | Folkdance | $2+0$ | 2,0 |
| ESTÜ 130 | Turkish as a Foreign Language II | $2+0$ | 2,0 | THU 203 | Community Services | 0+2 | 3,0 |

## DEPARTMENT OF AIRFRAME AND POWERPLANT MAINTENANCE

In this department, highly qualified maintenance approval personnel are educated, according to the international standards, foraviation sector. In the Department of Airframe and Powerplant Maintenance, education is offered according to European UnionStandards, EASA Part-66 Aircraft Maintenance Personnel Regulations, and EASA Part-147 Aircraft Maintenance EducationalInstitutions Regulations. The Faculty has the SHY-147 Aircraft Maintenance Education Institution Authorization Certificate from the General Directorate of Civil Aviation of the Ministry of Transportation. Besides the theoretical courses, students geteducation tailored to application in the Aerodynamics, Hydraulic Systems, Material Science, CAD/CAM, Computer laboratories; Airframe, Powerplant, Test Cell Workshops and SHY-145 certified maintenance facilities. Every academic year,Sixty students are accepted by centralized nationwide entry examinations. In the department, one year of optional Intensive English Language education is followed by four years of undergraduate education. 40 workdays of internship is required.
The graduates work at Turkish Airlines, Turkish Air Force Air Supply and Maintenance Centers, private airline companies, and at the technical departments of other companies operating in the aviation sector.
$\begin{array}{ll}\text { Department Head } & : P r o f . ~ D r . ~ E n i s ~ T . ~ T U R G U T ~\end{array}$

PROGRAM

FiZ 105
FiZ 107
HYO 115
MAT 801

MAT 803

TRS 131
TÜR 125
UGB 105

HYO 122
HYO 221
HYO 223
HYO 226
iNG 209
MAT 208
MEK 112

TAR 166

TER 203

HYO 319
HYO 336
ING 309
UGB 307
UGB 315
UGB 317
UGB 321
I. Semester

| Physics I | 4+0 | 6,0 | FiZ 231 |
| :---: | :---: | :---: | :---: |
| Physics Laboratory I | 0+2 | 1,5 | HYO 116 |
| Introduction to Civil Aviation | $2+0$ | 3,0 | HYO 225 |
| Mathematics I | $4+0$ | 4,0 | MAT 802 |
| Linear Algebra | $3+0$ | 3,0 | TAR 165 |
| Technical Drawing and Standards | 4+0 | 4,0 | TÜR 126 |
| Turkish Language I | $2+0$ | 2,0 |  |
| Theory of Flight | $3+0$ | 3,5 |  |
| Foreign Language Course |  | 3,0 |  |
|  |  | 30,0 |  |

## III. Semester

| Aircraft Materials I | 2+1 | 3,0 | HYO 222 |
| :---: | :---: | :---: | :---: |
| Electrical Fundamentals I | $3+0$ | 3,0 | HYO 224 |
| Electrical Fundamentals <br> Laboratory I | 0+2 | 1,5 | ING 210 |
| Aircraft Maintenance Terminology II | $3+0$ | 4,0 | MEK 218 |
| English Language Skills III | $3+0$ | 3,0 | UGB 202 |
| Differential Equations | $3+0$ | 3,5 | UGB 203 |
| Mechanis | $3+0$ | 3,0 |  |
| Atatürk's Principles and History of Turkish Revolution II | $2+0$ | 2,0 |  |
| Thermodynamics | 4+0 | 4,0 |  |
| Elective Course |  | 3,0 |  |
|  |  | 30,0 |  |

## V. Semester

| Aircraft Aerodynamics | $3+1$ | 4,0 | HYO 313 |
| :--- | :---: | :---: | :--- |
| Aircraft Electrical Systems | $4+0$ | 4,0 | HYO 315 |
| English Language Skills V | $3+0$ | 3,0 | MEK 318 |
| Electronic Fundamentals II | $2+1$ | 4,0 | UGB 320 |
| Gas Turbine Engine Theory | $3+0$ | 4,0 | UGB 322 |
| Aircraft Hardware and <br> Applications I | $3+5$ | 6,0 | UGB 324 |
| Aircraft Electricity Workshop | $2+4$ | 5,0 | UGB 326 |

