

## 23908 Economic Modelling

**Course area** UTS: Business

**Delivery** Autumn 2014; City

**Credit points** 6cp

**Requisite(s)** [23917c](#) Advanced Macroeconomics AND [23909c](#) Thesis Proposal in Economics (Honours) AND [23907c](#) Advanced Microeconomics  
These requisites may not apply to students in certain courses.  
There are also course requisites for this subject. See [access conditions](#).

**Result type** Grade and marks

### Subject coordinator

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### Teaching staff

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### Subject description

Economic Modelling extends earlier training received by students in their economics major by introducing students to a selection of economic modelling approaches that are at the heart of modern economic research based on experimental and observational data. Specifically, it extends the set of topics covered to include methods for panel data analysis, instrumental variables, maximum likelihood estimations, and others.

### Subject objectives

Upon successful completion of this subject students should be able to:

1. understand modern microeconomic modelling techniques
2. apply microeconomic models to the analysis of individual economic behaviour
3. modify existing models and apply them to new policy questions
4. use the technical skills developed throughout the course to knowledgeably read contemporary microeconomic research.

### Contribution to the development of graduate attributes

This subject develops more advanced knowledge of microeconomic modeling tools that are widely used for modeling economic behavior at the micro-level. It familiarises students with selected modeling approaches, both theoretical and empirical. Students will learn to apply the modeling tools of modern microeconomics to the analysis of economic policy issues.

### Teaching and learning strategies

The subject will be taught using a combination of lectures and tutorials. There is no course textbook. Students will read from texts and articles appropriate to the selection of topics. The class will follow the usual weekly lecture (3 hours per week), with occasional intensive delivery.

### Content

The content will be selected from the following areas:

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- Limited Dependent Variables and Discrete Choice Models
- Instrumental Variables
- Panel Data Methods
- Simultaneous Equations Models
- Models of Learning and Adaptive Behaviour
- Structural Modelling
- Econometric modelling of individual labour supply decisions using observational and experimental data
- Dynamic Stochastic General Equilibrium Models

## Program

Week/Session	Dates	Description
1	26/02	Lecture 1: Linear Regression Model  <b>Notes:</b> Reading: Lecture Note 1
2	05/03	Tutorial: problem set Lecture 2: Properties of Estimators  <b>Notes:</b> Reading: Lecture Note 2
3	12/03	Tutorial: problem set Lecture 3: Gauss Markov and Statistical Inference  <b>Notes:</b> Reading:Lecture Note 3
4	19/03	Tutorial: problem set Lecture 4: Specification Issues and Maximum Likelihood  <b>Notes:</b> Reading: Lecture Note 4
5	26/03	Tutorial: problem set Lecture 5: Heteroskedasticity and Autocorrelation  <b>Notes:</b> Reading: Lecture Note 5

6	02/04	Tutorial: problem set Lecture 6: Instrumental Variable Estimation  <b>Notes:</b> Reading: Lecture Note 6
7	09/04	Tutorial: articles Lecture 7: Simultaneous Equations Models  <b>Notes:</b> Reading:Lecture Note 7
8	30/04	No Tutorial Mid-term Exam (1 hour) Lecture 8: Panel Data Method I  <b>Notes:</b> Reading:Lecture Note 8
9	07/05	Tutorial: articles Lecture 9: Panel Data Method II  <b>Notes:</b> Reading: Lecture Note 9
10	14/05	Tutorial: articles Lecture 10: Binary Choice Models  <b>Notes:</b> Reading: Lecture Note 10
11	21/05	Tutorial: articles Lecture 11: Limited Dependent Variable Models  <b>Notes:</b> Reading: Lecture Note 11
12	28/05	Tutorial: articles Lecture 12: Structural Estimation  <b>Notes:</b> Reading: Lecture Note 12

There is no restriction on which program to use to complete the data analysis part of the homework assignments. The university has resources for EViews.

