RTU Course "Contemporary Engineering Technologies in Medicine"

15D02 Medicīnas fizikas un biomedicīnas inženier.pr.g.

General data

Code	MEE515
Course title	Contemporary Engineering Technologies in Medicine
Course status in the programme	Compulsory/Courses of Limited Choice; Courses of Free Choice
Course level	Post-graduate Studies
Course type	Professional
Field of study	Medical Engineering
Responsible instructor	Jurijs Dehtjars
Volume of the course: parts and credits points	1 part, 5.0 Credit Points, 7.5 ECTS credits
Language of instruction	LV, EN
Possibility of distance learning	Not planned
Abstract	Role of technology in contemporary medicine. Modern tendencies in healthcare. Development directions of medical technologies. Non-invasive technologies: imaging, functional diagnostics. Innovations in implant and prosthetic technologies. Radiation technologies: approaches and perspectives. Nanotechnologies in medicine. Biotechnologies.
Goals and objectives of the course in terms of competences and skills	
Structure and tasks of independent studies	
Recommended literature	J. D. Bronzino. The Biomedical Engineering handbook. CRC Press, 1995. ISBN 0-8493-8346-3 Interneta resursi
Course prerequisites	

Course outline

Theme	Hours
	12
	12
	12
	12
	12
	10
	10

Learning outcomes and assessment

Learning outcomes	Assessment methods

Study subject structure

Part	CP	ECTS	Hours per Week			Tests			Tests (free choice)		
			Lectures	Practical	Lab.	Test	Exam	Work	Test	Exam	Work
1.	5.0	7.5	1.0	4.0	0.0		*		*		