***Econometrics***

***B.1.1.3.5.***

**Degree:** Bachelor

**Year:** *3*

**Semester:** Fall

**General workload:** 5 ECTS credits, *180* hours

**Goals and objectives of the course**

The course goal is to acquire updated theoretical knowledge and practical skills in real system model development.

The objectives of the course are the following:

To make specifications, develop procedures for assessing and verifying the relevancy of regression models of financial and economic systems that are sufficient for taking special and applied courses and for analysis of financial and economic entities and processes based on the use of modern econometric software.

**Key didactic units**

Econometrics, its objectives and methodology. Econometric model specification principles. Econometric modelling principles. Linear multiple regression model and optimal statistical procedure for its parameters assessment. Gauss-Markov theorem testing. Linear regression models and heteroscedastic and autocorrelation residue. The weighed method of least squares. The accessible general method of least squares.

**Place of the discipline within the curriculum**

The course is a mandatory discipline in the professional training unit within the curriculum of program 38.04.01. in Economics (concentration: International Finance). The course builds the theoretical and methodological foundation for further study of economic and mathematical disciplines taught to bachelor students majoring in Economics (concentration: International Finance).

**Upon completing the course, the students should:**

*Know:*

* Econometric model construction methods used for object, phenomenon and process modelling;

*Be able to:*

* Build standard theoretical and econometric models based on the situation description;
* Examine and correctly interpret the results obtained,
* Predict the economic agents’ behavior taking into account standard theoretical and econometric models, economic process and phenomenon development at the micro- and macro-levels;

*Have:*

* Knowledge of modern econometric model construction methodology; economic phenomenon and process analysis methods and techniques based on the use of standard theoretical and econometric models.

**Course structure:** lectures, seminars, independent student work

**Summative assessment:** examination