ECOM90002 Econometrics

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2012, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus.
Time Commitment:	Contact Hours: Two 1-hour lectures and a 1-hour tutorial/practice class per week. Total Time Commitment: Estimated total time commitment of 120 hours per semester
Prerequisites:	Introductory Econometrics or equivalent.
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	ECOM30002 Econometrics

Subject	Study Period Commencement:	Credit Points:
ECOM30002 Econometrics	Semester 1	12.50

Core Participation Requirements:	For the purposes of considering requests for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Description, Subject Objectives, Generic Skills and Assessment Requirements for this entry.The University is dedicated to provide support to those with special requirements. Further details on the disability support scheme can be found at the Disability Liaison Unit website: http://www.services.unimelb.edu.au/disability/
Coordinator:	Prof Vance Martin
Contact:	Graduate School of Business and Economics Level 4, 198 Berkeley Street Telephone: +61 3 8344 1670 **Online Enquiries (https://nexus.unimelb.edu.au/OnlineEnquiryForm.aspx?campaigncode=CMP-01311-VZ8293&cssurl=https://nexus.unimelb.edu.au/cssfiles/gsbe.css&redirecturl=http://www.gsbe.unimelb.edu.au/contactus/nexus/gsbe.html)** Web: **www.gsbe.unimelb.edu.au (http://www.gsbe.unimelb.edu.au/)**
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:	On successful completion of this subject students should be able to: # 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:	2-hour end-of-semester examination (65%)Class assignments totalling 3200 words (35%)
Prescribed Texts:	You will be advised of prescribed texts by your lecturer.
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: # 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 ECOM90002 Econometrics and ECOM30002 Econometrics.
Related Course(s):	Master of Commerce - Economics