



RTU Course "Safety of Aircraft Flights"

15E01 Aeronautikas tehnoloģiju katedra

General data

Code	TAE314
Course title	Safety of Aircraft Flights
Course status in the programme	Compulsory/Courses of Limited Choice
Course level	Undergraduate Studies
Course type	Professional
Field of study	Transport
Responsible instructor	Šestakovs Vladimirs
Volume of the course: parts and credits points	1 part, 2.0 Credit Points, 3.0 ECTS credits
Language of instruction	LV, EN, RU
Possibility of distance learning	Not planned
Abstract	ICAO, JAR and RL CAA flight regulations. Requirements for the flight safety system. Aviation incidents and special situations. Aviation as a sensitive transport. Air safety - the most important feature of the aviation transport system. Safety indicators and benchmarks. Aircraft technical condition analysis. Human factor. Technical condition of aircraft and crew working on board, means of objective control.
Goals and objectives of the course in terms of competences and skills	To master the ICAO, EASA, CAA Flight LR regulating normative documents, requirements for the safety assurance system. To learn the airworthiness norming rules of the aviation transportation system elements.
Structure and tasks of independent studies	Study of literature, homeworks with the ICAO, EASA, CAA Flight regulations. Quantitative evaluation of flight safety. Acquisition of preventive methods of flight safety adversities. Report and presentation of laboratory work results.
Recommended literature	1. Kroes M.I. Aircraft Maintenance. Repair. Sixth Edition, New York, 1993, 650p. 2. ICAO konvencija un 1.-18. pielikumi. Dos. 7300. 3. Latvija civilās aviācijas normatīvie dokumenti. LCAA, Latvijas vēstnesis, 1999- 2010. 4. Šestakovs V. Lidojumu drošība. Gaisa transporta sertifikācija. Rīga, 1997, 85 lpp.
Course prerequisites	Aircraft aerodynamics and design.

Course outline

Theme	Hours
Flight safety assurance in CA. Flight safety in the Latvian air transport. Specific situations.	6
Aviation accidents. Flight safety quantitative evaluation. Risk factor reduction methods.	6
Airworthiness norming rules of aviation transportation system elements.	2
Flight safety level assessment by the flight recorder.	2
Practical work.	8
Laboratory work.	8

Learning outcomes and assessment

Learning outcomes	Assessment methods
To be able to describe and make flight data analysis and processing.	Practical work, laboratory work, homework, exam. Criteria: to be able to carry out calculation of the flight safety indicators, analysis of the flight information.
To be able to define and calculate indicators of flight safety.	Practical work, laboratory work, homework, exam. Criteria: capable to define the relative probability of failure (the adverse factor).

Study subject structure

Part	CP	ECTS	Hours per Week			Tests		
			Lectures	Practical	Lab.	Test	Exam	Work
1.	2.0	3.0	1.0	0.5	0.5		*	