# **School of Economics & Finance**

# **Important Degree Information:**

#### **B.Sc./M.A.** Honours

The general requirements are 480 credits over a period of normally 4 years (and not more than 5 years) or part-time equivalent; the final two years being an approved Honours programme of 240 credits, of which 90 credits are at 4000 level and at least a further 120 credits at 3000 and/or 4000 levels. Refer to the appropriate Faculty regulations for lists of subjects recognised as qualifying towards either a BSc or MA degree.

### B.Sc./M.A. Honours with Integrated Year Abroad

The general requirements are 540 credits over a period of normally 5 years (and not more than 6 years) or part-time equivalent; the final three years being an approved Honours programme of 300 credits, of which 60 credits are gained during the integrated year abroad, 90 credits are at 4000 level and at least a further 120 credits at 3000 and/or 4000 levels. Refer to the appropriate Faculty regulations for lists of subjects recognised as qualifying towards either a BSc or MA degree.

**Other Information:** In the case of students who spend part of the Honours programme abroad on a recognised Exchange Scheme, the Programme Requirements will be amended to take into account courses taken while abroad.

Degree Programmes	Programme Requirements at:
(M.A. Honours or B.Sc. Honours): Applied Economics Degree	Single Honours Applied Economics Degrees: Level 1: At least 40 credits in 1000-level EC modules.
	Please note: A pass in EC1001 is a prerequisite for enrolment in EC2002, EC2003 and EC2004. A pass in EC1002 is a prerequisite for enrolment in EC2001.
	<b>Level 2:</b> At least 60 credits comprising passes in EC2001, EC2002, EC2003 and EC2004 with passes at 11 or better in both EC2001 and EC2002 (students who have passed MT2004 or MT1007 may be exempted from the requirement to pass EC2003 at the discretion of the Head of School; students who have passed MT1001 or MT1002 may be exempted from the requirement to pass EC2004 at the discretion of the Head of School)
	Level 3: 75 credits comprising EC3201, EC3202 and EC3203
	<b>Level 4:</b> at least 135 credits including EC4205 (30 credits) and at least 105 credits from EC4203, EC4302 or EC4303, EC4501 - EC4509, EC4511-EC4590 and from selected MN and IR modules approved by the Head of School.

Degree Programmes	Programme Requirements at:
(M.Sci. Honours):	Single Honours M.Sci. Applied Quantitative Finance Degree:
Applied Quantitative Finance	Level 1: At least 20 credits including MT1002
	<b>Level 2:</b> At least 100 credits including EC2001, EC2002, MT2001 (at grade 15 or better) and MT2004.
	Level 3: At least 75 credits including EC3201, MT3504, MT3607 and MT3703.
	Level 4: At least 45 credits including EC4501, EC4502 and MT4551.
	<b>Level 5:</b> At least 150 credits including EC5301, EC5399, EC5703, EC5704, EC5705 and MT5812.
	The programme must also include at least 90 additional credits provided by the Schools of Economics & Finance and Mathematics & Statistics. Grades of 11 or more are normally required in EC2001 and EC2002 before a student may take any of the level 3, 4 or 5 modules provided by the School of Economics & Finance (modules with the prefix EC). Exceptions can only be made by the Head of the School of Economics & Finance. Students are also normally expected to take at least 150 credits at the 5000 level and at least an additional 180 credits from the 3000 and 4000 levels.
(M.A. Honours or B.Sc. Honours):	Single Honours Economics Degrees:
Economics Degree	Level 1: At least 40 credits in 1000-level EC modules.
	Please note: A pass in EC1001 is a prerequisite for enrolment in EC2002, EC2003 and EC2004. A pass in EC1002 is a prerequisite for enrolment in EC2001.
	<b>Level 2:</b> At least 60 credits comprising passes in EC2001, EC2002, EC2003 and EC2004 with passes at 11 or better in both EC2001 and EC2002 (students who have passed MT2004 or MT1007 may be exempted from the requirement to pass EC2003 at the discretion of the Head of School; students who have passed MT1001 or MT1002 may be exempted from the requirement to pass EC2004 at the discretion of the Head of School)
	Level 3: 75 credits comprising EC3201, EC3202 and EC3203;
	<b>Level 4:</b> 165 credits including EC4201, EC4202 and EC4203 (75 credits) and 90 credits from EC4204, either EC4300 or EC4301, EC4501-EC4590
(M.A. Honours or B.Sc. Honours ):	Single Honours Financial Economics Degrees:
Financial Economics Degree	Level 1: At least 40 credits in 1000-level EC modules.
	Please note: A pass in EC1001 is a prerequisite for enrolment in EC2002, EC2003 and EC2004. A pass in EC1002 is a prerequisite for enrolment in EC2001.
	<b>Level 2:</b> At least 60 credits comprising passes in EC2001, EC2002, EC2003 and EC2004 with passes at 11 or better in both EC2001 and EC2002 (students who have passed MT2004 or MT1007 may be exempted from the requirement to pass EC2003 at the discretion of the Head of School; students who have passed MT1001 or MT1002 may be exempted from the requirement to pass EC2004 at the discretion of the Head of School)
	Level 3: 75 credits comprising EC3201, EC3202 and EC3203
	<b>Level 4:</b> 165 credits including EC4201, EC4202, EC4204, EC4501, EC4502 (105 credits) and 60 credits from EC4203, either EC4300 or EC4301, EC4501-EC4590

