

AVIATION COURSES

I) AIR TRANSPORT COURSES

- Introduction to Air Transportation (AIRTRANSPORT-101)
- Fundamentals of Air Transport Management (AIRTRANSPORT-102)

II) AIRPORT MANAGEMENT COURSES

- Airport Management (AIRPORT-101)
- Airport Planning and Management (AIRPORT-102)
- Airport Equipment and Operations (AIRPORT-103)
- Airport Service Development and Marketing (AIRPORT-104)
- Crisis Management and Airport Emergency Response Planning Training (AIRPORT-105)

III) AIRLINE MANAGEMENT COURSES

- Airline Management (AIRLINE-101)
- Airline Business Models and Strategy (AIRLINE-102)

IV) AVIATON SAFETY COURSES

- Safety Management System (SAFETY-101)
- Human Factors in Aviation (SAFETY-102)
- Crew Resource Management (SAFETY-103)

V) SUSTAINABLE AVIATION COURSES

- Thermo–economic/environmental Analyses for Aircraft Systems (SUSAV-101)
- Life Cycle Analysis in Aviation (SUSAV-102)
- Environmental Impact of Aircraft (SUSAV-103)
- Fundamentals of Sustainable Aviation (SUSAV-104)

VI) MISCELLANEOUS COURSES

Undergraduate Courses

- Digital Circuits and Microprocessors (Electrics and Electronics)
- Aircraft General Knowledge (Electrics and Electronics)

Graduate Courses

Introduction to Control Theory (Electrics and Electronics)



I) Air Transport Courses

Course ID	AIRTRANSPORT-101
Course title	Introduction to Air Transportation
Target group	Students/Instructors
Duration	20 Hours
Start date	To be determined on request
Course outline	 The Air Transportation Industry Historical Perspective of Air Transportation Air Transportation Regulators and Associations Airline Industry Airline Management and Organization Airline Passenger Marketing Air Cargo Fleet Planning
Course language	English
Prerequisites	None
Max. number of participant	20
Price	1,000 USD (VAT excluded)



I) Air Transport Courses

Course ID	AIRTRANSPORT-102
Course title	Fundamentals of Air Transport Management
Target group	Undergraduate and Graduate students, industry representative
Duration	20 Hours
Start date	To be determined on request
Course outline	 Introduction of Air Transport Industry Air Transport Industry Environment Air Transport as a Business Regulatory Environment of Civil Aviation International Regulators Airlines Airports Aircraft Manufacturers Air Transport Stakeholders Challenges and Opportunities for Air Transport Industry Case Studies and Group Works
Course language	English
Prerequisites	None
Max. number of participant	30
Price	4,000 USD (VAT excluded)



Course ID	AIRPORT-101
Course title	Airport Management
Target group	Undergraduate and Graduate students
Duration	40 Hours
Start date	To be determined on request
Course outline	 Fundamentals of Air Transport Industry Management and Strategic Management Airport Governance Models Airport Costs and Revenues Airport Commercial Management Airport Network Management Airport Sustainability Airport Performance Management Case Studies and Group Works
Course language	English
Prerequisites	None
Max. number of participant	30
Price	8,000 USD (VAT excluded)



Course ID	AIRPORT-102
Course title	Airport Planning and Management
Target group	Undergraduate / Graduate / Instructors
Duration	20 Hours
Start date	To be determined on request
Course outline	 Air Transportation Regulators and Associations Airports and Airports System The Components of Airport Airport Landside Operations Management Airport Airside Operations Management Aiport Planning Airport Capacity and Delay Management Arena Airport Simulation Planning Examples
Course language	English
Prerequisites	None
Max. number of participant	20
Price	1,000 USD (VAT excluded)



Course ID	AIRPORT-103
Course title	Airport Equipment and Operations
Target group	Undergraduate and Graduate students
Duration	40 Hours
Start date	To be determined on request
Course outline	 Introduction to International Regulations Annex 14 and ICAO Docs&Manuals on Airport Operations Annex 14 and Airport Physical Requirements Airport Master Planning Airport Terminal Operations Airport Airside Operations Case Studies and Group Works
Course language	English
Prerequisites	None
Max. number of participant	30
Price	8,000 USD (VAT excluded)



Course ID	AIRPORT-104
Course title	Airport Service Development and Marketing
Target group	Undergraduate and Graduate students, industry representative
Duration	20 Hours
Start date	To be determined on request
Course outline	 Fundamentals of Air Transport Industry Airport Business in the 21st Century Fundamentals of Airport Business Airport Commercial Management Airport Cost and Revenue Structure Strategies for Airport Revenue Development Cost Reduction Strategies for Airports Airport Marketing Airport Corporate Relations Case Studies and Group Works
Course language	English
Prerequisites	None
Max. number of participant	30
Price	4,000 USD (VAT excluded)



