Estonian Aviation Academy

COMMERCIAL AVIATION MANAGEMENT

CURRICULUM

Curriculum version: 2021/2022

Tartu 2020

GENERAL INFORMATION

Name of Curriculum	Commercial Aviation Management
Level	514 Applied higher education
Study format	Full-time
Higher educational institution	Estonian Aviation Academy
Credits total	180 ECTS
Õppe nominaalkestus	3 years
Study field	Transportation services
Curriculum code	
Instruction language	English
Other languages to reach learning outcomes	N/A
Registration at EHIS	-
Version	-
Institutional accreditation	-
Specialisation	Main speciality: *Commercial Aviation Management* Additional specialiSation: N/A
General objectives	The general goal of the curriculum is that the graduate would have knowledge of management of aviation-related processes which are based on the main functions of commercial organisations in the aviation sector. The goal also is that the graduate would have prerequisites to perform the duties of company's work organisation processes manager.

Learning outcomes	The graduate of Commercial Aviation Management: 1) has a systematic understanding of the basic concepts related to aviation, the principles of aviation management and new developments in international aviation; 2) is able to collect and analyse information related to the operation of an aviation company, process it with appropriate methods, interpret and analyse the results; 3) is able to create and use IT-solutions and digital simulation models related to the activities of the aviation sector; 4) has systematic knowledge of logistics, international economics, financial, economic and strategic planning activities of an airline; 5) knows the principles of management and teamwork, possesses communication skills necessary for work and has the ability to work in an international environment; 6) makes responsible management decisions and is guided by the ethical and environmentally conscious principles acquired during the study process; 8) has a systematic overview of the nature and main elements of academic research and conducts an analytical research;.
Modules and courses	Annex 1
Admission requirements	1) Secondary education or equivalent foreign qualification; 2) English language B2 level minimum; 3) other conditions are set out in the reception rules.
Brief description of the curriculum structure	The curriculum consists of the following modules: 1. Basic module (27 ECTS) 2. Technology and Analysis Module (24 ECTS) 3. Aviation Company Operations Module (based on simulation software) (30 ECTS) 4. Economics and Management Module of an Aviation Company (30 ECTS) 5. Internship module (27 ECTS) 6. Research and final exam (12 ECTS) 7. Elective and Foreign Exchange Module (18 ECTS) 8. Optional and Foreign Exchange Module (12 ECTS)

Choice and conditions of subjects	The subjects of the curriculum are structured in different modules (see above). Subjects are divided into compulsory (150 ECTS), elective (18 ECTS) and optional (12 ECTS) subjects. Passing the basic module must take place in the first semester and the final exam in the last academic year, the order of passing other subjects is defined by calculation. Elective and optional subjects may also be taken at other educational institutions (including the Erasmus Window) and will be considered after ELA recognition.
Õppe lõpetamise tingimused	In order to complete the curriculum, the student must pass the compulsory subject courses and electives prescribed in the curriculum and complete the internships in full and defend the dissertation with a positive grade.
Documents issued after completion	Diploma Supplement
Title of diploma or degree obtained on graduation	Bachelor of Science in Engineering (BSc)
Additional information	Curriculum Manager, Kristjan Roosipõld eava@eava.ee, +372 7448 100

Annex 1

CURRICULUM MODULES AND SUBJECTS

Module I: Introductory Module	**Credits: 27 ECTS**
Objectives	The aim of the basic module is to create a theoretical and practical framework for passing specialty subjects in the curriculum.
Learning outcomes	Student who has passed the module: 1) Knows the nature and development trends of international aviation; 2) Knows the basics of economic theory, basic terminology and general principles of economic operation; 3) Has basic knowledge related to entrepreneurship and is able to analyse the business environment and shape the company's development strategies; 4) Knows the basic principles of professional ethics and is able to express his or her views with arguments; 5) Speaks professional English.

Subject code	**Subject**	**Credit, ECTS**	**Semester**	**Responsible institution**
	Introduction to air transport systems	6	1F	EAVA
	Introduction to Entrepreneurship	6	1S	EAVA
	Introduction to Economics	6	1F	EAVA
	Aviation and Business English	6	1F	EAVA
	Business Ethics, Communication and Presentation Skills	3	3F	EAVA

Module II: Technology and Analysis	**Credits: 24 ECTS**
Objectives	The student who has passed the module has deepened mathematical analysis and modeling skills, increased information technology skills and acquired an understanding of future technologies in aviation.
Learning outcomes	Student who has passed the module: 1) knows how to use methods of mathematical analysis and modelling; 2) is able to perform statistical analysis and interpret the results; 3) has acquired specific skills for creating and using simulation models; 4) is familiar with the future technologies in the aviation sector.

