

TITLE OF THE COURSE:	Financial Econometrics
Course code:	EKF5014
Course group:	C
Faculty:	Faculty of Economics and Management
Study program:	Finance
Level:	Master's
Semester:	Spring
ECTS credits:	6
Language of instruction	English
Course lecturer/s:	Dr. Mindaugas Butkus
Short course description:	This course belongs to the selective subjects' area and seeks to deepen knowledge and skills in statistic and econometric analysis, essentially complementary and completing the chosen study field of education. Students train skills required for the data analysis and prediction of financial market and its environment. Students acquire skills to organize and implement econometric researches independently and in groups and to present results to the specialists and non-specialist audience. During workshops students acquired skills especially needed at work of financial markets analyst.
Course content:	<ol style="list-style-type: none"> 1. Introduction to time series analysis: stationarity, unite root process, DickeyFuller test; cointegration, Engle-Granger and Johansen tests 2. Granger causality: ADL, ECM, VAR and VECM models. 3. Asset return and its distribution. Asset return forecast. Market effectiveness tests and asset pricing models 4. Deterministic and stochastic trend and volatility. ARCH models. GARCH and other models for evaluation of stochastic volatility. 5. Combination of cross-sectional data and time series: models with independently pooled cross-sections over time. Evaluation of policy (strategy) impact on economic outcome. 6. Balanced panel data and models: FD, FE and RE. 7. Unbalanced panel data and models 8. Evaluation of policy (strategy) impact on economic outcome using models for balanced and unbalanced panel data
Grading and evaluating student work in class and/or at the final exam:	Midterm exam – 10%. Individual homework –40%. Examination - 50 %.
Required reading and additional study material	<ol style="list-style-type: none"> 1. 2014 Brooks, Ch. Introductory Econometrics for Finance 3rd ed. Cambridge University Press, NY 2. 2016 Graham, E., Timmermann, A. Economic Forecasting Princeton University Press 3. 2009 Mills, T.C., Patterson, K. ed. Palgrave Handbook of Econometrics. Volume 2. Applied Econometrics. Palgrave McMillan 4. 2014 Adkins, L.C. Using GRETL for Principles of Econometrics, 4th ed. Oklahoma State University Press Additional study materials:

	<ol style="list-style-type: none">1. 1997 Campbell, J.Y., Lo, A.W., McKinlay, C. A. The Econometrics of Financial Markets. Princeton University Press2. 2001 Gouriéroux, Ch., Jasiak, N. Financial Econometrics: Problems, Models, and Methods. Princeton University Press3. 2010 Kozhan., R. Financial Econometrics with EViews Ventus Publishing ApS4. 2011 Carnot, N., Koen, V, Tissot, B. Economic Forecasting and Policy. Palgrave Macmillan
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