Course ID	AIRPORT-105
Course title	Crisis Management and Airport Emergency Response Planning Training
Target group	Same outline can be used both for student and instructor groups.
Duration	12 Hours
Start date	To be determined on request
Course outline	Introduction to Crisis Management: Fundamentals of management and planning, Definition and characteristics of emergency, Different Types of Emergency, Definition and characteristics of crisis management, Crisis management processes, World safety performance; Fundamentals of Airport Emergency Response Planning: Purposes of airport emergency planning and related regulations, Principles of emergency planning, Organizations covered by emergency planning; Emergency Operations Centre and Mobile Command Post; Responsibilities and Role of Stakeholders; Grid Maps and Information on the Units to Be Connected; Triage and Medical Care; Crisis Communication; Airport Emergency Exercises; Removal of Disabled Aircraft.
Course language	English
Prerequisites	None
Max. number of participant	30
Price	3,600 USD (VAT excluded)



III) Airline Management Courses

Course ID	AIRLINE-101
Course title	Airline Management
Target group	Same outline can be used both for student and instructor groups.
Duration	40 Hours
Start date	To be determined on request
Course outline	Fundamentals of Management; Fundamentals of Strategic Management; System Approach on Air Transportation; Fundamentals of Airline Product: Airline market, Characteristics of air transport service, Processes of air transport service, Supply and demand, components of airline product; Classification of Airlines; Strategic Positioning of Airlines: Porter's Positioning School, Porter's 5 Forces Model, Differentiation strategy, Cost leadership strategy, Focus strategy; Characteristics of Airline Industry: Oligopolistic market features, Scale economies, Scope economies, Sectoral features; Economic Regulations in Airline Industry: Bilateral air services agreements, Market access, Market entry, Capacity, Tariffs, Impact of economic regulations on airline management; Deregulation and Liberalization in Airline Industry: Multilateral air services agreements; Arline Networks: Grid network, Hub&Spoke network; Key Performance Indicators of Airlines: Parameters related to production quantity, Parameters related to productivity, Operational parameters, Non-financial performance parameters; Cost and Yield Structure of Airlines: Direct and indirect operating costs, Fixed and variable costs in airlines, Unit costs, Uncontrollable input costs, Features of the aircraft affecting costs, Features of network structure and flight schedule affecting costs, Features of network structure and flight schedule affecting costs, Depreciation policies affecting costs; Global Airlines and Airline Strategic Alliances: The concept of airline alliances, Factors effective in the formation of airline alliances, Purpose and benefits of airline alliances, Taxonomy of airline alliances, Global airline alliance groups; Low Cost Carriers: Concept of LCC business model, General characteristics of low cost carriers, personnel and customer profile of LCCs, Comparison of LCCs and traditional airlines, Effects of LCC business model, new trends in LCC business model.
Course language	English
Prerequisites	None
Max. number of participant	30
Price	10,000 USD (VAT excluded)



III) Airline Management Courses

Course ID	AIRLINE-102
Course title	Airline Business Models and Strategy
Target group	Undergraduate and Graduate students, industry representative
Duration	30 Hours
Start date	To be determined on request
Course outline	 Fundamentals of Air Transport Industry Management and Strategic Management Airline Business Models Network Carriers Low Cost Carriers Regional and Charter Airlines Hybridization of Airline Business Models Challenges and Opportunities Case Studies and Group Works
Course language	English
Prerequisites	None
Max. number of participant	30
Price	6,000 USD (VAT excluded)



IV) Aviation Safety Courses

Course ID	SAFETY-101
Course title	Safety Management System
Target group	Same outline can be used both for student and instructor groups.
Duration	40 Hours
Start date	To be determined on request
Course outline	Fundamental Concepts of Aviation Safety: Definition of hazard, risk and safety, Accident and incidents, Regulatory authorities, SHELL Model, Need for ensuring aviation safety; Traditional and new Generation Approaches to Aviation Safety Management: The evolution of safety management in aviation, Reactive approaches, Proactive approaches, Performance based approach; Error and Violation Management: Human Behavior Model of Rasmussen, Generic Error Modelling System of Reason, Reason HFACS Model; Positive Safety Culture: Fundamentals of culture, Reporting culture, Learning culture, Flexible culture, Just culture; Safety Management System: Safety policies and targets, Hazard analysis and risk management, Management of change, Measuring safety performance, Monitoring safety performance, Safety promotion; Conducting Exercises: Carrying out the exercise of hazard analysis, Carrying out the exercise of risk analysis, Carrying out the exercise of designing safety performance indicators, Case study of an aircraft accident.
Course language	English
Prerequisites	None
Max. number of participant	30
Price	12,000 USD (VAT excluded)



IV) Aviation Safety Courses

Course ID	SAFETY-102
Course title	Human Factors in Aviation
Target group	Same outline can be used both for student and instructor groups.
Duration	40 Hours
Start date	To be determined on request
Course outline	Introduction to Human Factors; General Models of HF Analysis; Information Processing: Attention, perception, short and long term memory; Decision Making: Rational and intuitive decision making, Errors in decision making, Some pitfalls in the decision making process; Human Error: Human Behavior Model of Rasmussen, Generic Error Modelling System of Reason, Reason HFACS Model; Human Performance and Limitations: Vision, hearing; Factors Affecting Performance: Fatigue; stress, sleep, workload, time pressure, circadian rhythms, shift work, alcohol, medication and drug abuse; Positive Safety Culture: Fundamentals of culture, Reporting culture, Learning culture, Flexible culture, Just culture; Situational Awareness: Fundamentals of situational awareness, The Relationship of SA with the Information Processing Process, Hints of loss of SA; Factors causing decrease in SA, Criticisms of the concept of SA; Case Study: Accident analysis.
Course language	English
Prerequisites	None
Max. number of participant	30
Price	12,000 USD (VAT excluded)