Degree Programmes	Programme Requirements at:
(B.Sc. Honours): Economics and Biology, Computer	Economics element of Joint Honours Degrees: Level 1: At least 40 credits in 1000-level EC modules.
Science, Environmental Geoscience, Geoscience, Internet Computer Science, Management, Management Science, Mathematics, Psychology,	Please note: A pass in EC1001 is a prerequisite for enrolment in EC2002, EC2003 and EC2004. A pass in EC1002 is a prerequisite for enrolment in EC2001.
Statistics.  (M.A. Honours): Economics and Ancient History, Arabic, Biblical Studies, English, Film Studies, Geography, German^, International Relations, Italian^,	<b>Level 2:</b> At least 60 credits comprising passes in EC2001, EC2002, EC2003 and EC2004 with passes at 11 or better in both EC2001 and EC2002 (students who have passed MT2004 or MT1007 may be exempted from the requirement to pass EC2003 at the discretion of the Head of School; students who have passed MT1001 or MT1002 may be exempted from the requirement to pass EC2004 at the discretion of the Head of School)
Management, Mathematics, Mediaeval History, Middle East	Level 3: 75 credits comprising EC3201, EC3202 and EC3203
Studies, Modern History,	<b>Level 4:</b> at least 45 credits from EC4201-EC4204, EC4302, EC4501-EC4590
Philosophy, Psychology, Russian^, Social Anthropology, Spanish^, Statistics.	<b>Other information:</b> In total (between the two Schools) 240 credits are required at 3000 level and 4000 level of which at least 90 credits must be achieved at 4000 level.
^ available also as 'With Integrated Year Abroad Degrees'	<b>Note:</b> This programme will not provide sufficient Psychology credits for BPS recognition.
(B.Sc. Honours): Economics with French^	Economics element of Major Degree Programmes: Level 1: At least 40 credits in 1000-level EC modules.
(Not available to entrants after 2008-09)	Please note: A pass in EC1001 is a prerequisite for enrolment in EC2002, EC2003 and EC2004. A pass in EC1002 is a prerequisite for enrolment in EC2001.
(M.A. Honours):	<b>Level 2:</b> At least 60 credits comprising passes in EC2001, EC2002, EC2003 and EC2004 with passes at 11 or better in both EC2001 and EC2002 (students who have passed MT2004 or MT1007 may be exempted from the requirement
Economics with German^, Russian^, Social Anthropology, or Spanish^	to pass EC2003 at the discretion of the Head of School; students who have passed MT1001 or MT1002 may be exempted from the requirement to pass EC2004 at the discretion of the Head of School)
	Level 3: 75 credits comprising EC3201, EC3202 and EC3203
^ available also as 'With Integrated Year Abroad Degrees'	<b>Level 4:</b> at least a further 75 credits including EC4203 (30 credits) and at least 45 credits from EC4201-EC4202, EC4204, EC4300–EC4301, EC4501-EC4590
	<b>Other information:</b> In total (between the two Schools) 240 credits are required at 3000 level and 4000 level of which at least 90 credits must be achieved at 4000 level.