## Assessment

### Assessment task 1: Assignment (Individual)

**Objective(s):** This addresses subject learning objective(s):  
1 and 3

**Weight:** 25%

**Task:** 1 hour mid-term exam will be given on Apr 30.

### Assessment task 2: Assignment (Individual)

**Objective(s):** This addresses subject learning objective(s):  
2 and 3

**Weight:** 25%

**Task:** Weekly assignment (10%), weekly class participation and presentation (5%), and end-of-term assignment (10%).

**Further information:** The detail of assignments will be given in class.

### Assessment task 3: Final examination (Individual)

**Objective(s):** This addresses subject learning objective(s):  
1, 2 and 3

**Weight:** 50%

**Length:** 2 hour final exam will be given at the end of the semester.

## Minimum requirements

Students must achieve at least 50% of the subject's total marks.

## Required texts

Jeffrey Wooldridge: Introductory Econometrics: A Modern Approach, 5th Edition, South Western CENGAGE Learning

## Recommended texts

Some useful reading materials are:

William Greene: Econometric Analysis 7th Edition, Pearson

A. Colin Cameron and Pravin K. Trivedi: Microeconometrics: Methods and Applications, Cambridge University Press, New York, May 2005.

## References

I will e-mail or post lecture notes for each lecture.

## Academic liaison officer

- Dr Maria Ossimitz, Accounting Discipline Group, telephone 9514 3069
- Mr Harry Tse, Economics Discipline Group, telephone 9514 7786 / 9514 5456
- Dr Otto Konstandatos, Finance Discipline Group, telephone 9514 7758
- Dr Paul Wang, Marketing Discipline Group, telephone 9514 3692
- Dr Katie Schlenker, Management Discipline Group and BBus (Kuring-gai), telephone 9514 5303 (until week 10)
- Dr Daryl Adair, Management Discipline Group and BBus (Kuring-gai), telephone 9514 5498 (weeks 11–14)

Any arrangements should be negotiated within the first six weeks of semester.

## Support

**Student Services Unit/Counselling:** Student Services provides a range of free and confidential professional services to support different aspects of your life and learning at UTS ( [www.ssu.uts.edu.au](http://www.ssu.uts.edu.au)). These services include counselling for personal and learning problems or issues. If you are experiencing difficulties with your overall study program, for whatever reason, phone 9514 1177 (City campus) or 9514 5342 (Kuring-gai campus).

**Students with disabilities or ongoing medical conditions:** If you are a student who has a disability or ongoing medical condition that requires support services you are encouraged to contact the disability support officers or Special Needs Service (phone 9514 1177; [www.ssu.uts.edu.au/sneeds/](http://www.ssu.uts.edu.au/sneeds/)) for a confidential interview. Supporting documentation regarding your disability or ongoing medical condition is required if you wish to apply for assessment adjustments, including alternative assessment conditions. Each faculty has appointed academic liaison officers (ALOs) who are responsible for approving assessment adjustments. Meeting with the disability support officers or Special Needs Service before seeking assessment adjustments from your ALO is required.

**Improve your academic and English language skills:** Marks for all assessment tasks such as assignments and examinations are given not only for what you write but also for how you write. If you would like the opportunity to improve your academic and English language skills, make an appointment with the HELPS (Higher Education Language and Presentation Support) service in Student Services.

**HELPS (Higher Education Language and Presentation Support):** HELPS provides assistance with English language proficiency and academic language. Students who need to develop their written and/or spoken English should make use of the free services offered by HELPS, including academic language workshops, vacation intensive courses, drop-in consultations, individual appointments and Conversations@UTS ([www.ssu.uts.edu.au/helps](http://www.ssu.uts.edu.au/helps)). HELPS is located in Student Services, on level 3 building 1 at City campus and via the Student Services area at Kuring-gai (phone 9514 2327 or 9514 2361).

