STATISTICS

Credit points	6 CP
Duration of the course	5th semester
Study course annotation	Questions about statistical tasks and organization are discussed in the lecture course. Questions about statistical observation, grouping, creating tables, graphical representation of data, absolute, relative, average values, variation indices, dynamics series, indices and their use in economic analysis are covered.
Aim of the study course	The goal is to learn statistical methods and their use in the analysis of economic phenomena and processes, as well as to be able to apply them in the analysis of economic, demographic and social phenomena. To acquire theoretical knowledge of specific statistical methods. Understand the content of statistical indicators, calculation methods, obtained results.

	Knowledge	Skills	Competences
Study course results	to understand statistical subjects and methods of statistical observation; clustering and grouping in statistics. Be able to draw statistical data graphically and statistical tables; analyze types of statistical groupings; analyze the collection of statistical indicators (absolute, relative and average values); compile variation indicators; sampling methods (observation, data generalization); knowledge of the use of dynamic queues; application of index method in factor analysis;	Creating a sense of responsibility of future specialists, which related to the correspondence of the processing information to the truth, about the correctness of the choice of statistical research methods. Management of various statistical methods used in the study of mass phenomena and the operation of individual enterprises. Know how to freely manage the statistical information creation methodologies of the company. Evaluation of the financial results of the company's operation.	Ability to implement data collection, analysis and processing, which are necessary to find solutions to the tasks; Able to choose the instrumental means for economic data processing according to the assigned task, analyze the calculation results and justify the obtained conclusions; Able to calculate the economic indicators characterizing the company's activity; Using various sources of information, able to analyze output data and prepare an analytical report.

	Topics	
Study course content	1	Subject and method of statistics
	2	Statistical observation
	3	Aggregation and grouping in statistics. Statistical tables
	4	Types of statistical groupings. Graphical representation of statistical data
	5	Graphical representation in statistics
	6	Compilation of statistical indicators. Absolute and relative quantities
	7	Average sizes. Indicators of variation
	8	Sampling method (observation, data generalization)
	9	Dynamics queues
	10	Application of index method in factor analysis
Form of assessment:	Differentiated written assessment	

Obligatory literature:

1. Statistics for Business and Economics / Paul Newbold, William L. Carlson, Betty M. Thorne. - 8th ed. - Pearson Education Inc., 2013. - 792 p.: fig., tabl.
2. Berenson ML, "Basic Business Statistics. Concepts and Applications", Timothy C . Krehbiel, 9th ed., Rearson Education International, 2004.
3. Cramer, "The SAGE Dictionary of Statistics. A Practical Resource for Students in the Social Sciences", SAGE Publications, 2004.
4. Statistics for Management and Economics / Gerard Keller. - 11th ed. - Cengage Learning, 2018. - 998 p.

Additional reading:

1. Greene J., "Learning to use Statistical Tests in Psychology", Manuela D' Oliveira, 3rd ed., Open University Press, 2006.
2. Fundamentals of Business Mathematics and Statistics (FMS). Foundation / The Institute of Cost Accountants of India (ICAI). - 2nd ed. - 2014. - 426 p.: fig., tabl.

Other sources of information:

1. "Latvian Economist" magazine
2. Merchant Baltic & Nova Media
3. Newspaper "Daily Business"
4. Central Statistical Office, URL: http://www.csb.gov.lv/par-mums/par-mums-8272.html
5. European commission statistics, URL: http://ec.europa.eu/eurostat
6. The Statistical portal, URL: https://www.statista.com
7. www.csb.gov.lv
8. http://ec.europa.eu/eurostat

Changes and additions to the program and literature list are possible during the study process