Degree Programmes	Programme Requirements at:
(M.A. Honours):  Modern Languages with	Economics element of Minor Degree Programmes; Level 1: At least 40 credits in 1000-level EC modules.
Economics^  This programme is not available to entrants after 2005-06.	Please note: A pass in EC1001 is a prerequisite for enrolment in EC2002, EC2003 and EC2004. A pass in EC1002 is a prerequisite for enrolment in EC2001.
^ available also as 'With Integrated Year Abroad Degrees'	<b>Level 2:</b> At least 60 credits comprising passes in EC2001, EC2002, EC2003 and EC2004 with passes at 11 or better in both EC2001 and EC2002 (students who have passed MT1007 may be exempted from the requirement to pass EC2003 at the discretion of the Head of School; students who have passed MT1001 or MT1002 may be exempted from the requirement to pass EC2004 at the discretion of the Head of School)
	Level 3: 75 credits comprising EC3201, EC3202 and EC3203
	Level 4: 15 credits from EC4501-EC4590
	<b>Other information:</b> In total (between the two Schools) 240 credits are required at 3000 level and 4000 level of which at least 90 credits must be achieved at 4000 level.

# **Modules**

Normally the prerequisite for each of the following Honours modules is entry to the Honours Programme(s) for which they are specified, as well as any specific prerequisite(s) given.

General degree and non-graduating students wishing to enter 3000-level or 4000-level modules must consult with the relevant Honours Adviser within the School before making their selection.

# **Economics (EC) Modules**

### **EC3201 Advanced Microeconomics**

Credits: 30 Semester: 1

Description: The module is designed to provide an advanced understanding of selected but central topics in microeconomics. Students will be introduced to a range of formal analytical models that will help develop their understanding of core microeconomic theory. The subjects dealt with are: choice as constrained optimisation in consumer and producer theory, uncertainty, exchange, production and trade, imperfect competition and welfare economics. The module aims to develop a firm mathematical base to the economic theory involved.

Class Hour: 10.00 am Monday, Tuesday and Wednesday
Teaching: Three lectures and a weekly tutorial or laboratory

Assessment: Continuous Assessment = 30%, 3 Hour Examination = 70%

#### EC3202 Econometrics 1: The Classical Linear Regression Model

Credits: 15 Semester: 1

Description: This module introduces the student to the classical linear regression model with an emphasis on applied analysis using computers. The module also develops the student's understanding of the key concepts of statistical analysis and their application in economics. The skills that the student will acquire include the ability to estimate, interpret and test economic relationships and to use equations to make forecasts. These are essential components of the toolkit of a trained economist and are transferable skills in relation to many types of career.

Class Hour: 10.00 am Thursday and Friday.

Teaching: Two lectures and a weekly tutorial or laboratory

Assessment: Continuous Assessment = 40%, Report = 50%, Presentation = 10%

#### **EC3203 Advanced Macroeconomics**

Credits: 30 Semester: 2

Description: The module is designed to provide an advanced understanding of monetary theory and macroeconomics. Students will be introduced to a range of formal analytical models that will help develop their understanding of key macroeconomic and monetary relationships. Topics may include: models of growth, real business cycle theory, models of the demand for money and the supply of money, formal AD/AS models with rational expectations, models of the determination of the exchange rate, the issue of time inconsistency in monetary policy and New Keynesian macroeconomics.

Class Hour: 10.00 am Monday, Tuesday and Wednesday.

Teaching: Three lectures and one tutorial or laboratory

Assessment: Continuous Assessment = 30%, 3 Hour Examination = 70%

# EC4201 Economic Analysis

Credits: 30 Semester: 1

Availability: Available only to students in the second year of the Honours Programme.

