

# **Programme Specification**

# Finance and Econometrics (2018-19)

This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if s/he takes full advantage of the learning opportunities that are provided.

**Awarding Institution** University of Southampton

Teaching Institution University of Southampton

Mode of Study Full-time

Duration in years 1

Accreditation details None

Final award Master of Science in the Social Sciences (MSc SocSci)

Name of award Finance and Econometrics Interim Exit awards Postgraduate Certificate

Postgraduate Diploma

FHEQ level of final award Level 7

UCAS code

Programme code 6185

external reference

QAA Subject Benchmark or other Economics 2015, Master's Degree Characteristics 2010

Programme Lead Antonella Ianni (ianni)

# **Programme Overview**

## Brief outline of the programme

The MSc Finance and Econometrics offers students a rigorous training in econometrics and provides the broad knowledge and training needed to operate as Finance specialists for the corporate, banking, fund management or government sectors, as well as further career in academia. It is designed for students with a particular interest in the more quantitative aspects of the subject and is one of the few programmes in the UK to offer specialist training in advanced econometric techniques and their application to Finance.

The full time programme lasts 12 months, with two semesters of taught modules between October and June, followed by three months of research and preparation of Master's dissertation, to be completed by the end of September. Students can expect to enjoy predominantly small-group teaching and a considerable degree of individual attention from members of staff, and they are strongly encouraged to attend our seminars and research workshops. Equally importantly, the Department offers superb facilities for accessing real time and historical financial data and news through a state of the art Bloomberg trading suite.

Your contact hours will vary depending on your module/option choices. Full information about contact hours is provided in individual module profiles.

### Learning and teaching

- · Modules are taught using a variety of methods, including lectures, seminars, group or project work
- Each module will involve one or two sessions each week spread over the semester. For each module, students will be expected to write essays, make presentations and contribute to seminar discussions
- Lectures offer an overview of a topic, an explanation of difficult concepts or a discussion of key issues. Lectures presume a certain amount of additional reading, so it is often a good idea to read references before attending the corresponding lecture
- Seminars provide a forum for a closer examination of particular aspects of each module and are an important part of the learning process. Usually it is only by discussing and questioning aspects of a subject that their full implications can be understood. Students prepare papers and lead discussions or debates, and so develop their written and presentational skills
- A particular feature of the learning environment in the Economics Department is its research-led teaching. Academic staff research in areas of important contemporary significance and bring to their teaching modules their experience of working in the wider world
- The increasing use of web-based, video-based and computer-lab teaching methods demonstrates our commitment to the effective use of available equipment and resources

#### Assessment

Some modules are assessed by coursework, others by exams and some by a mix of these methods. Exams are held at the end of each semester.

# Special Features of the programme

- $\cdot$  This programme offers a combination of rigorous training in econometrics and training needed to operate as Finance specialists.
- This programme is a part of the cognate group of Masters Programmes including also MSc Economics, MSc Economics and Economics, MSc Finance and Economics. Students may transfer to any programme within first weeks of Semester 1, subject to approval. The Department of Economics will provide advice and approve requests, following the results of the ECON6001 Preliminary Mathematics and Statistics and a further discussion with student's academic tutor.
- $\cdot$  This programme offers access to Bloomberg terminals and DataStream as a part of standalone training, teaching of Finance, and research associated with MSc Dissertations.

**Please note:** As a research-led University, we undertake a continuous review of our programmes to ensure quality enhancement and to manage our resources. As a result, this programme may be revised during a student's period of registration; however, any revision will be balanced against the requirement that the student should receive the educational service expected. Please read our <u>Disclaimer</u> to see why, when and how changes may be made to a student's programme.

Programmes and major changes to programmes are approved through the University's <u>programme validation process</u> which is described in the University's <u>Quality handbook</u>.

