

**RTU Course "Statistics"****22000 Faculty of Engineering Economics and Management****General data**

Code	IV0002
Course title	Statistics
Course status in the programme	Compulsory/Courses of Limited Choice; Courses of Free Choice
Responsible instructor	Ingūna Jurgelāne-Kaldava
Academic staff	Ieva Suškeviča Evija Liepa-Hazeleja Gita Janševica Linda Kelle Dina Barute
Volume of the course: parts and credits points	1 part, 4.0 credits
Language of instruction	LV, EN
Annotation	The study course obtains tasks and organization of statistics. The course covers tasks which includes statistical observation, grouping, tabulation, graphical representation of data, absolute, relative, average values, variation indicators, dynamic time series, indices and their implementation in economic analysis.
Goals and objectives of the course in terms of competences and skills	The aim of the study course is to teach statistical methods and their use in the analysis of economic phenomena and processes, as well as to develop skills in the analysis of economic, demographic and social phenomena. Tasks of the study course: 1.) to provide theoretical knowledge about specific statistical methods; 2.) to promote understanding of the content of statistical indicators, calculation methods; 3.) to develop the ability to analyse the obtained results.
Structure and tasks of independent studies	Using statistical information and the acquired theory, solve problems, as well as analyse and substantiate the results obtained in the calculation of statistical data.
Recommended literature	Obligātā/Obligatory: 1. Orlovska, A., Jurgelāne, I. (2016). Ekonomiskā statistika: mācību līdzeklis. Rīga: RTU. 158.lpp. 2. Orlovska, A. (2004). Statistika: mācību līdzeklis. Rīga: RTU. 81 lpp. 3. Orlovska, A. (2008). Uzdevumu krājums statistikā. Rīga: RTU. 97 lpp. Papildu/Additional: 1. Goša, Z. (2003). Statistika. Mācību grāmata. Rīga: SIA Jumis. 333 lpp. 2. Krastiņš, O., Ciemiņa, I. (2003). Statistika. Rīga: LR CSP. 267 lpp. 3. Goša, Z. (2009). Uzdevumu krājums statistikā. Rīga: LU. 116 lpp. 4. James T. Mc Clave, Terry Sincich (2003). Statistics. Prentice Hall. 850 p. 5. Paul Newbold, William C. Carlson, Betty M. Thorne (2003). Statistics for Business and Economics. Prentice Hall. 850 p. 6. Valsts statistikas likums/LR Saeimas un Ministru kabineta ziņotājs, 1997. - Nr.24. - 5.-10. lpp.
Course prerequisites	Microeconomics, Macroeconomics, National Economy of Latvia.

Course contents

Content	Full- and part-time intramural studies		Part time extramural studies	
	Contact Hours	Indep. work	Contact Hours	Indep. work
Introduction.	1	0	1	0
Statistical observation. Grouping. Statistical work organization in Latvia and the EU.	4	6	3	8
Graphical illustration methods of statistical data.	5	6	2	10
Relative indicators, their types and application in the analysis of economic phenomena.	8	11	3	12
Average indicators: not weighted, weighted. Apportionment row averages.	7	11	3	14
Concept of variation, absolute and relative indicators.	4	7	2	12
Types and errors of sample observations. Necessary sample size.	4	6	2	10
Rows and types of dynamics. Average indicators. Trends.	5	12	4	12
Indexes. Individual, general indexes, aggregate and average indexes.	4	11	2	12
Total:	42	70	22	90

Learning outcomes and assessment

Learning outcomes	Assessment methods
Able to orientate in statistical data, to evaluate and to make analysis.	Tests over all tasks.
Understands how to use statistical calculations in practice by conducting research.	Statistical research.
Able to analyse and present the obtained statistical calculations.	Statistical research and it's presentations.

Able to show comprehension and can use statistical methods in research. Able to show comprehension about acquired results, to explain, to argument and to substantiate them.	Exam including theoretical and practical parts.
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Evaluation criteria of study results

Criterion	%
Two tests (each 15%)	30
Two statistical studies in groups, presenting them (each 10%)	30
Exam	40
Total:	100

Study subject structure

Part	CP	Hours			Tests			Tests (free choice)		
		Lectures	Practical	Lab.	Test	Exam	Work	Test	Exam	Work
1.	4.0	20.0	22.0	0.0		*			*	