## II. Semester

| Waves and Optics | $4+0$ | 5,0 |
| :--- | :---: | :---: |
| Aviation Legislation | $3+0$ | 4,0 |
| Aircraft Maintenance <br> Terminology I | $3+0$ | 4,0 |
| Mathematics II | $4+0$ | 4,0 |
| Ataturk's Principles and <br> History of Turkish <br> Revolution I | $2+0$ | 2,0 |
| Turkish Language II <br> Foreign Language <br> Course | $2+0$ | 2,0 |
| Elective Courses |  | 3,0 |

30,0

| IV. Semester |  |  |
| :--- | :---: | :---: |
| Electrical Fundamentals | $3+0$ | 3,0 |
| II |  |  |
| Electrical Fundamentals | $0+2$ | 1,5 |
| Laboratory II |  |  |
| English Language Skills | $3+0$ | 3,0 |
| IV | $3+0$ | 3,0 |
| Fluid Mechanics | $2+1$ | 3,5 |
| Electronic |  |  |
| Fundamentals I | $3+0$ | 4,0 |
| Aircraft Materials II |  | 12,0 |
| Electrical Fundamentals |  |  |
| II |  |  |

30,0

| VI. Semester |  |  |
| :--- | :---: | :---: |
| Electrical Machinery $3+0$ 3,0 <br> Electrical Machinery <br> Laboratory $0+2$ 1,5 <br> Flight Mechanics $3+0$ 3,0 <br> Aircraft Hardware and <br> Applications II <br> Gas Turbine Engine $3+3$ 4,5 <br> Systems I <br> Aircraft Structure and <br> Systems I $4+0$ 4,5 <br> Avionic Systems <br> Non-destructive <br> Inspection Methods $4+0$ 4,0$\quad 0+3$ | 2,0 |  |

$\overline{30,0}$

HYO 338
HYO 419

## HYO 422

UGB 407

UGB 409
UGB 411
VII. Semester

| Electronic Instrument Systems | $3+0$ | 4,0 |
| :---: | :---: | :---: |
| Modern Avionic Systems | $2+0$ | 2,5 |
| Human Factors | $3+0$ | 3,0 |


| Aircraft Structure andSystems | $3+0$ | 4,0 |
| :--- | :--- | :--- |
| II |  |  |
| Maintenance Practices | $3+5$ | 6,5 |
| Gas Turbine Engine Systems $4+0$ 5,5 <br> II  4,5 Area Elective Course |  |  |

30,0

| HYO 420 | Electromagnetic | $2+0$ | 2,5 |
| :--- | :--- | :--- | :--- |
| HYO 436 | Environment |  |  |
| UGB 412 | Flight Controls | $2+0$ | 2,0 |
| UGB 415 | Aircraft Structure and | $3+0$ | 4,0 |
|  | Systems III <br> Applications of <br> Powerplant- <br> Airframe <br> Maintenance | $0+3$ | 3,0 |
| UGB 420 | Propeller <br> Gas Turbine Engine | $0+8$ | 5,0 |
| UGB 426 | Workshop | $3+0$ | 4,0 |
| UGBSJ 402 | Internship I | $0+2$ | 5,0 |
|  | Area Elective Course |  | 4,5 |
|  |  |  | 30,0 |