Description: The module is designed to provide an advanced understanding of current economic theory, covering both macroeconomics and microeconomics. The macroeconomic content of the module will include models of the microfoundations of money; aspects of economic growth, such as the Ramsey model, the Diamond model and the question of endogenous growth; and a range of issues on unemployment. The microeconomic content of the module will cover the role which information plays in markets with particular attention placed on the inefficiencies arising from asymmetric information as well as concepts and applications of game theory in economics and social science.

Class Hour: 10.00 am Monday, Tuesday and Wednesday.

Teaching: Three lectures and a weekly tutorial or laboratory

Assessment: Continuous Assessment = 30%, 3 Hour Examination = 70%

# EC4202 Econometrics 2

Credits: 15 Semester: 1

Prerequisite: EC3202

Description: The module seeks to equip students with advanced skills in data analysis using both time series and cross-section econometric techniques. These skills include the ability to explain and interpret simultaneous equation models, limited dependent variable models and the properties of stationary and non-stationary variables. The module builds upon the knowledge of the classical linear regression model acquired in EC3202.

Class Hour: 10.00 am Thursday and Friday.

Teaching: Two lectures and a fortnightly tutorial

Assessment: Continuous Assessment = 30%, 2 Hour Examination = 70%

#### **EC4203 Contemporary Issues**

Credits: 30 Semester: 2

Prerequisites: EC3201 and EC3203

Description: The module is designed to show students how to use economic analysis to understand a range of contemporary economic policy issues. It will cover a range of topics such as privatisation, regulation, the economics of the European Community, central bank independence, European monetary union, foreign exchange markets, the economics of global warming and carbon taxes. The exact list of topics will vary between years.

Class Hour: 10.00 am Thursday and Friday.

Teaching: Two lectures and occasional seminars

Assessment: Continuous Assessment = 40%, 3 Hour Examination = 60%

# **EC4204 Financial Economic Theory**

Credits: 30 Semester: 2

Prerequisites: EC4501, EC4502, EC4201, EC4202

Description: This module is an introduction to the theoretical development of asset pricing models. Whereas EC4501 and EC4502 emphasise the solution of small case-studylike financial problems via the application of the standard CAPM pricing model, in EC4204 we derive the CAPM model from its foundations and study its theory in detail. The theoretical implications of pricing models for evaluating portfolio performance are also studied in depth. There is also extensive coverage of the theoretical foundations of option pricing. The binomial approach and its extensions to multinomial option pricing and, ultimately, the derivation of the Black-Scholes formula are studied.

Class Hour: To be arranged.

Teaching: Three lectures and a seminar

Assessment: Continuous Assessment = 30%, 3 Hour Examination = 70%

### **EC4205 Economic Policy**

Credits: 30 Semester: 1

Prerequisites: Available only to students in the second year of the Applied Economics Honours

Programme

Description: The module will study a range of contemporary topics in economic policy. It will introduce students to analyses of the choices confronting policy makers. The subject matter will range from the study of how individual markets can and should work to the broadest interactions in the world economy. The module will draw heavily on contemporary studies published by policy think tanks such as the CEPR, IFS, PSI and IPPR. Because the policy agenda is continually changing, the actual topics covered in the module will vary from year to year. Examples of topics that might be covered would be public/private partnerships, pension reform, the funding of higher education, competition policy, regulation, trade policy, technology policy and the economic issues of EU enlargement.

Class Hour: To be arranged.

Teaching: Two lectures and a seminar

Assessment: Continuous Assessment = 40%, 3 Hour Examination = 60%

#### EC4300 Dissertation in Economics

Credits: 30 Semester: Whole Year

Prerequisites: Available only to students in the second year of the Single Honours Economics or Single

Honours Financial Economics Programmes.

Anti-requisite: EC4301

Description: This module is designed to develop students' independent research, writing and presentation skills and to enable them to apply economic and/or statistical and econometric analysis to a selected topic in economics. The dissertation must be on a topic in economics and a preliminary outline of it should have been approved within the first two weeks of the semester by the Director of Teaching and by the proposed dissertation supervisor. The maximum number of words allowed is 15,000 but students will be advised to cover the topic in around 10,000 words.

Class Hour: None, but attendance at the School research colloquia required.

Teaching: Three supervision meetings per semester.

