



RTU Course "Bachelor Thesis"

15325 Teorēt.mehānikas un materiālu pretestības katedra

General data

Code	MTM001
Course title	Bachelor Thesis
Course status in the programme	Graduation Test
Course level	Undergraduate Studies
Course type	Academic
Responsible instructor	Vība Jānis
Volume of the course: parts and credits points	1 part, 10.0 Credit Points, 15.0 ECTS credits
Language of instruction	LV, EN
Possibility of distance learning	Not planned
Abstract	The Thesis comprises the summary of the relevant literature studied for the needs of the topical problem solution and contains the following main sections: Thesis theme. Aims and tasks of the paper Literature review. Conclusions made on the literature sources reviewed. The theoretical part. Modelling applying the computer software. Planning and implementation of the possible experiments Conclusion Reference sources Possible suggestions.
Goals and objectives of the course in terms of competences and skills	To acquaint students with the fundamentals of engineering and mechanical engineering. To achieve this aim the following tasks should be fulfilled: 1st The fundamental relationships of technical engineering, mechanical engineering, kinematics and dynamics are analysed 2nd The solution of the tasks on engineering, mechanics and mechanical engineering applying the computer software. 3rd Improving the students' knowledge of mechanics in the areas related to vibrotechnics and machinery. 4th Teaching students the skills required to be proficient to perform technical, vibromachine and engineering facilities related calculations.
Recommended literature	O.Kepe,J.Vība, Teorētiskā mehānika, Rīga ,Zvaigzne,1982.g. 577lpp., TO.Kepe,J.Vība, Teorētiskā mehānika. Dinamika II, Rīga, RTU, 1996.-173.lpp. E. Lavendelis, Vibro mašīnu optimālš sintēze, Rīga "Zinātne", 1970., 252.lpp.

Learning outcomes and assessment

Learning outcomes	Assessment methods
At the end of the studies a student will be able to evaluate the mechanical processes in nature and technology.	Laboratory work.
At the end of the studies a student will be able to give examples of the mechanical engineering positions.	Practical work/tasks
At the end of the studies a student will be able to analyze the dynamics and strength of the mechanisms and machines.	Questions at the end of the lecture.
At the end of the studies a student will be able to distinguish between technical and technological challenges.	Assessment test
At the end of the studies a student will be able to formulate tasks on the analysis and synthesis of the mechanical object.	Assessment test
At the end of the studies a student will be able to assess the mechanical engineering and engineering problems.	Exam

Study subject structure

Part	CP	ECTS	Hours per Week			Tests		
			Lectures	Practical	Lab.	Test	Exam	Work
1.	10.0	15.0	0.0	0.0	0.0			*