## AREA ELECTIVE COURSES

| ESTÜ 305 |  | Sustainable Marketing | $3+0$ | 5,0 | ING 146 | (Eng) | Business English II | $2+0$ | 2,0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ESTÜ 405 |  | Computer Programming | $3+0$ | 5,0 | ING 310 | (Eng) | English Language Skills VI | $3+0$ | 3,0 |
| HYO 105 |  | Air Transportation Management | $3+0$ | 3,0 | SHU 424 |  | Aircraft Maintenance and Reliability Management | $3+0$ | 3,0 |
| HYO 114 |  | Ergonomics in Aviation | 4+0 | 5,0 | UGB 204 |  | Aircraft Powerplants (TEI/TUSAS) | 5+9 | 12,0 |
| HYO 304 |  | Aircraft Manufacturing Technologies | $3+0$ | 4,5 | UGB 206 |  | Aircraft Powerplants (HUBF) | 5+9 | 12,0 |
| HYO 406 |  | Helicopter Theory and Systems | 3+0 | 4,5 | UGB 417 |  | Magnetic Particle and Ultrasonic Inspection | $3+0$ | 4,5 |
| HYO 409 |  | Case Studies in Aviation Safety | $2+0$ | 3,0 | UGB 422 |  | Environmental Impact Assessment in Aviation | $3+0$ | 4,5 |
| HYO 411 |  | Vibration Analysis in Aircrafts | 2+1 | 3,0 | UGB 424 |  | Reciprocating Engines | 1+3 | 4,5 |
| HYO 413 | (Eng) | Aircraft Systems Design | $2+2$ | 4,5 | UGB 425 |  | Aircraft Maintenance <br> Practices M11 | 0+5 | 4,5 |
| HYO 415 |  | Academic and Technological Progresses in Aviation | $3+0$ | 4,5 | UGB 428 |  | Aircraft Maintenance Practices M7 | 0+4 | 4,5 |
| HYO 416 |  | Reciprocating Engine Theory, <br> Systems and Maintenance | $3+0$ | 3,0 | UGB 430 |  | Aircraft Maintenance <br> Practices M17 | 0+4 | 3,0 |
| HYO 421 |  | Automatic Flight Systems | $3+0$ | 3,0 | UGB 432 |  | Vocational Training in Workplace | 0+8 | 15,0 |
| HYO 425 |  | Safety Management System | $2+0$ | 3,0 | UGBSJ 404 |  | Internship II | 0+2 | 2,5 |
| HYO 428 |  | Aviation Meteorology | $3+0$ | 3,0 | UMB 407 |  | Heat Transfer and Aircraft Engine Applications | $3+0$ | 4,5 |
| ING 145 | (Eng) | Business English I | $2+0$ | 2,0 |  |  |  |  |  |

## ELECTIVE COURSES

BEÖ 155
BiL 303
ESTÜ 101
ESTÜ 104
ESTÜ 106
ESTÜ 111
ESTÜ 112
ESTÜ 113
ESTÜ 114
ESTÜ 115
ESTÜ 116
ESTÜ 117
ESTÜ 118
ESTÜ 123
ESTÜ 125
ESTÜ 127
ESTÜ 129
ESTÜ 130
ESTÜ 131
ESTÜ 132
ESTÜ 133
ESTÜ 201
ESTÜ 203

| Physical Education | $2+0$ | 2,0 | ESTÜ 301 |
| :---: | :---: | :---: | :---: |
| Visual Programming | $3+0$ | 3,0 | ESTÜ 307 |
| Introduction to University Life | 0+1 | 2,0 | ESTÜ 401 |
| Academic and Life Skills | $2+1$ | 3,0 | ESTÜ 402 |
| Project Management | $2+1$ | 3,0 | ESTÜ 403 |
| Volunteering Works | $1+2$ | 4,0 | HYO 113 |
| Cyber Security for Everyone | $2+0$ | 2,0 | HYO 120 |
| Design Thinking | $3+0$ | 3,0 | HYO 334 |
| Visual Thinking | $3+0$ | 3,0 | ILT 307 |
| Photographic Viewpoint | $2+1$ | 3,0 | iSG 401 |
| Computer Aided Design I | $3+0$ | 3,0 | ISG 402 |
| Computer Aided Design II | $3+0$ | 3,0 | MÜZ 155 |
| Visual Thinking with Concepts | $3+0$ | 3,0 | MÜZ 157 |
| Gender Equality in Work Life | $2+0$ | 3,0 | REK 242 |
| Philosophy of Science | $3+0$ | 3,0 | SAĞ 102 |
| Diction | $1+2$ | 3,0 | SAN 155 |
| Turkish as a Foreign Language I | $2+0$ | 2,0 | SNT 155 |
| Turkish as a Foreign Language II | $2+0$ | 2,0 | SOS 155 |
| Argentine Tango Dance | 0+2 | 2,0 | SOS 312 |
| History of Political Thought | $3+0$ | 3,0 | THU 203 |
| Disability and Awareness | $3+0$ | 3,0 | TKY 304 |
| Turkish Sign Language | $3+0$ | 3,0 |  |
| Introduction to Sociology | $3+0$ | 3,0 |  |

