| Course Title | Econometrics I |
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| Course Code | AEF475 |
| Course Type | Elective |
| Level | Bachelor (1st Cycle) |
| Year / Semester | 4th Year / 7th Semester |
| Teacher's Name | ТВА |
| ECTS | 6 Lectures / week 3 Hours / Laboratories / None 14 weeks week |
| Course Purpose and Objectives | To increase students' econometric understanding. Students will learn how to collect data and to run regression analysis. They will be in a position to understand and critically evaluate the results. |
| Learning Outcomes | Upon successful completion of this course students should be able to: Identify appropriate estimation methods in a variety of contexts and circumstances; Discuss the adaptations and limitations of regression analysis; Apply econometrics in a robust way for a project Interpret, and critically appraise, quantitative econometric results; Explain and apply hypothesis tests in the context of regression analysis; Conduct basic econometric analysis using the computer software package SPSS or STATA |
| Prerequisites | AEF240, BUS210, BUS315 Co-requisites None |
| Course Content | Introduction: Review of Some Basic and Important Results in Statistics: Summation. Random Variables and Probability Distributions. The Normal Probability Distribution and Related Distributions. Sampling Distributions Point Estimation, Interval Estimation and Testing of Hypotheses. Simple Regression: Ordinary Least Squares. The Method of Moments and the Method of Least Squares. Statistical Inference, Analysis of Variance and Prediction with the Simple Linear Regression Model. Alternative Functional Forms for the Regression Equations. Multiple Regression: Statistical Inference, Interpretation of the Coefficients. Partial Correlations and Multiple Correlation. |

| | Analysis of Variance and Tests of Hypotheses. Omission of Relevant Variables. Degree of Freedom and Adjusted R2. Heteroscedasticity: Detection, Consequences and Solutions. Heteroscedasticity and the Use of Deflators. Autocorrelation: Detection; Durbin-Watson Test; Consequences and Solutions. Multicollinearity: Detection Consequences and Solutions |
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| Teaching Methodology | Face-to-face |
| Bibliography | Gujarati Damodara: Essentials of Econometrics, McGraw-Hill (latest edition) Gujarati Damodara: Basic Econometrics, McGraw-Hill (latest edition) Jeffrey Wooldridge: Introductory Econometrics, South-Western (latest edition) Studenmund H.: Using Econometrics, Addison Wesly, (latest edition) Hill C., Griffiths W., Judge G.: Undergraduate Econometrics, Wiley, (latest edition) |
| Assessment | Examinations60%Class Participation and Attendance10%Assignments30%100%100% |
| Language | English |