## **Educational Aims of the Programme**

The aims of the programme are to:

- · A rigorous understanding of the theoretical foundations of economic and financial analysis;
- The ability to formulate, manipulate and draw conclusions from an economic model;
- The ability to apply economic and financial analysis in the context of financial markets;
- The ability to interpret and critically evaluate economic ideas and research findings;

- The knowledge of recent developments in econometric techniques and their application to the analysis of economic and financial data;
- The ability to test and evaluate economic models using a variety of research methodologies, data and techniques of analysis;
- · In-depth knowledge of the operation of financial markets;
- The ability to design, implement and manage independent research in finance and economics;
- · The ability to present ideas, arguments and research findings effectively.

# **Programme Learning Outcomes**

## **Knowledge and Understanding**

On successful completion of this programme you will have knowledge and understanding of:

- A1. Mathematical and statistical tools for economic analysis;
- A2. The theoretical foundations of microeconomics and finance:
- A3. The process of model formulation, analysis and validation in economic theory;
- A4. The application of economic and financial theory and reasoning to a range of topics, including the analysis of financial markets;
- A5. Qualitative and quantitative economic and financial data, and the appropriate methods for structuring and analysing such data;
- A6. The statistical foundations of econometric methods;
- A7. Quantitative Techniques widely used in the finance and investment industry and recent developments in econometric inference and their application to economic and financial data;
- A8. Alternative approaches to quantitative modelling in economics;
- A9. Theoretical and empirical developments at the research frontiers in two specialised areas of the subject.

#### **Teaching and Learning Methods**

Lectures, seminars, problem classes and independent research. For example, lectures will achieve A1-A4, A6 and A8; seminars and problem classes will achieve A3-A5, independent research will achieve A7 and A9

#### **Assessment Methods**

Written examinations, problem sets, project-based coursework and Master's dissertation. For example, examinations will assess A1-A4, A6 and A8; problem sets will assess A3-A5, project-based coursework and Master's dissertation will assess A7 and A9

#### Subject Specific Intellectual and Research Skills

On successful completion of this programme you will be able to:

- B1. The ability to abstract the essential features of complex data and to formalise and construct a model for the critical analysis and evaluation of a theoretical model, of its application and of its policy implications;
- B2. A critical understanding of the application of inductive reasoning to assumption-based models;
- B3. Ability to use quantitative methods to evaluate investment strategies and understand patterns observed in financial data; the ability to empirically validate economic and financial models through a process of estimation and testing, using a range of statistical methods applied to a variety of economic and financial data;
- B4. The ability to evaluate the applicability of a range of research methodologies used to conduct research in economics and finance:
- B5. The ability to formulate research questions in economics, finance and/or econometrics and translate these into appropriate research designs.

## **Teaching and Learning Methods**

Lectures, seminars, problem classes and independent research

#### **Assessment Methods**

Written examinations, problem sets, project-based coursework and Master's dissertation

### Transferable and Generic Skills

On successful completion of this programme you will be able to:

- C1. Communicate complex economic arguments in both written and oral form;
- C2. Make effective use of a range of ICT including the Internet, word-processing, databases and spreadsheets;
- C3. Identify, select and access a range of sources of printed, electronic and other material as means to the development and presentation of arguments and evidence;
- C4. Demonstrate awareness and understanding of the ethical and legal issues associated with the conduct of research in the social sciences;
- C5. Design, implement and manage a piece of research.

Seminars, problem classes and independent research

#### **Assessment Methods**

Project-based coursework and Master's dissertation. For example, the design, implementation and management of a piece of research (C5) form the central part of the successful completion of the dissertation.

## **Subject Specific Practical Skills**

On successful completion of this programme you will be able to:

- D1. The ability to make informed judgements on the design and effective implementation of policies to address a range of economic problems;
- D2. An extensive knowledge of the principal sources of economic information and data;
- D3. Mastery of a range of statistical software for the organisation, presentation and analysis of economic and financial data.
- D4. Use financial databases such as Bloomberg and DataStream

## **Programme Structure**

The programme structure table is below:

Information about pre and co-requisites is included in individual module profiles.

#### Part I

Typical programme content

The programme is studied over 12 months full-time. The taught component 60 ECTS (120 CATS) is spread over two semesters. All semester one modules and some semester two modules are core or compulsory, the remaining are optional. The taught part of the programme is followed by a three-month period of supervised research for a Master's

dissertation on the topic of their own choice to be submitted in September, 30 ECTS (60 CATS).

