RTU Course "Bachelor Thesis Including Project"

15E01 Aeronautikas tehnoloģiju katedra

General data

Code	TAE012
Course title	Bachelor Thesis Including Project
Course status in the programme	Graduation Test
Course level	Undergraduate Studies
Course type	Professional
Responsible instructor	Šestakovs Vladimirs
Academic staff	Kleinhofs Mārtiņš Ozoliņš Ilmārs
Volume of the course: parts and credits points	1 part, 12.0 Credit Points, 18.0 ECTS credits
Language of instruction	LV
Possibility of distance learning	Not planned
Abstract	The range of issues of the field of studies: Aviation technical and operational performance analysis and synthesis: the design of aviation operational reliability, durability, survivability, operational techniques, scope control, repair, power saving and ergonomics. The scope of knowledge includes: system analysis and management of aviation transport maintenance and repair; study of aircraft in operation damaging processes and their regularities, diagnostic systems and processes, aviation transport quality control system development, maintenance strategy and modes.
Goals and objectives of the course in terms of competences and skills	The aim of the Bachelor Paper is to confirm ability to detect, formulate, develop projects and solve professional problems in structural durability, viability, service and repair technology. The objectives are: 1. to master aviation equipment operation and performance analysis and synthesis; 2. to master aircraft and engine flight and maintenance services; 3. to master system analysis and management of aviation transport flight and technical maintenance and repair process; 4. to master aviation transport maintenance services.
Recommended literature	1. M. Kleinhofs, V. Šestakovs. Metodiskie norādījumi bakalaura darbu izpildīšanai specialitātē MCAO "Mašīnzinības. Aviācijas transports", 2007., www.rtu.ai.lv. 2. Kroes M.I. Aircraft Maintenance. Repair. Sixth Edition, New York, 1993, 650 p. 3. Смирнов Н.Н. и др. Техническая эксплуатация летательных аппаратов. Москва: Транспорт. 1990. 422 стр. 4. Н. Владимиров, В. Шестаков. Методические указания по дипломному проектированию для студентов механического факультета специальности «Техническая эксплуатация воздушных судов и двигателей».Рига, РАУ,1998.г., 30 стр. 5. N. Vladimirovs, V. Šestakovs. Metodiskie norādījumi par maģistru darbu pildīšanas organizāciju virzienā "Mašīnzinības. Aviācijas nransports " Rīga, RAU, 1999.g, 37 lpp. 6. В. Шестаков. Положение о работах на соискание академической степени бакалавра. Рига, РАУ, 1997., 19 стр. 7. Смирнов Н., Ченючин Ю. Методические указания по дипломному проектированию для студентов специальности 13.03 «Эксплуатация воздушных судов и двигателей» всех форм обучения. М. МГТУ ГА, 2000. –48 стр. 8. LR Standarts LRS 3-90, www. Latvijasstandarts.lv Software: 1. FAR Handbook for Aviation Maintenance Technicians. Englewood: Jeppesen Sanderson, Inc. 2002. 2. Acceptable Methods, Techniques, and Practices - Aircraft Inspection and Repair. Advisory Circular. Washington: U.S. Department of Transportation, Federal Aviation Administration. 8 September, 1998.

Learning outcomes and assessment

Learning outcomes	Assessment methods
A student is able to demonstrate knowledge and skills acquired during undergraduate programs of study course and their application to theoretical problem stating and practical problem solving.	Bachelor Paper resonably presents the selection of a theme and its selection criteria.
A student is able to choose necessary information and input materials, and determined to use them in a creative work.	Bachelor Paper reasonably explains the choice of information sources and a list of literature.
A student is able to perceive, understand and develop a project in the field of aviation equipment exploitation.	Bachelor Paper demonstrates the ability of the student to put forward a problem in the field of maintenance service of aviation transport, to estimate their importance, to solve and defend the obtained results.
A student is able to reasonably explain and defend the theoretical and practical aspects of the Paper.	Bachelor Paper demonstrates the ability to publicly present and defend work results.

Study subject structure

Part	CP	ECTS	Hours per Week			Tests		
			Lectures	Practical	Lab.	Test	Exam	Work
1.	12.0	18.0	0.0	0.0	0.0			*