

AIRCRAFT TECHNOLOGY PROGRAMME

1st SEMESTER

BLT101 COMPUTER TECHNOLOGIES-I

Examination of methods and techniques to access information and acquisition of skills to use them. Basic concepts of information technology such as computer information, data processing, technological development, professional concepts and applications, current software applications (Windows, Word, Excel, Power Point)

İSG111 MATHEMATICS

Basic mathematical concepts related to profession will be processed.

TURK101 TURKISH LANGUAGE-I

Definition of language, place and significance of language in nations life, relation of language and culture, place of Turkish language among world languages, development of Turkish language, sounds and their classification, phonetic features and rules, syllable, spelling rules and application, punctuation marks and their applications, derivational affixes and functions, forms of word usage, practices in literary texts.

TCT101 HISTORY OF TURKISH REPUBLIC-I

The reasons leading to the collapse of the Ottoman Empire, the efforts to stop the collapse and the quest for reform, the reasons leading to World War I, the participation in the war and its consequences, the Armistice of Mudros, the Societies, the beginning of the National Struggle.

SHU101 INTRODUCTION TO CIVIL AVIATION

Innovations from past to present, expansions of abbreviations and codes in aviation, the functioning of existing departments of the aviation facilities, legal regulations, the decisions and sanctions of national and international institutions and organisations.

UTE101 BASIC ELECTRICAL AND ELECTRONICS

electron theory, static electricity and its conduction, electrical terminology, generation of electricity, DC electrical sources and circuits, resistance, power and energy, capacitance, magnetism, inductance, DC motors and generators, AC theory Resistive-Capacitive-Inductive (RLC) circuits, filters, AC generators and motors, semi-conductors, transistors, integrated circuits, printed circuit boards, servomechanism

UTE103 TECHNICAL DRAWING

Introduction of drawing tools, equipments, standard paper sizes and sheet layout, Letters, figures, line types and thicknesses, concept of scale, simple geometric drawings, projection and plan, section, appearance concepts and types, measuring techniques at various scales, Simple perspective rules and expression techniques

UTE105 MATERIAL INFORMATION

Introduction to and classification of materials, properties of metallic materials, bond types, crystal lattice systems and their importance and effects to material properties, principles of plastic deformation problems, continuous heating and continuous cooling curves in metals and alloys, information about iron - carbon metastabil and stability equilibrium diagrams, temperature - time - transformation diagrams, heat treatment information, steel and casting material standards, important mechanical and non-destructive inspection methods.

UTE107 HUMAN FACTORS IN AVIATION

General informations about human factors, vision, hearing and human performance and limits, responsibility, motivation and pressure, culture, team work and management mistake, leadership and professional leadership, health, wellness and attention, physical environment, workload, stress and shift work, alcohol, drug use, lack of sleep/insomnia, communication, missions, error models, workplace hazards

ING 101-FOREIGN LANGUAGE – I

Students will be able to understand English, use it effectively, and compare basic grammar rules of English. Through this course, students can interpret simple dialogue in English and use the new structure and words they have learned in their daily lives.

2nd SEMESTER

BLT102 COMPUTER TECHNOLOGIES-II

Examination of methods and techniques to access information and acquisition of skills to use them. Basic concepts of information technology such as computer information, data processing, technological development, professional concepts and applications, current software applications (Windows, Word, Excel, Power Point)

İNG102 FOREIGN LANGUAGE – II

Students will be able to understand and interpret simple dialogues in English, use basic grammar rules effectively, use new structure and words they will have learned in their daily lives.

UTE106 INTERNSHIP-I

Students complete internship training in public or private sector organizations working in the field.

MYO104 DISASTER CULTURE

Kinds of disasters, disaster and practices for surviving, things to do before, during and after a disaster, search and rescue activities, field coordination system, the disaster planning.

TCT102 HISTORY OF TURKISH REPUBLIC-II

Information on the concept of revolution, preparation, action, reformation stages of the Turkish Revolution as well as basic principles and characteristics of the Turkish Revolution, domestic and foreign policy of Turkey after the period of Ataturk.

UTE102 BASIC AIRCRAFT INFORMATION

History of aeronautics, flying principle, lifting force, power systems, control surfaces, aircraft systems.

UTE104 PROFESSIONAL DRAWING

Drawings of axle, wedges, gearwheels and other machine parts and their mounting systems.