Assessment: Continuous Assessment = 15%, Dissertation = 85%

### **EC4301 Group Dissertation**

Credits: 30 Semester: Whole Year

Prerequisites: Available only to students in the second year of the Single Honours Economics or Single

Honours Financial Economics Programmes.

Anti-requisite: EC4300

Description: This module is designed to develop students' research, writing and presentation skills and to enable them to apply economic and/or statistical and econometric analysis to a selected topic in economics, as a part of a research team of 2 or 3 members. The dissertation must be on a topic in economics and a preliminary outline of it should have been approved within the first two weeks of the semester by the Director of Teaching and by the proposed dissertation supervisor. The maximum number of words allowed is 20,000 but students will be advised to cover the topic in around 18,000 words.

Class Hour: None, but attendance at the School research colloquia required.

Teaching: Three supervision meetings per semester.

Assessment: Continuous Assessment = 15%, Dissertation = 85%

### EC4302 Research Project

Credits: 30 Semester: 2

Prerequisites: Available only to students in the second year of the Single Honours Applied Economics

Programmes or of a joint degree involving Economics

Anti-requisite: EC4303

Description: This module is designed to develop students' independent research, writing and presentation skills and to enable them to apply economic and quantitative analysis to a selected topic in economics. The project must be on a topic in economics chosen from a list collated by the Director of Teaching or on a topic approved by him/her. The maximum number of words allowed is 10,000 but students will be advised to cover the topic in around 8,000 words.

Class Hour: None, but attendance at the School research colloquia required.

Teaching: Three supervision meetings per semester.

Assessment: Continuous Assessment = 15%, Dissertation = 85%

### EC4303 Group Research Project

Credits: 30 Semester: 2

Prerequisites: Available only to students in the second year of the Single Honours Applied Economics

Programmes or of a joint degree involving Economics

Anti-requisite: EC4302

Description: This module is designed to develop students' research, writing and presentation skills and to enable them to apply economic and quantitative analysis to a selected topic in economics, as a part of a research team of 2 or 3 members. The project must be on a topic in economics chosen from a list collated by the Director of Teaching or on a topic approved by him/her. The maximum number of words allowed is 15,000 but students will be advised to cover the topic in around 12,000.

Class Hour: None, but attendance at the School research colloquia required.

Teaching: Three supervision meetings per semester.

Assessment: Continuous Assessment = 15%, Dissertation = 85%

#### **EC4501 Capital Investment Analysis**

Credits: 15 Semester: 1

Description: This module introduces the basic concepts of investment value analysis. The ultimate aim is to provide the student with a standard approach to define, measure and predict the value of investments in a world of uncertainty. The standard notion of risk versus return is defined and analytical economic models of how risks and returns are determined and traded in financial markets are applied to solve investment analysis problems. The usual valuation problems covered in this module involve corporate investments, a wide array of corporate liabilities such as shares and bonds and associated financial contracts such as options.

Class Hour: To be arranged

Teaching: Two lectures per week and occasional seminars

Assessment: Continuous Assessment = 40%, 2 Hour Examination = 60%

# **EC4502 Corporate Finance**

Credits: 15 Semester: 2

Prerequisites: EC4501

Description: In this module we investigate the problem of how a collection of corporate liabilities is affected in value by corporate actions. Possible actions include corporate investment decisions, decisions regarding the firm's financial structure, changes in management rules and compensation and changes in the scope, specialisation and legal environment of the corporation's business. As in the prerequisite module, EC4501, we emphasise standard methods for solving problems under economic uncertainty. At the end of this module the student will have a good working knowledge of institutions and the theory and valuation methods used worldwide in major corporations and financial institutions.

Class Hour: To be arranged

Teaching: Two lectures per week and occasional seminars

Assessment: Continuous Assessment = 40%, 2 Hour Examination = 60%

# **EC4503** The Economics of Innovation

Credits: 15 Semester: 2

Availability: 2009-10

Description: Innovation is both a major contributory factor in economic growth and a crucial element of competitive behaviour and policy. The aim of this module is to introduce students to recent developments in the economic theory of innovation. The module, which is analytical in nature, examines the incentives firms have to innovate by the introduction of new products and new processes and, in particular, how this is affected by strategic competitive conditions.