**Study skills / learning support:** If you are experiencing difficulty with your studies or need to develop the necessary study skills you require for your course, there is a host of useful information and websites to help you on the UTS Business School, Teaching And Learning website. Links on how to write better, study more effectively, available support services/staff to help, how to complete assignments; as well as tips for successful study and online study skills resources can all be accessed ([www.uts.edu.au/current-students/current-students-information-uts-business-school-0/study-and-assessment-resources](http://www.uts.edu.au/current-students/current-students-information-uts-business-school-0/study-and-assessment-resources))

**Careers Service:** The UTS Careers Service aims to actively support the career development needs of all UTS students ([www.ssu.uts.edu.au/careers/](http://www.ssu.uts.edu.au/careers/)).

## Statement about assessment procedures and advice

### Assessment of coursework subjects

All staff and students involved in the assessment of coursework subjects at UTS are subject to the Policy for the Assessment of Coursework Subjects. The policy is applicable to the assessment of all coursework subjects. This policy does not apply to thesis subjects that are taken by students enrolled in research degrees, but does apply to any coursework subjects undertaken by research degree students. It does not describe policy that relates to academic progression through a course of study.

The policy should be read in conjunction with the Procedures for the Assessment of Coursework Subjects. Both are available at: [www.gsu.uts.edu.au/policies/assessment-coursework.html](http://www.gsu.uts.edu.au/policies/assessment-coursework.html)

## Statement on copyright

Australian copyright law allows you as a student or researcher to copy and use limited amounts of other people's material in your study or research without their permission and free of charge.

This applies to any sort of published or unpublished work, and includes written material, tables and compilations, designs, drawings (including maps and plans), paintings, photographs, sculpture, craft work, films (such as feature films, television programs, commercials and computer video games), software (such as computer programs and databases), sound recordings, performances and broadcasts (including podcasts and vodcasts of these) and text, including books, journals, websites, emails and other electronic messages.

It is important to remember that **you can only use a limited amount for your study or research purposes** and that **you need to correctly acknowledge the author and reference their material** when you use it in your work.

Incorrect or improper use of copyright protected material could result in breaking Australian copyright law, for which significant penalties apply. Incorrect or improper use of copyright protected material at UTS would result in consideration under the UTS Student Misconduct rules.

UTS Rules and the UTS Student Charter require that students familiarise themselves and comply with UTS student policies and procedures. The copyright information advising what you can copy and how much you can use can be seen at: [www.uts.edu.au/about/utsweb-statements/copyright-statement](http://www.uts.edu.au/about/utsweb-statements/copyright-statement)

## Statement on plagiarism

Plagiarism is a broad term referring to the practice of appropriating someone else's ideas or work and presenting them as your own without acknowledgment. Plagiarism is literary or intellectual theft. It can take a number of forms, including:

- copying the work of another student, whether that student is in the same class, from an earlier year of the same course, or from another tertiary institution altogether
- copying any section, no matter how brief, from a book, journal, article or other written source, without duly acknowledging it as a quotation
- copying any map, diagram or table of figures without duly acknowledging the source
- paraphrasing or otherwise using the ideas of another author without duly acknowledging the source.

Whatever the form, plagiarism is unacceptable both academically and professionally. By plagiarising you are both stealing the work of another person and cheating by representing it as your own. **Any instances of plagiarism can therefore be expected to draw severe penalties and may be referred to the Faculty Student Conduct Committee.**

Cheating means to defraud or swindle. Students who seek to gain an advantage by unfair means such as copying another student's work, or in any other way misleading a lecturer about their knowledge or ability or the amount of work they have done, are guilty of cheating.

Students who condone plagiarism by allowing their work to be copied will also be subject to severe disciplinary action.

Avoiding plagiarism is one of the main reasons why the UTS Business School is insistent on the thorough and appropriate referencing of all written work.

## Statement on UTS email account

Email from the University to a student will only be sent to the student's UTS email address. Email sent from a student to the University must be sent from the student's UTS email address. University staff will not respond to email from any other email accounts for currently enrolled students.