MCom Econometrics (Coursework) (07250013)

Department	Economics
Minimum duration of study	1 year
Total credits	180
NQF level	09

Admission requirements

1. Relevant BComHons degree
2. A cumulative weighted average of at least 65% for the honours degree

Other programme-specific information

Any other module on master's level approved by the relevant head of department can constitute an elective.

Candidates who consider pursuing a doctoral degree are required to complete the MPhil (Economics).

A minimum number of at least five candidates are required to register before a module is presented.

The department furthermore reserves the right not to present a module if the particular expertise in that module is not available in the department for that year.

Each candidate is only allowed to register twice for a particular module. Exam entry in all subjects requires a minimum 40%. In order to continue on the programme, all students must receive exam entry in every module. Students cannot be registered on the programme more than two years.

Capacity limitations

- The supervision of postgraduate students is a time-consuming process, and, therefore, the Department reserves the right to limit entry into programmes.
- Please consult the Department for the most recent information on enrolment expectations.
- All reasonable measures will be taken to ensure that those students who meet the minimum requirements, are enrolled.
- In the event that departmental capacity cannot accommodate the number of students who meet the minimum requirements, the students will be ranked according to the above averages, and only the top performing students will be admitted to the programme, in accordance with the number of students that the departmental teaching capacity and supervision can accommodate.

Examinations and pass requirements

The pass mark for both a dissertation and a mini-dissertation is 50%. The provisions regarding pass requirements for dissertations, contained in General Regulation G.12.2, apply mutatis mutandis to mini-dissertations. A pass mark of at least 50% is required in the examination of each module.

Research information

The research component comprises the writing of a mini-dissertation. The postgraduate programme manager will appoint a supervisor, based on the mutual interests of the candidate and the supervisor. Once a supervisor agrees to work with a candidate, the candidate will continue to work under the guidance of his/her supervisor to complete the research and to develop and finalise a mini-dissertation according to departmental guidelines and regulations.

The dissertation contributes 67% towards the total requirements for the degree.

Mini-dissertations, curricula and modules

1. The degree programme requires that a mini-dissertation must be submitted.
2. Information on modules, credits and syllabi is available on the yearbook.
3. A module in Research Methodology is compulsory in the programme, although it is incorporated into the mini-dissertation mark. The Dean may, on the recommendation of the relevant head of department, waive the prerequisites.
4. The mini-dissertation should be written in consultation with the supervisor, and is to be submitted either by 30 November to graduate in April or May 31 to graduate in September. The mini-dissertation should be submitted to the postgraduate administrator in the department, with the approval of the supervisor. If the supervisor does not approve, the student should approach the postgraduate committee of the department. That committee will make a final recommendation on submission.

Article for publication
There is no expectation that an article be published from the research conducted in the mini-dissertation.

Curriculum: Final year

Minimum credits: 170

A minimum of 180 credits are required, 160 from the core modules and 20 from the elective modules.

Core modules

Microeconomics 812 (EKN 812)

Module credits	10.00
NQF Level	09
Service modules	Faculty of Natural and Agricultural Sciences
Prerequisites	Only for students in relevant programme
Contact time	1 lecture per week
Language of tuition	Module is presented in English
Department	Economics
Period of presentation	Semester 1

Module content

The module will first expose students to knowledge related to how individual consumers and firms behave under a very strict set of circumstances. Toward the end of the semester, the module will then begin to examine behaviour under less strict assumptions. The module covers in detail, firm behaviour, consumer behaviour, general equilibrium, behaviour under uncertainty and risk, strategic behaviour, information, game theory and to a lesser extent, the interaction between the government and the individual.

Macroeconomics 813 (EKN 813)

Module credits	10.00
NQF Level	09
Service modules	Faculty of Natural and Agricultural Sciences
Prerequisites	Only for students in relevant programme
Contact time	1 other contact session per week, 3 lectures per week
Language of tuition	Module is presented in English
Department	Economics
Period of presentation	Semester 1 or Semester 2

Module content

The basic framework for this module will be infinitely-lived dynamic stochastic and non-stochastic macro models in both discrete and continuous time frames. Overlapping generation models will also be used to deal with certain topics. Topics include:
- The Lucas Critique
- Growth models
- Expectations
- Business cycles
- Basics of a new Keynesian business cycle model
- Overlapping generations models

Econometrics 813 (EKT 813)

Module credits	10.00
NQF Level	09
Prerequisites	Only for students registered for the following programmes: MCom (Economics), MCom (Econometrics), MPhil (Economics) or PhD Economics
Contact time	1 lecture and/or practical per week
Language of tuition	Module is presented in English
Department	Economics
Period of presentation	Semester 1 or Semester 2

Module content

EKT 813 is an econometrics module focused on the background statistics (including distribution theory), matrix algebra, calculus and related information that underscores econometrics.