Class Hour: To be arranged
Teaching: Two lectures

Assessment: Continuous Assessment = 40%, 2 Hour Examination = 60%

#### EC4504 Economics of Social Life

Credits: 15 Semester: 1

Availability: 2009-10

Description: This module considers the application of microeconomic theory to various aspects of non-market social activity not generally considered to be economic in character. Much of the course focuses on the household production model introduced by Gary Becker, and its various applications to marriage, divorce, sleep, fertility, addiction and religion. In addition, there will be some consideration of the economics of courtship, sex, cohabitation, illegitimate births, altruism and gift giving.

Class Hour: To be arranged Teaching: Two lectures

Assessment: Continuous Assessment = 40%, 2 Hour Examination = 60%

### **EC4505 Environmental Economics**

Credits: 15 Semester: 1

Availability: 2010-11

Description: The aim of this module is to introduce basic ideas and methods of environmental economics and policy building on a knowledge of economics. The background and current state of global warming is related to international efforts to control the problem and the activities of energy lobbies. A variety of economic, environmental and public policy considerations will be discussed including international trade, tropical deforestation, urban transport, sustainability of economic development, and the relationship between economic (material) growth, the environment, and human happiness and welfare. Specific problems of developing countries and their relations to the developed world will be studied.

Class Hour: To be arranged Teaching: Two lectures

Assessment: Continuous Assessment = 40%, 2 Hour Examination = 60%

#### **EC4506 Experiments in Economics**

Credits: 15 Semester: 1

Availability: 2009-10

Description: This module deals with aspects of bargaining, negotiation, conflict and choice under uncertainty. It draws heavily on evidence from laboratory experiments on human subjects which aim to test the congruence of game theory and microeconomic theory with observed behaviour. The topics covered will be selected from the following: auctions and bidding behaviour; sunk cost accounting; preference reversal; free riding and public goods; deadline effects and ultimatum games; co-ordination games; the determinants of bargaining behaviour; the subject incentive problem; experimental design and experimental ethics.

Class Hour: To be arranged Teaching: Two lectures

Assessment: Continuous Assessment = 40%, 2 Hour Examination = 60%

#### **EC4508 Industrial Organisation**

Credits: 15 Semester: 1

Availability: 2010-11

Description: This module is an analytical treatment of industrial organisation, providing rigorous coverage of core areas of the subject, supported by both theoretical models and econometric studies. Topics covered are as follows. Models of intra-industry competition, including discussion in game theoretic terms, and their econometric estimation. Other forms of competition, including workable competition and contestability. Natural monopoly analysis covering Ramsey pricing, the Weak Invisible Hand Theorem, and inter-temporal unsustainability. Extensions of organisational analysis of the firm, including managerial, growth, hierarchical, and principal-agent approaches. Financial structure of the firm, and empirical applications to takeovers and mergers.

Class Hour: To be arranged Teaching: Two lectures

Assessment: Continuous Assessment = 40%, 2 Hour Examination = 60%

#### **EC4509 International Finance**

Credits: 15 Semester: 2

Availability: 2010-11

Description: This module provides a comprehensive treatment of selected aspects of international finance. The course makes intensive use of mathematical techniques of exchange rate modelling. The module aims to deepen understanding of the functioning of the international financial system, and to familiarise students with some key issues in the literature of international finance. It has a dual function: to provide an understanding of some international financial policy issues which have figured heavily in recent practical debates, and to consolidate understanding of some basic principles of financial theory.

Class Hour: To be arranged Teaching: Two lectures

Assessment: Continuous Assessment = 40%, 2 Hour Examination = 60%

#### **EC4510 Issues in Economic Policy**

Credits: 15 Semester: 1

Anti-requisite: EC4205

Description: The module will study a range of contemporary topics in economic policy. It will introduce students to analyses of the choices confronting policy makers. The subject matter will range from the study of how individual markets can and should work to the broadest interactions in the world economy. The module will draw heavily on contemporary studies published by policy think tanks such as the CEPR, IFS, CEPA, PSI and IPPR. Because the policy agenda is continually changing, the actual topics covered in the module will vary from year to year. Examples of topics that might be covered would be public/private partnerships, pension reform, the funding of higher education and competition policy, regulation, trade policy, technology policy and the economic issues of EU enlargement.

