

Econometrics

B.1.1.3.1.

Degree: Bachelor

Year: 2019

Semester: Fall

General workload: 4 ECTS credits, 180 hours

Goals and objectives of the course

To learn how to use basic econometric research methods, to acquire econometric model building skills using Excel and R and skills needed for using them in various economic sectors.

Key didactic units

1. Simple Linear Regression Model (SLR). Ordinary Least Squares (OLS) examination.
2. Multiple Linear Regression Model (MLR): two explanatory variables and k explanatory variables.
3. Variables transformations in regression analysis.
4. Linear Regression Model specification.
5. Heteroscedasticity.
6. Autocorrelated random disturbance.
7. Time series data-based modelling.

Place of the discipline within the curriculum

This is a course within a general training module.

Upon completing the course, the students should:

Know methods of using modern software;

Be able to use the methods of using modern software;

Have computer use skills and modern professional applications use skills;

Know calculation methods and basic research methods;

Be able to use calculation methods and basic research methods;

Have skills of using calculation methods and basic research methods in a professional environment;

Know the Russian laws regulating accounting operations, accounting and accounting (financial) statement formation methodology;

Be able to use the laws and other regulatory documents for reporting of objects of accounting;

Have the skills needed for independent use of knowledge when examining economic situations and facts of economic life;

Know the main approaches to systematization, summarizing and analysis of data for accounting and reporting purposes;

Be able to apply data systematization, summarizing and analysis methods for accounting and reporting purposes using knowledge of the regulatory framework;

Have skills needed for systematization, summarizing and analysis of accounting and reporting data;

Know mathematical methods used for solving standard professional financial and economic problems;

Be able to apply mathematical methods to solve standard professional financial and economic problems;

Have the skills needed to use mathematical methods for solving standard professional financial and economic problems, and for interpreting the mathematical results obtained.

Course structure: lectures, seminars, independent student work

Summative assessment: examination