



RTU Course "Physical Materials Science"
15D01 Elektronikas un vakuumtehn.materiālzinību pr.g.

General data

Code	MMK233
Course title	Physical Materials Science
Course status in the programme	Compulsory/Courses of Limited Choice
Course level	Undergraduate Studies
Course type	Academic
Field of study	Medical Engineering
Responsible instructor	Sagalovičs Genādijs
Volume of the course: parts and credits points	1 part, 2.0 Credit Points, 3.0 ECTS credits
Language of instruction	LV
Possibility of distance learning	Not planned
Abstract	Basics of quantum mechanics, statistical physics and solid state physics. Metals and alloys. Semiconductor materials. Active and passive insulators. Magnetic materials.
Goals and objectives of the course in terms of competences and skills	
Structure and tasks of independent studies	
Recommended literature	1. Physical Metallurgy. Edited by R.W.CAHA/NHPC, Amsterdam, 1965, 475 lpp. 2. Fļorovs V., Kolangs S., Puķītis P. un C. Fizikas rokasgrāmata. Rīga, "Zvaigzne", 1988, 451 lpp. 3. Brown B., Smallwood R., Barber D., Lawford P., Hose D. Medical physics and biomedical engineering. IOP, Bristol, 1999, 736 lpp. 4. Thornton P., Colangelo V. Fundamental of Engineering Materials Physical Metalurgy.Amsterdam.N-H.P.C.,1998,p480
Course prerequisites	

Course outline

Theme	Hours
	2
	3
	3
	2
	2
	2
	2
	16

Learning outcomes and assessment

Learning outcomes	Assessment methods

Study subject structure

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