Class Hour: To be arranged Teaching: Two lectures

Assessment: Continuous Assessment = 40%, 2 Hour Examination = 60%

#### **EC4511 Labour Economics**

Credits: 15 Semester: 2

Availability: 2009-10

Description: Core microeconomics modules provide the basic tools for the understanding of labour economics. This module aims to build upon these foundations, examining in some detail a series of topics of interest within the labour economics field. These include the functioning of labour markets, and how wages, employment and unemployment are determined. In particular, the role of differing institutions across countries and how they influence labour market outcomes will be explored.

Class Hour: To be arranged Teaching: Two lectures

Assessment: Continuous Assessment = 40%, 2 Hour Examination = 60%

#### **EC4512 Law and Economics**

Credits: 15 Semester: 2

Availability: 2010-11

Description: The module is designed to develop an analytical understanding of the economic function of legal principles and procedure, using microeconomic theory. Students analyse property, contract, family, tort and criminal law by the application of economic models and techniques. Topics include the optimal criminal deterrence, property and liability rules of nuisance, optimal breach of contract, and the costs of accidents.

Class Hour: To be arranged Teaching: Two lectures

Assessment: Continuous Assessment = 40%, 2 Hour Examination = 60%

#### EC4513 The Macroeconomics of European Integration

Credits: 15 Semester: 2

Availability: 2009-10

Description: The purpose of the module is to explore the macroeconomic and monetary issues involved in European economic integration. After a historical introduction focused on the question of why the members of the EC/EU have sought exchange rate stability and then monetary union, the module provides a thorough examination of the theory of optimum currency areas, including both traditional and modern approaches, and both theoretical and empirical European-related research. It then investigates the workings of the pre-EMU European monetary arrangements, the European Monetary System. The monetary policy strategy of the ECB will then be considered and the relationship between fiscal and monetary policy and the desirability of stability pact limits on fiscal policy will be examined. Finally, we will examine and evaluate the experience of EMU.

Class Hour: To be arranged Teaching: Two lectures

Assessment: Continuous Assessment = 40%, 2 Hour Examination = 60%

### **EC4514 Monetary Policy**

Credits: 15 Semester: 1

Availability: 2010-11

Description: The module is designed to provide a specialised understanding of monetary policy issues. The lectures cover the aims of monetary policy, the use of alternative monetary policy frameworks, the issue of central bank independence, and current topics such as interest rate smoothing. The last part of the course surveys the experience of major countries with different policy frameworks over the last quarter of a century.

Class Hour: To be arranged Teaching: Two lectures

Assessment: Continuous Assessment = 40%, 2 Hour Examination = 60%

#### **EC4515 Public Finance**

Credits: 15 Semester: 2

Availability: 2010-11

Description: The aim of the module is to apply principally microeconomic reasoning to understand a range of issues in the economics of the public sector. It will examine the growth of government expenditure, the arguments for it and the problems of its management. It will discuss issues such as how much public provision there should be of both private and public goods, the growth of social security and its implications for efficiency and equity, and the problems of coping with an ageing population. Since taxes finance a large part of this spending, the module will look at the pattern of taxation (both nationally and internationally), the effects of tax on the behaviour of economic agents, and the design of a tax system. The module also discusses other topical issues in public finance such as devolution, the regulation of industry and the auctioning of public assets.

Class Hour: To be arranged Teaching: Two lectures

Assessment: Continuous Assessment = 40%, 2 Hour Examination = 60%

# **EC4517 Small Business Economics**

Credits: 15 Semester: 2

Availability: 2010-11

Description: The module will provide students with a detailed understanding of the small firm as a distinct enterprise form. The approach combines theory, evidence and policy. Under theory, the course considers rational bases for small-firm formation, attitude to risk, distribution of entrepreneurial ability, and division of labour, amongst other topics. Under evidence, the course looks at matters like the size distribution of firms, and empirical models of performance, growth, flexibility and survival. Under policy, the course considers issues like the small-firm sector's importance for employment, labour market flexibility, entrepreneurship, and innovation. Reference is made to the UK economy in general, and specifically to the Scottish economy, for example, in the context of policies for enterprise stimulation, like business incubation.

