



RTU Course "Ergonomics and Work Safety in Air Transport"

15E04 Transporta sistēmu un loģistikas katedra

General data

Code	TAE518
Course title	Ergonomics and Work Safety in Air Transport
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
Academic staff	Kleinhofs Mārtiņš
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	The subject "Ergonomics and work safety of air transport" is based on theoretical background study of the maintenance of aircraft equipment. Study subject concerns such issues as ergatic system devices purpose, structure and operational framework, design, technical specification and control methods of production safety in the workplace of harmful and dangerous factors. ICAO, JAR, and Latvian CAA Normative documents on ergonomics requirements to aircraft.
Goals and objectives of the course in terms of competences and skills	To gain knowledge on theoretical foundation of ergonomics and protection of air transport, to understand protective role of air transport system and operating principles. To be able to perform the analysis of industrial injuries. To get ergonomic requirements for operators, tools, work place, regulating safety measures and techniques of aircraft maintenance area.
Structure and tasks of independent studies	Study of literature and the Internet. Working with legislative documents. Laboratory work reports and presentations preparation.
Recommended literature	1. Šestakovs V. Metodiskie norādījumi laboratorijas darbu izpildei mācību priekšmetā "Ergonomika un darba aizsardzība gaisa transportā", RTU Izdevniecība, Rīga, 2004. 2. Šestakovs V. Drošība un dzīvības procesu norises nodrošināšana, TSI, 2009., 88 lpp. 3. Šestakovs V. Metodiskie norādījumi laboratorijas darbu „Īstā un mākslīgā apgaismojumu pētīšana telpās” izpildīšanai mācību priekšmetā „Ergonomika un darba aizsardzība gaisa transportā”, Rīga, RTU, 2005. 4. M.J. Kroes Aircraft Maintenance & Repair Sixth Edition, Clenceo, New York, 1993, 650 pp. 5. www.caa.lv 6. www.aaib.dtlr.gov.uk
Course prerequisites	Aircraft aerodynamics, structure and maintenance.

Course outline

Theme	Hours
Health and safety on aircraft maintenance site. Ergonomics systems.	2
Production traumatism. Ergonomics as a means against industrial accidents.	4
Ergonomic requirements for aircraft technical maintenance site.	4
Protection against industrial hazards.	4
Fire safety.	2
Practical work.	8
Laboratory work.	8

Learning outcomes and assessment

Learning outcomes	Assessment methods
A student knows ergonomisc theoretical background.	Independent work question. Exam.
A student is able to describe and make production traumatism information analysis and processing.	Practical work question. Exam.
A student knows and is able to solve production protection tasks.	Exam.
A student is able to identify and estimate safety performance.	Practical work question. Exam.
Student is able to formulate ergonomic requirements for operators, tools, work place, regulating safety measures and techniques of aircraft maintenance area.	Laboratory work defending question. Exam.

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		*	