Econometrics 816 (EKT 816)

Module credits	10.00
NQF Level	09
Prerequisites	EKT 813 and only for students registered for the following programmes: MCom (Economics), MCom (Econometrics), MPhil (Economics) or PhD Economics.
Contact time	1 lecture and/or practical per week
Language of tuition	Module is presented in English
Department	Economics
Period of presentation	Semester 1 or Semester 2

Module content

EKT 816 is an econometrics module focused on cross-section econometrics, and, therefore, includes topics such as linear and nonlinear models, randomized controlled trials, instrumentation, matching, regression discontinuity and other topics according to the choice of the lecturer.

Mini-dissertation: Econometrics 895 (EKT 895)

Module credits	120.00
NQF Level	09
Prerequisites	Only for students in relevant programme
Language of tuition	Module is presented in English
Department	Economics
Period of presentation	Year

Elective modules

International trade 804 (EKN 804)

Module credits	10.00
NQF Level	09
Prerequisites	Only for students in relevant programme
Contact time	1 lecture per week
Language of tuition	Module is presented in English
Department	Economics
Period of presentation	Semester 2

Module content

Evidence over the last fifty years has shown that trade remains the engine for growth and development across the world and for almost each individual country. This module comprises a thorough analysis of international trade with an emphasis on trade theory, growth and development. It exposes students to the critical issues that policymakers grapple with on a day-to-day basis (WTO issues) and extends the international trade theory to policymaking. Furthermore, an understanding of the circumstances within which international trade policy is made in developing countries with particular reference to South Africa.

International finance 805 (EKN 805)

Module credits	10.00
NQF Level	09
Prerequisites	Only for students registered for the following programmes: MCom (Economics), MCom (Econometrics), MPhil (Economics) or PhD Economics
Contact time	1 lecture per week
Language of tuition	Module is presented in English
Department	Economics
Period of presentation	Semester 1

Monetary economics and banking 816 (EKN 816)

Module credits	10.00

NQF Level	09
Service modules	Faculty of Natural and Agricultural Sciences
Prerequisites	Only for students in relevant programme
Contact time	1 lecture per week
Language of tuition	Module is presented in English
Department	Economics
Period of presentation	Semester 1 or Semester 2

Module content

This module presents an advanced treatment of critical topics in monetary economics and the models economists use to investigate the interactions between real and monetary factors. It provides extensive coverage of general equilibrium (DSGE) models, models of the short-run real effects of monetary policy, and game-theoretic approaches to monetary policy. Among the topics covered are models of time consistency, monetary policy operating procedures, interest rates and monetary policy.

Throughout, this module focuses on the implications of interest rate control for monetary policy. The module is designed for advanced graduate students in monetary economics, economic researchers and economists working in policy institutions and central banks.

The module includes discussions of empirical evidence on the new Keynesian model, inflation forecast targeting models, optimal policies in forward-looking models, stability and the Taylor principle, and open economy new Keynesian models. It explicitly treats policy analysis in new Keynesian models and their underlying DSGE foundations for both a closed economy, a small open economy and a two-country world economy; the discussion includes the derivation of the policy objective function, optimal commitment and discretionary outcome, targeting rules and instrument rules.

Computable general equilibrium modelling 819 (EKN 819)

Module credits	10.00
NQF Level	09
Prerequisites	Only for students registered for the following programmes: MCom (Economics), MCom (Econometrics), MPhil (Economics) or PhD Economics
Language of tuition	Module is presented in English
Department	Economics
Period of presentation	Semester 1

Capita selecta economics 821 (EKN 821)

Module credits	10.00
NQF Level	09
Prerequisites	Only for students registered for the following programmes: MCom (Economics), MCom (Econometrics), MPhil (Economics) or PhD Economics
Contact time	1 lecture per week
Language of tuition	Module is presented in English

Department	Economics
Period of presentation	Semester 1

Module content

EKN 821 is a capita selecta module in Economics. The content is dependent upon staff make-up and capacity.

Applied microeconomics 822 (EKN 822)

Module credits	10.00
NQF Level	09
Prerequisites	Only for students in relevant programme
Contact time	1 lecture per week
Language of tuition	Module is presented in English
Department	Economics
Period of presentation	Semester 1

Module content

The module is devoted to microeconomic theory, and the relevant econometric theory needed to apply that theory to data that is readily available. Students will be expected to read a broad selection of published papers, learn about recent advances in both theory and econometrics, and start writing their own microeconomic research. Students will be graded through coursework and tests, as well as on their research.