UTE108 AVIATION ACTS

EASA / PART-OPS, EASA / PART-145, EASA / PART-66, EASA / PART 147 and EASA / PART, EASA / PART-OPS Commercial Aircraft Carrier

UTE110 AIRCRAFT ELECTRICAL SYSTEMS

Principles of electricity production on airplanes, principles and use of batteries, principles and use of aircraft cables and related devices, cabling works, power supplies, lighting systems.

İSG114 PHYSICS

Basic physics concepts and principles will be given in detail.

TURK102-TURKISH LANGUAGE-II

Definition of language, the place and prominence in the life of the nation, language and culture relation, the place of Turkish Language among the world languages, development of Turkish Language, sounds and classification, audio features, phonetic rules, syllable, bookmarking rules and application, punctuation marks and its application, construction supplements and functions, forms of word usage, practices in literary texts

3rd SEMESTER

İNG201 VOCATIONAL ENGLISH-I

To teach students professional English in construction applications and building terminology.

MYO203 EMOTIONAL INTELLIGENCE

The concept of Emotional Intelligence and its importance in professional and social life.

UTE201 AERODYNAMIC

Introduction to Atmospheric Physics, Introduction to Flight Theory, Return Theory, Flight Stability and Dynamics, Aircraft Aerodynamics and Flight Controls, High Speed Flight.

UTE203 PISTON MOTORS

Basic definitions of piston engines, engine performance, engine fuel systems, engine sub-systems.

UTE205 BORDO TOOLS

Indications in the cockpit, placement of signs, working principles of the marks, electrostatic protection methods.

UTE207 GAS TURBINE ENGINES

'Inlet', Compressors, 'Combustion', Exhaust, Lubricants and Fuel, Fuel Systems, Air Systems, Starting and Ignition Systems, Engine Indication Systems, Turbo-prop Motors, 'Turbo-shaft' motors, Auxiliary Power Units (APUs), Engine Placement, Engine 'Monitoring' and on-site operation.

UTE209 AIRPLANE MATERIALS AND EQUIPMENT

Ferrous and non-ferrous aircraft materials, composite materials, wooden structures, corrosion and prevention methods, screws, bolts, studs, locking devices, pipes, records, bearings, transmissions, control cables, electrical cables

UTE211 RESEARCH METHODS

Making observations, experimental design and interpretation, library research, visual library research, uses of tables and figures, types of research, research papers, scientific misconduct, error and fraud, ethics in science.

UTE213 AIRCRAFT PROPELLERS

Basic Information, Propeller Structure, Propeller 'Pitch' Command, Propeller Synchronization, Propeller Protection from Frost, Propeller Maintenance, Propeller Storage and Protection.

4th SEMESTER

ING202 VOCATIONAL ENGLISH-II

Terms and concepts used in aviation documents, aircraft systems

UTE208 INTERNSHIP-II

Students complete internship training in public or private sector organizations working in the field.

MYO204 KNOWLEDGE RENEWAL

Concept and Application of Knowledge, Knowledge Exchange, Knowledge Economy, Industry 4.0, Legal, Social and Academic Developments in the Field.

ISG212 PREPARATION FOR VERTICAL TRANSFER EXAMINATION

The vertical transition exam covers current topics.

ISG214 ENTREPRENEURSHIPS

Entrepreneurship and its Importance, Entrepreneur and Characteristics of Successful Entrepreneur, Creativity and Innovation in Entrepreneurship, Conversion of a Business Idea into the Project and Investment, Entrepreneurship in the World, Developments in the Entrepreneurship and Suggestions to the Young Entrepreneurs, Environmental Factors and Industry Analysis in Business Plan Preparation, Marketing Plan, Production Plan, Management Plan, Finance Plan and Risk Analysis.

UTE206 COMPUTER AIDED DRAWING

Basic concepts of CAD, CAM, AutoCAD screen and menus, drawing and designing in this program.

UTE204 AIRCRAFT STRUCTURES AND SYSTEMS

Aircraft structural, mechanical and electrical systems.

UTE202 AIRCRAFT MAINTENANCE AND APPLICATIONS

Safety Precautions - Aircraft and Workshop, Tools / Tools, Compliance and Openings, Riveting.

UTE210 GRADUATION PROJECT

Students will prepare a project proposal in the field of Aircraft Technology and conduct a scientific research on the selected subject and deliver the results in a report.