



## RTU Course "Product Design and Development"

22161 Starptautisko programmu nodaļa

### General data

Code	IUE550
Course title	Product Design and Development
Course status in the programme	Compulsory/Courses of Limited Choice
Course level	Post-graduate Studies
Course type	Professional
Field of study	Innovations
Responsible instructor	Elīna Gaile-Sarkane
Volume of the course: parts and credits points	1 part, 4.0 Credit Points, 6.0 ECTS credits
Language of instruction	LV, EN
Possibility of distance learning	Not planned
Abstract	The focus of the course is integration of the marketing, design and manufacturing functions of the firm in creating a new product/service. The course is intended to provide students with a set of tools and methods for product design and development. During the course students will develop a real prototype of a new product/service.
Goals and objectives of the course in terms of competences and skills	The goal of the course is to systematize and broaden knowledge and develop practical skills in new product development and with an aim to apply this knowledge and skills in professional situations and everyday activities. Main task of the course is to develop competences in new product planning and development, and to apply this in practice, to stimulate skills of creativity, planning and presentation.
Structure and tasks of independent studies	The course is based on formation of project groups (4-6 members of the project group), who during the course are working on practical project. Project contains 5 assignments, development of prototype and presentation of the project results. Each assignment will be evaluated by grade in 10 point scale. Final grade for the course composes from: 70% evaluation of assignments; 30% evaluation of the prototype and final project presentation.
Recommended literature	Pamatliteratūra: Karl T. Ulrich, Steven D. Eppinger "Product Design and Development", 5-th ed., Mc Graw Hill, 2008.  Papildus literatūra: Inovācijas (tulkojums no angļu valodas), Rīga, Lietišķās informācijas diensests, 2009 - 112. lpp. Ābeltiņa A. Inovācija - XXI gadsimta fenomens - R.: Izdevniecība "Turība", 2008 - 151 lpp. Dimza V. Inovācijas pasaulē, Eiropā, Latvijā - R.: Latvijas Zinātņu akadēmijas Ekonomikas institūts, 2003, 205 lpp. Faruk A. Khan New product technology, accumulation, and growth. Washington, D.C. : World Bank, 2006.- 42 pp. Bröckel U., Meier W., Wagner G. Product design and engineering :best practices. Weinheim : Wiley-VCH, 2007.
Course prerequisites	This subject has an integrating role. It combines knowledge gained over different study courses

### 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.	4.0	6.0	1.0	1.0	2.0		*	