Georg-August-Universität Göttingen Module M.WIWI-QMW.0005: Econometrics II	6 C 4 WLH
Learning outcome, core skills: As the outcome of this advanced course the students are able to • identify problems of estimation and inference arising due to stochastic regressors, • establish finite sample and asymptotic properties of estimators under the assumption that the data generating process contains stochastic regressors, • model simple univariate stationary and non-stationary time series processes, • carry out and interpret test results of unit root and cointegration tests, • set up, and estimate (over-, under-) identified simultaneous equation models, • model simple multivariate time series with possible cointegration, • implement estimators and analyze real world datasets with the R programming language.	**Workload:** Attendance time: 56 h Self-study time: 124 h
Course: M.WIWI-QMW.0005.Lec **Econometrics** (Lecture) *Contents*: Stochastic regressors in linear econometric models; OLS, IV, 2SLS, GMM estimators; Dynamic linear econometric models: stationary stochastic processes, ARMA models, (testing) unit roots, (testing) cointegration, spurious regression; Simultaneous equation models: Identification, estimation (GLS, IV, 2SLS, 3SLS, ILS) Vector autoregressive and error correction models: Interpretation, estimation, inference.	2 WLH
Course: M.WIWI-QMW.0005.Ex **Econometrics II** (Exercise) *Contents*: Exercises deepening concepts from the lecture, and demonstrating practical applications. Simulations and data analysis exercises using the R programming language.	2 WLH
Examination: Written examination (90 minutes) M.WIWI-QMW.0005.Mp: Econometrics II	6 C
Examination requirements: The students demonstrate their understanding of advanced econometric concepts. They show that they can apply these concepts to real economic problems.	

Admission requirements: none	**Recommended previous knowledge:** M.WIWI-QMW.0004 Econometrics I
Language: English	**Person responsible for module:** Prof. Dr. Helmut Herwartz
Course frequency: each summer semester	**Duration:** 1 semester[s]
Number of repeat examinations permitted: twice	**Recommended semester:** 2 - 3
Maximum number of students:	

not limited	