IV) Aviation Safety Courses

Course ID	SAFETY-103
Course title	Crew Resource Management
Target group	Same outline can be used both for student and instructor groups.
Duration	40 Hours
Start date	To be determined on request
Course outline	Fundamentals of Crew Resource Management; Human Error: Human Behavior Model of Rasmussen, Generic Error Modelling System of Reason; Problem-Solving and Decision Making: Attention, Perception, illusions, short and long term memory, vigilance, rational and intuitive decision making, Errors in decision making, Some pitfalls in the decision making process; Communication and Interpersonal Skills: Fundamentals of communication, Errors caused by sender and receiver, Types of communication styles, Important verbal communication skills in CRM (Inquiry, Advocacy, Listening, Conflict Resolution, Critique), Assertiveness, Hierarchy-authority and communication success, Sharing information and mental models, Factors affecting communication success, Suggestions for increasing communication success, culture and the communication; Situational Awareness: Fundamentals of situational awareness, The Relationship of SA with the Information Processing Process, Hints of loss of SA; Factors causing decrease in SA, Criticisms of the concept of SA; Leadership and Teamwork: Fundamentals of leadership and teamwork, Group dynamics, Group thinking, Components of leadership according to ICAO, Functions of the leader according to NOTECHS, Leadership theories and types, Leaders' power sources, Elements necessary for effective teamwork; Workload Management: Definition of workload, Concepts associated with workload, Arousal level and workload, Factors Determining workload, Degree and effects of workload, tasks that increase the workload, Workload management strategies; Stress Management: Definition and classification of stress, Acute and chronic stress, Adaptation and stress, Approaches to explaining stress, Sources of stressors, Individual differences and stress, Coping with stress; Critique; Threat and Error Management: Brief history and definition of TEM, Relationship of TEM with CRM, Components of TEM, The Concept of threat, Internal and external threats, Expected, unexpected and latent threats, The Concept of Error, Error types by TEM, Undes
Course language	English
Prerequisites	None
Max. number of participant	30
Price	12,000 USD (VAT excluded)



V) Sustainable Aviation Courses

Course ID	SUSAV-101
Course title	Thermo–economic/environmental Analyses for Aircraft Systems
Target group	Undergraduate and Graduate Students / Instructors
Duration	48 hours
Start date	To be determined on request
Course outline	 Fundamentals of Thermodynamics Second Law of Thermodynamics Entropy and Exergy Applications Life Cycle Cost Approaches Life Cycle Analysis Approaches Applications
Course language	English
Prerequisites	Basic Engineering Knowledge
Max. number of participant	30
Price	12,000 USD (VAT excluded)

Course ID	SUSAV-102
Course title	Life Cycle Analysis in Aviation
Target group	Undergraduate / Graduate / Instructors
Duration	48 hours
Start date	To be determined on request
Course outline	 Basic Aviation Definitions Basic Environmental Definitions Ecological Approaches Life Cycle Assessment Life Cycle Inventory Practice on Examples
Course language	English
Prerequisites	Basic Engineering Knowledge
Max. number of participant	30
Price	12,000 USD (VAT excluded)



V) Sustainable Aviation Courses

Course ID	SUSAV-103
Course title	Environmental Impact of Aircraft
Target group	Graduate / Instructors
Duration	16 hours
Start date	To be determined on request
Course outline	 Introduction to Aircraft Engines Fundamentals of Aircraft Emissions Gaseous and Particulate Matter Emissions Previous Research Studies Projections, Strategies and Objectives ICAO Annex 16 (Vol I-IV)
Course language	English
Prerequisites	Basic Aviation Knowledge
Max. number of participant	28
Price	5,000 USD (VAT excluded)

Course ID	SUSAV-104
Course title	Fundamentals of Sustainable Aviation
Target group	Undergraduate / Graduate / Instructors
Duration	48 hours
Start date	To be determined on request
Course outline	 Basic Sustainability Definitions Sustainable Development Goals Sustainable Roadmap of ICAO and Other Aviation Authorities Discussion on Sustainability Reports Improvement of Sustainability Index Practice on Examples
Course language	English
Prerequisites	Basic Engineering Knowledge
Max. number of participant	30
Price	12,000 USD (VAT excluded)



VI) Miscellaneous Courses*

Undergraduate Courses

- Digital Circuits and Microprocessors (Electrics and Electronics)
- Aircraft General Knowledge (Electrics and Electronics)

Graduate Courses

- Introduction to Control Theory (Electrics and Electronics)
- * The details regarding the courses above will be determined upon agreement.

The University is located 5 km from city center. There are many accommodation options in city center and frequent public transportation is available to or from the University. There are also daily direct flights between Brussels (Belgium) and Eskişehir.

