



RTU Course "Digital Techniques Electronic Instrument Systems"

15E02 Avionikas katedra

General data

Code	TAA103
Course title	Digital Techniques Electronic Instrument Systems
Course status in the programme	Compulsory/Courses of Limited Choice
Course level	Undergraduate Studies
Course type	Professional
Field of study	Transport
Responsible instructor	Smirnovs Igors
Academic staff	Šļenska Nina
Volume of the course: parts and credits points	2 parts, 3.0 Credit Points, 4.5 ECTS credits
Language of instruction	LV, RU
Possibility of distance learning	Not planned
Abstract	The name, content and structure of the course meet the requirements of the 5th module of PART 66 document (Aircraft maintenance, category B2). Studying includes such questions as structural principles of digital electronics and computers, aircraft data buses and electrical displays, electro magnetic connectivity on board, typical digital aircraft systems.
Goals and objectives of the course in terms of competences and skills	Gaining knowledge on theoretical and practical aspects of the course. Being able to combine and use different bits of knowledge in a logical way. Being able to use the knowledge in studying the process of different courses and in technical maintenance of the aircraft electrical equipment.
Structure and tasks of independent studies	Study of placement, block diagrams, operating and testing principles of typical aircrafts systems.
Recommended literature	1. Module 5. Licence By Post. EASA 66. Books 1-6. HP20 1QA UK. 2008. 2. J. Greivulis, I. Raņķis. Iekārtu vadības elektroniskie elementi un mezgli. Rīga: Avots, 2004, 288 lpp 3. Опадичий Ю.Ф. и др. Аналоговая и цифровая электроника. Москва: Горячая линия-Телеком. 2002, 768 стр. 4. Suematsu Y. Introduction to Personal Computer Based Controllers. Tokyo: Ohmsha, Ltd., 2002, 256 p. 5. Henderson M.F. Aircraft Instruments & Avionics for A&P Technicians. Colorado: Jeppesen Sanderson, Inc. 2001, 212 p.
Course prerequisites	Physics, Electrical Engineering, Electronics.

Course outline

Theme	Hours
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Learning outcomes and assessment

Learning outcomes	Assessment methods
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Study subject structure

Part	CP	ECTS	Hours per Week			Tests		
			Lectures	Practical	Lab.	Test	Exam	Work
1.	1.0	1.5	1.0	0.0	0.0		*	
2.	2.0	3.0	1.5	0.0	0.5		*	