## FOREİGN LANGUAGE COURSES

| ING 111 | (Eng) | English Language Skills I | $3+0$ | 3,0 | íNG 195 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| iNG 112 | (Eng) | English Language Skills II | $3+0$ | 3,0 | iNG 196 |


| Science Communication | $2+0$ | 3,0 |
| :---: | :---: | :---: |
| Children Rights and Family Education | $2+0$ | 2,0 |
| Introduction to Professional Life | $1+1$ | 2,0 |
| Coaching and Leadership | $3+0$ | 3,0 |
| Basic Computer Utilization | $3+0$ | 4,0 |
| Aviation History | $2+0$ | 2,0 |
| Basics of Rescue and Fire Fighting | $2+0$ | 3,0 |
| Sustainable Aviation Technologies | $2+0$ | 2,0 |
| Communication | $3+0$ | 3,0 |
| Occupational Health and Safety I | $2+0$ | 2,0 |
| Occupational Health and Safety II | $2+0$ | 2,0 |
| Turkish Folk Music | $2+0$ | 2,0 |
| Traditional Turkish Art Music | $2+0$ | 2,0 |
| Sports Aviation | $1+2$ | 3,0 |
| First Aid | $2+0$ | 2,5 |
| Hall Dances | 0+2 | 2,0 |
| History of Art | $2+0$ | 2,0 |
| Folkdance | $2+0$ | 2,0 |
| Organizational Behavior | $3+0$ | 4,5 |
| Community Services | 0+2 | 3,0 |
| Quality Assurance Systems | $2+0$ | 3,0 |
| Sports Aviation |  |  |

(Eng)

English for General $\quad 4+0 \quad 3,0$
Purposes I
English for General
Purposes II
$4+0 \quad 3,0$

Safety Management System: Hazard, Risk; Safety Management Fundamentals; Safety Culture; Safety Performance Management; Safety Data Collection; Safety Analysis; State Safety Programme; Safety Management Systems: Safety management system framework, Safety policy and objectives, Safety risk management, Safety assurance, Safety promotion.

## UGB 206 Aircraft Powerplants (HUBF)

Main Engine Knowledge: Air inlet, Compressors, Combustion chamber; Turbine Section: Types of turbine blades and their operating characteristics; Exhaust; Bearings and Seals; Lubricants and Fuels; Lubrication Systems; Fuel Systems; Air Systems; Starting and Ignition Systems; Engine Indication Systems; Power Increasing Systems; Engine Test; Engine Storage and Preservation.

## UGB 204 Aircraft Powerplants (TEI/TUSAS)

Health of Workers and Security of Work; Technical English; Main Engine Knowledge of F-110 and F100: Air inlet, Compressors, Combustion chamber; Turbine Section: Types of turbine blades and their operating characteristics; Exhaust; Bearings and Seals; Lubricants and Fuels; Lubrication Systems; Fuel Systems; Air Systems; Starting and Ignition Systems; Engine Indication Systems; Power Increasing Systems; Baroscopic Control; Quality Control Systems; Paper Works of Engine Installation; Education of Engine Installation Workshop; Engine Test; Engine Storage and Preservation.

SHU 305 Business Analytics $\quad \mathbf{2 + 1} \mathbf{6 , 0}$
Business Analytics Framework and Basic Concepts: Business analytics and business intelligence, Big data, Spreadsheets; Descriptive Analytics; Predictive Analytics; Business Analytics Software; Data Preparation: Organizing data, Classifying data, Cleaning data, Inspecting data; Data Management and Analysis with Spreadsheets; Data Visualization; Descriptive Analytics with Spreadsheets; Predictive Analytics with Spreadsheets; Data Mini.

## ESTÜ 305 Sustainable Marketing

The Concept of Sustainability; Sustainability and Environment; Marketing and Sustainable Marketing: Sustainability and marketing relationship, Historical process in sustainable marketing, Basic principles and framework of sustainable marketing; Sustainable Marketing Environment: Sustainability and sociocultural environment, Sustainability and economic environment, Sustainability and competitive environment, Sustainability and technological environment, Sustainability and legal environment, Sustainability and natural environment; Sustainable Marketing Mix: Sustainable products and services, Sustainable pricing, Sustainable distribution, Sustainable promotion.

## PLT 480 Situational Awareness in Pilots $2+0 \quad 5,0$

Introduction to Situational Awareness: Definition and Importance of Situational Awareness; Levels of Situational Awareness; Components of Situational Awareness; Factors Affecting Situational Awareness: Workload, Fatigue, Stress, Burnout, Physiological Factors, Lack of Communication, Lack of Experience/Training, Cognitive Bias, Spatial Disorientation; Measuring Situational Awareness: Tools and Methods; Cockpit Design for Situational Awareness; Accident/Incident Case Studies.
*The contents of the newly opened courses in the 2023-2024 Academic Year are available above. You can access other course contents from the 2022-2023 Academic Year course contents section.