Class Hour: To be arranged Teaching: Two lectures

Assessment: Continuous Assessment = 40%, 2 Hour Examination = 60%

#### EC4522 International Trade and Globalisation

Credits: 15 Semester: 2

Prerequisite: EC4201

Description: This module is designed to place the modern debate on international trade and globalisation in theoretical and historical context. First, it will develop, at an advanced level, the key modern theories of the costs and benefits of free international trade. Second, it will review the key empirical tests of these theories. Third, the module will analyse the historical context within which these theories developed, and will examine, in some detail, the last great era of increasing globalisation (roughly speaking, up until the First World War). Finally, the module will address the key policy implications of the globalisation debate.

Class Hour: To be arranged Teaching: Two lectures

Assessment: Continuous Assessment = 40%, 2 Hour Examination = 60%

### EC5301 AQF Third year Project

Credits: 30 Semester: Whole Year

Availability: 2010-11
Prerequisite: EC4501
Co-requisites: MT4551

Description: This module is mainly intended for the proposed four year Master's programme in Applied Quantitative Finance but can be taken up by any interested students satisfying the pre- and co-requisites. Students will take part in a motivated trading game which is set up by an academic staff member. Students will build groups and each group will be given a 'hypothetical endowment' which it can use to by 'hypothetical' shares of stocks, futures, options and other derivatives which are listed at the London Stock Exchange. Students need to actively manage their portfolio and one objective is to achieve a maximum portfolio value at the end of the module. However, students need to motivate their investment decision by referring to theoretical concepts such as the Capital Asset Pricing Model, Black-Scholes formula, Value at Risk etc. During the trading game students have to write three reports, which need to reflect this.

Class Hour: To be arranged

Teaching: Lectures

Assessment: Continuous Assessment = 100%

# EC5399 Dissertation in Applied Quantitative Finance

Credits: 40 Semester: Whole Year

Availability: 2011-12

Description: This module is designed to develop students' independent research, writing and presentation skills and to enable them to apply financial, economic, mathematical and/or statistical/econometric analysis to a selected topic in Quantitative Finance. The dissertation must be on a topic in Quantitative Finance and a preliminary outline of it should have been approved within the first two weeks of Martinmas semester by the Director of Teaching and by the proposed dissertation supervisor. The maximum number of words allowed is 20,000 but students will be advised to cover the topic in around 15,000. Dissertations have to be written individually.

Teaching: Individual Supervision

Assessment: Dissertation = 85%, 15 Minute Examination = 15%

#### MT5812 Global Capital Markets - Structured Derivatives, Analytics and Applications

Credits: 20 Semester: Either

Availability: 20010-11
Prerequisite: MT4551
Co-requisites: EC5705

Description: The Global Capital Markets divisions of Investment Banks are now a significant employer of highly numerate graduates who have a rigorous training in both Economics and Mathematics. This module will provide a practical introduction to the theory and applications of the various different types of structured derivatives that currently exist across all the asset classes that constitute Capital Markets. Detailed examples of both the applications as well as the dynamics, valuation and risk-management of 'vanilla' and 'exotic' Interest Rate, Equity, Credit, FXC and Commodity structured derivatives will be discussed and analysed.

The focus will be practical and there will be a bias towards developing a strong intuition through discussing and analyzing such questions as 'Why do structured derivatives exist?', 'Who are the participants (e.g. Asset Managers, Pension Funds, Hedge Funds, etc) in this market?', 'How are these structured derivatives valued, risk-managed and traded?', 'What types of models are used in their valuation?'. 'What assumptions underlie the models and when do the assumptions break down?' to finally 'How do Banks make money from structured derivatives?' and 'How are the models actually used on the trading desks of Investment Banks?'

Class Hour: To be arranged

Teaching: Two lectures and one tutorial

Assessment: Continuous Assessment = 60%, Two hour Examination = 40%