Subject code	Subject	Credit, ECTS	Semester	Responsible institution
	Mathematics	6	1F	EAVA
	Statistics and econometrics	6	1S	EAVA
	Infotechnology	6	1F	EAVA
	Digital Simulation Software	3	1S	EAVA
	Future technologies in Aviation	3	1S	EAVA

Module III Aviation Company Operation (based on simulation software)	**Credits: 30 ECTS**
Objectives	The student who has passed the module has developed a broad-based understanding of the operation of the aviation sector and the skills to make planning and management decisions in it using simulation models.
Learning outcomes	Student who has passed the module: 1) is able to optimise and analyse the activities of aviation companies by means of computer simulations; 2) is familiar with the principles of operation and planning applied in an airline, is able to shape the use of resources and knows the technical possibilities of performing a flight; 3) has a systematic understanding of the structure, management and planning aspects of airport ground handling; 4) is able to plan the logistics of passenger and freight flows; 5) knows the principles of designing an optimal line network.

Subject code	Subject	Credit, ECTS	Semester	Responsible institution
	Airport and Ground Handling management	6	1S	EAVA
	Flight operations management	6	2S	EAVA
	Airline network planning	6	3F	EAVA
	Logistics	6	2F	EAVA
	Route planning and monitoring	6	1S	EAVA

Module: IV Aviation Company Economics and Management	**Credits: 30 ECTS**
Objectives	After completing the module, the student knows the theoretical and practical foundations of business economics and management in a specific framework of the commercial aviation sector.
Learning outcomes	Student who has passed the module: 1) knows the theoretical basis of the operation of aviation organisations and is able to define their strategic goals; 2) has specialist knowledge of air transport economics; 3) knows different aspects of the management process and is able to use them in practical management activities; 4) is able to analyze the specific financial activities and budgeting of an aviation company; 5) is familiar with the theories of international economics and the factors influencing the external environment for international aviation; 6) has a systematic overview of legislation and quality management systems related to international aviation; 7) knows the effects of aviation activities on the environment and takes them into account when making management decisions.

Subject code	**Subject**	**Credit, ECTS**	**Semester**	**Responsible institution**
	Air transportation economics	**6**	2S	EAVA
	Aviation company strategic management	**6**	3F	EAVA
	Regulations and aviation law	**3**	3F	EAVA
	Financial planning and economic accounting in aviation	**6**	3F	EAVA
	International economics and aviation	**3**	2S	EAVA
	Sustainable aviation	**3**	3F	EAVA
	Basics of quality management	**3**	2F	EAVA

Module V: Field Practice	**Credits: 27 ECTS**
Objectives	During the internship module, the student consolidates the acquired academic knowledge in practical activities and receives support in planning his / her career.
Learning outcomes	Student, who has passed the module: 1) has demonstrated the use of his/her academic knowledge in practical activities in the aviation sector; 2) has an overview of the structure and activities of the organisation which was the basis for the internship and of the career opportunities in that institution; 3) is able to perform the tasks assigned to him or her at the place of practice correctly, properly and within the expected time frame; 4) is able to collect, systematise, analyse and use the knowledge and skills acquired during the internship in his/her academic activities and later special activities. 5) is able to write an internship report in an academic form, which describes the structure, management system and activities of the organisation that was the basis for the internship and gives an overview of the work performed, knowledge and skills acquired during the internship.

Subject code	**Subject**	**Credit, ECTS**	**Semester**	**Responsible institution**
	Field Practice	27	N/A	EAVA

The module VI Final exam and research project	**Credits: 12 ECTS**
Objectives	The student who has passed the module has systemic skills for conducting independent analytical research and complex professional knowledge.
Learning outcomes	Student, who has passed the module: 1) is able to express himself/herself in writing in a professional academic language; 2) is able to set the goal of the research, formulate research tasks and plan the structure of the work; 3) is able to conduct research, analyze and interpret data and use appropriate research methods; 4) demonstrates his or her professional qualification in the form of a complex examination.

Subject code	Subject	Credit, ECTS	Semester	Responsible institution
	Basics of research and research project	6	3F	EAVA
	Final exam	6	3S	EAVA

Module VI Electives	**Credits: 18 ECTS**
Objectives	The student has individually expanded his / her professional knowledge based on the goal of the curriculum.
Learning outcomes	Upon passing the electives, students have deepened their knowledge in areas of specific interest to them. During the international exchange semester, students demonstrate their ability to take subjects in a foreign language and to cope successfully in an international study and work environment.

Subject code	Subject	Credit, ECTS	Semester	Responsible institution
	Digital developments in aviation	3	3K	EAVA
	Aeronavigation	3	1K	EAVA
	Marketing	3	2K	EAVA
	Baltic Sea Region economic environment	3	3S	EAVA
	Public sector economics	3	3K	EAVA
	IT project management	3		
	Leadership ja entrepreneurship subjects	3-6		
	Estonian language	3-6		
	Foreign language	3-6		

Module VIII Optional courses	**Credits: 12 ECTS**
Objectives	The student has individually expanded and diversified his / her knowledge and skills.

Learning outcomes	The student has deepened and expanded the academic knowledge and skills of his/her choice, which are necessary for professional professional work and individual development. Within the framework of the international studies semester, the students demonstrate their ability to take subjects in a foreign language and to cope successfully in an international study and work environment.