

RIGA TECHNICAL UNIVERSITY

Faculty of Transport and Mechanical Engineering

Aviation Institute

Foreign Students Department

STUDY PROGRAM
(**international students**)

Profile:	Aviation Transport
Study program:	Master
Duration of studies	1) 2 years 2) 3 years
Number of credits:	1) 80 Credit Points 2) 121 Credit Point
Previous education:	1) Diploma of Higher Professional Education for the Fifth-level Professional Qualification and/or the Second Professional Degree in Aviation Transport or Related 2) First (undergraduate) Degree in Mechanical Engineering
Degree:	1) Master Degree in Aviation Transport (Professional Degree) 2) Engineering Qualification in Aviation Transport and Master Degree in Aviation Transport (Professional Degree)

RTU program code AMGA0

		studies for 80 CP	studies for 121 CP
A.	COMPULSORY COURSES	10 CP	17 CP
1. TAE501	Standardization, Certification and Licensing in Air Transport	2 CP	2 CP
2. TAA404	Aviation Devices and Systems	2 CP	2 CP
3. TAL442	Dynamics of Flight	3 CP	3 CP
4. TAK515	Analysis of Aviation Transport Reliability	3 CP	3 CP
5. TAA103	Digital Techniques. Electronic Devices of Aircrafts		3 CP
6. TAA531	Global Satellite Navigation Systems		2 CP
7. TAE550	Aircraft and Electronic Equipment's Maintenance (Study Project)		2 CP
B.	LIMITED CHOICE	36 CP	44 CP
B.1.	Specialized courses	34 CP	42 CP
1. TAE529	Transport Ecology	3 CP	3 CP
2. TAS508	Experimental Methods in Mechanics	2 CP	2 CP
3. TAK511	Computer Methods for Test Planning and Data Processing	2 CP	2 CP
4. TAS503	Theory of Elasticity	2 CP	2 CP
5. TAE523	Aircraft Maintenance and its Technical Management	2 CP	2 CP
6. TAD545	Finite Element Method and its Applications	2 CP	2 CP
7. TAE544	Aircraft and Systems Reliability Strategy	2 CP	2 CP
8. TAD544	The Mathematical Simulation of the Heat Engines Characteristics	2 CP	2 CP
9. TAD540	The Nondestructive Methods of Monitoring of Aviation Construction	3 CP	3 CP
10. TAS514	CALS Technologies in Vehicle Engineering	2 CP	2 CP
10.a. TAE209	A Propeller		2 CP
11. TAK512	Mechanics and Strength of Composite Materials	2 CP	2 CP
12. AUM580	Structures Dynamics	2 CP	2 CP

13. TRR520	Laser Technology in Production and Repair of Vehicles	2 CP	2 CP
14. TAE503	Theoretical Fundamentals of Flight Safety	2 CP	2 CP
15. TAS515	Applied Continuum Theory	3 CP	3 CP
16. TAK513	Markov Processes and Preventive Maintenance Models	2 CP	2 CP
17. TAS502	Design Automation of Machines	2 CP	2 CP
18. TAS511	Parametric Modeling of Mechanical Object	4 CP	4 CP
19. TAK526	Structure Peculiarities of Modern Aircraft	2 CP	2 CP
20. TAS504	Fracture Mechanics	2 CP	2 CP
21. TAS507	Calculation Methods in Mechanics	2 CP	2 CP
22. TAE505	Logistics of Transport	2 CP	2 CP
22.a. TAE507	Aviation Legislation and International Rules of Flights		2 CP
22.b. TAE515	Engineering Diagnostic of an Aircraft		3 CP
22.c. TAK230	Aviation Technical English		2 CP
22.d. TAE221	Economics of Aviation Transport		2 CP
22.e. TAE315	A Human Factor		2 CP
22.f. TAD521	Civil Aviation Engines		3 CP
22.g. TAK502	Aircraft of Civil Aviation		3 CP
22.h. TAE513	Ergonomics and Labor protection at the aviation transport		2 CP
22.i. TAE314	Safety of Aircraft Flights		2 CP
22.j. TAA515	Aircraft Aviation and Radioelectronic Equipment		3 CP
22.k. TAE203	Organization and Ensuring of Aircraft Operation		2 CP
22.l. TAE431	Technical Operation of Aircraft and Engines		3 CP
23. TAA527	Special Electrical Machines of Aviation Automatics	2 CP	2 CP
24. TAA526	Analysis and Synthesis of Aviation Electrical Machines	2 CP	2 CP
25. TAA528	Dynamics and Errors of an Aviation Electric Drive	2 CP	2 CP
26. TAA532	Communication Infrastructure of Aviation	2 CP	2 CP
27. TAA533	Avionic Systems	3 CP	3 CP
28. TAA534	Methods and Means of Diagnostics of Aircraft Electrical Systems	3CP	3 CP
29. TAA529	Analysis and Synthesis of Aircraft Power Supply System	2CP	2 CP
30. TAA406	Automatic Control Systems of Aircraft	2 CP	2 CP
31. TAA523	Structure Optimization of Aircraft Navigation Complexes	3 CP	3 CP
32. TAA508	Navigation and Fly Complexes of Aircraft	4 CP	4 CP
33. TAA537	Aircraft Pilotage Complex and Flight Director Systems	3 CP	3 CP
34. TAA310	Radio Electronic Equipment of Aircraft	2 CP	2 CP
35. TAA521	Methods and Systems of Radio Navigation of Aircraft	2 CP	2 CP
36. TAA535	Modern Technologies of Fiber-Optical Networks in Aviation	2 CP	2 CP
36. TAA513	Organization, Planning and Management of the Technological Processes	4 CP	4 CP
36.a. TAK222	Aircraft Aerodynamics, Structures and Systems		3 CP
36.b. TAD213	Propulsion		2 CP
36.c. TAA212	Electrical Power Supply Systems of Aircraft		2 CP
36.d. TAA211	Aircraft Electrical Systems		3 CP
B.5.	Pedagogical and Psychological Courses	2 CP	2 CP
1. HSP484	Psychology	2 CP	2 CP
2. HSP446	Pedagogy	2 CP	2 CP
C.	FREE ELECTIVES	8 CP	
D.	PRCTICE	6 CP	32 CP
E.	STATE EXAMINATION	20 CP	28 CP
1. TAE002	Master Thesis	20 CP	28 CP
2. TAA002	Master Thesis	20 CP	28 CP
3. TAK002	Master Thesis	20 CP	28 CP
4. TAS002	Master Thesis	20 CP	28 CP
	TOTAL:	80 CP	121 CP