

316-636 Econometrics

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| Credit Points: | 12.50 |
| Level: | 9 (Graduate/Postgraduate) |
| Time Commitment: | Contact Hours: Three hours of classes per week plus three hours of seminars during the semester (Semester 1). Total Time Commitment: Not available |
| Prerequisites: | Introductory Econometrics or equivalent. |
| Corequisites: | None |
| Recommended Background Knowledge: | None |
| Non Allowed Subjects: | None |
| Core Participation Requirements: | <p><p>For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Student Support and Engagement Policy, academic requirements for this subject are articulated in the Subject Overview, Learning Outcomes, Assessment and Generic Skills sections of this entry.</p> <p>It is University policy to take all reasonable steps to minimise the impact of disability upon academic study, and reasonable adjustments will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact on meeting the requirements of this subject are encouraged to discuss this matter with a Faculty Student Adviser and Student Equity and Disability Support: http://services.unimelb.edu.au/disability</p></p> |
| Subject Overview: | Extensions of the multiple regression model are examined. Topics include non-linear least squares, maximum likelihood estimation and related testing procedures, generalised least squares, heteroskedasticity, autocorrelation and models with stochastic regressors. Limited dependent variable models and issues involving time-series data are introduced. Theoretical concepts are illustrated by applied examples. The computer software used is EViews. |
| Objectives: | <p>On successful completion of this subject students should be able to:</p> <ul style="list-style-type: none"> # Explain the concept of maximum likelihood estimation; # Use the EViews software program to find maximum likelihood estimates for nonlinear models, heteroskedastic and auto-correlated error models, seemingly unrelated regressions, binary choice and limited dependent variable models; # Interpret EViews output and place that interpretation in an economic context relevant to the model being estimated; # Explain the difference between the Wald, likelihood ratio and Lagrange multiplier testing procedures; # Use EViews output to perform tests for a variety of hypotheses; # Explain the concepts of endogeneity, instrumental variable and method of moments estimation and simultaneous equations models; # Use EViews to estimate simultaneous equation models and interpret the output; # Explain the time series concepts of stationarity, spurious regression, unit root tests and cointegration; # Describe each of the models studied in the subject, the characteristics of these models and the data for which they are suited; # Derive basic results related to each of the models. |
| Assessment: | A 2-hour end-of-semester examination (65%) class assignments up to 3200 words in total (32%) and tutorial attendance and participation (3%). |
| Prescribed Texts: | None |
| Breadth Options: | This subject is not available as a breadth subject. |
| Fees Information: | Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees |
| Generic Skills: | On successful completion of this subject, students should have improved the following generic skills: |

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| | <ul style="list-style-type: none"># Evaluation of ideas, views and evidence;# Synthesis of ideas, views and evidence;# Strategic thinking;# Critical thinking;# Application of theory to economic policy and business decision making;# Summary and interpretation of information;# Using computer programs;# Statistical reasoning;# Problem solving skills;# Collaborative learning and teamwork;# Written communication. |
| Notes: | Students may not gain credit for both 316-636 Econometrics and 316-317 Econometrics. |
| Related Course(s): | Master of Commerce - Economics |