Applied macroeconomics 823 (EKN 823)

Module credits	10.00
NQF Level	09
Prerequisites	Only for students in relevant programme
Contact time	1 lecture per week
Language of tuition	Module is presented in English
Department	Economics
Period of presentation	Semester 1

Module content

The module is devoted to macroeconomic theory, and the relevant econometric theory needed to apply that theory to data that is readily available. Students will be expected to read a broad selection of published papers, learn about recent advances in both theory and econometrics, and start writing their own macroeconomic research. Students will be graded through coursework and tests, as well as on their research.

Environmental economics 825 (EKN 825)

Module credits	10.00
NQF Level	09

Prerequisites	Only for students registered for the following programmes: MCom (Economics), MCom (Econometrics), MPhil (Economics) or PhD Economics
Language of tuition	Module is presented in English
Department	Economics
Period of presentation	Year

Health economics 864 (EKN 864)

Module credits	10.00
NQF Level	09
Prerequisites	Only for students registered for the following programmes: MCom (Economics), MCom (Econometrics), MPhil (Economics) or PhD Economics
Contact time	1 lecture per week
Language of tuition	Module is presented in English
Department	Economics
Period of presentation	Semester 1

Module content

EKN 864 is dedicated to health economics. The course will examine Grossman's model of health capital, markets for health insurance, physician-patient agency problems. We will also examine a number of issues related to access to care, quality of care, financing and health inequality.

Financial economics 865 (EKN 865)

Module credits	10.00
NQF Level	09
Prerequisites	Only for students registered for the following programmes: MCom (Economics), MCom (Econometrics), MPhil (Economics) or PhD Economics
Contact time	1 lecture per week
Language of tuition	Module is presented in English
Department	Economics
Period of presentation	Semester 1

Module content

EKN 865 is dedicated to financial economics, which includes models of pricing in markets for financial instruments, as well as imperfect information in financial markets, financial contracts, and the relationship between preferences and financial decisions.

Econometrics 814 (EKT 814)

Module credits	10.00
NQF Level	09

Prerequisites	Only for students in relevant programme
Contact time	1 lecture and/or practical per week
Language of tuition	Module is presented in English
Department	Economics
Period of presentation	Semester 1 or Semester 2

Module content

In this module, "panel data" refers to the pooling of observations on a cross-section of countries, households, firms, etc. over a number of time periods. We use panel data techniques for example to control for individual heterogeneity or to study the dynamics of adjustment. Panel data allows for more informative results, more variability, more degrees of freedom and more efficiency. This module focuses on statistical theory and empirical estimation, interpretation and evaluation of economic relationships, within a panel data context. The module covers both techniques applicable to stationary and non-stationary panel data sets, and begins with an introduction to one-way error component models (either including individual-specific or period-specific (time) effects), followed by two-way error component models (including individual-specific and time effects simultaneously). Estimation techniques include fixed effects (LSDV or "Within" estimation) and random effects estimation. Hypothesis testing includes tests for poolability (pooled vs. individual regressions), tests for fixed effects, random effects, and specification (exogeneity of the X-regressors). It also includes various tests for serial correlation and heteroscedasticity and the correction thereof. The section on stationary panel data techniques concludes with a discussion of seemingly unrelated regression (SUR) models. In the non-stationary panel data section we discuss unit root testing in the panel context, estimation of non-stationary panels and tests for co integration.

Econometrics 815 (EKT 815)

Module credits	10.00
NQF Level	09
Prerequisites	EKT 813 and only for students registered for the following programmes: MCom (Economics), MCom (Econometrics), MPhil (Economics) or PhD Economics
Contact time	2 lectures per week
Language of tuition	Module is presented in English
Department	Economics
Period of presentation	Semester 1

Module content

EKT 815 is an econometrics module focused on time-series econometrics, which includes topics, such as stationarity, cointegration, nonlinear modelling, VARs and other topics according to the choice of the lecturer.

Economic development 880 (EOG 880)

Module credits	10.00
NQF Level	09
Prerequisites	Only for students in relevant programme

Language of tuition	Module is presented in English
Department	Economics
Period of presentation	Semester 1 or Semester 2

Public economics 880 (OWE 880)

Module credits	10.00
NQF Level	09
Prerequisites	OWE 780 and only for students registered for the following programmes: MCom (Economics), MCom (Econometrics), MPhil (Economics) or PhD Economics
Contact time	1 other contact session per week, 2 discussion classes per week
Language of tuition	Module is presented in English
Department	Economics
Period of presentation	Semester 2

The information published here is subject to change and may be amended after the publication of this information. The General Regulations (G Regulations) apply to all faculties of the University of Pretoria. It is expected of students to familiarise themselves well with these regulations as well as with the information contained in the General Rules section. Ignorance concerning these regulations and rules will not be accepted as an excuse for any transgression.