#### Programme details

The structure of the programme and the modules currently offered are set out below. Of the modules shown against each year of your programme, some are compulsory (i.e. enrolment is automatic) and others are optional. Against each year, students are directed to which modules are compulsory and which are optional. The optional modules listed constitute an indicative list. There will always be choice but the options might vary between years. A list of optional modules will be available to you via the Student Record Self-Service system once you enrol at the University.

In addition to the modules listed below, students will be required to participate in Software Lab sessions and Research Skills Workshops organised by the Department and designed to develop their skills in designing, implementing and managing independent research in economics. These are complemented by a series of faculty workshops in generic research skills for the social sciences including bibliographic skills, ethical issues in social research, writing and dissemination skills, personal and career development. The material covered in these workshops is assessed through the Master's dissertation.

Option modules will be chosen during Semester 1, with advice from the programme team. The modules which will run will be based on student demand.

#### Part I Compulsory

Code	Module Title	ECTS	Туре
ECON6040	Panel Data and Microeconometrics 2018-19	5	Compulsory
ECON6001	Preliminary Mathematics and Statistics 2018-19		Compulsory
ECON6044	Principles of Corporate Finance 2018-19	5	Compulsory
ECON6041	Time Series Econometrics 2018-19	5	Compulsory

## Part I Core

Code	Module Title	ECTS	Туре
ECON6006	Economic Analysis 2018-19	10	Core
ECON6029	Financial Economics and Asset Pricing 2018-19	10	Core
ECON6004	Quantitative Methods 2018-19	10	Core

### Part I Optional

Code	Module Title	ECTS	Туре
ECON6043	Financial Econometrics 2018-19	5	Optional

ECON6042	Financial Derivatives 2018-19	5	Optional	
ECON6038	Health Policy and Economics 2018-19	5	Optional	
ECON6008	Industrial Economics 2018-19	5	Optional	
ECON6016	International Trade 2018-19	5	Optional	
ECON6007	Labour Economics 2018-19	5	Optional	

#### Part II

#### Part II Core

Code	Module Title	ECTS	Туре
ECON6020	Dissertation 2019-20	30	Core

#### **Progression Requirements**

The programme will follow the University's regulations for <u>Progression, Determination and</u> <u>Classification of Results: Undergraduate and Integrated Masters Programmes</u> or the University's regulations for <u>Progression, Determination and Classification of Results: Standalone Masters</u> <u>Programmes</u> as set out in the General Academic Regulations in the University Calendar: <a href="http://www.calendar.soton.ac.uk/sectionly/sectly-index.html">http://www.calendar.soton.ac.uk/sectionly/sectly-index.html</a>

# Support for student learning

There are facilities and services to support your learning some of which are accessible to students across the University and some of which will be geared more particularly to students in your particular Faculty or discipline area.

## The University provides:

- library resources, including e-books, on-line journals and databases, which are comprehensive and up-todate; together with assistance from Library staff to enable you to make the best use of these resources
- high speed access to online electronic learning resources on the Internet from dedicated PC Workstations onsite and from your own devices; laptops, smartphones and tablet PCs via the Eduroam wireless network. There is a wide range of application software available from the Student Public Workstations.
- computer accounts which will connect you to a number of learning technologies for example, the Blackboard virtual learning environment (which facilitates online learning and access to specific learning resources)
- standard ICT tools such as Email, secure filestore and calendars.
- access to key information through the MySouthampton Student Mobile Portal which delivers timetables, Module information, Locations, Tutor details, Library account, bus timetables etc. while you are on the move.
- IT support through a comprehensive website, telephone and online ticketed support and a dedicated helpdesk in the Hartley Library.

- Enabling Services offering support services and resources via a triage model to access crisis management, mental health support and counselling. Support includes daily Drop In at Highfield campus at 13.00 15.00 (Monday, Wednesday and Friday out of term-time) or via on-line chat on weekdays from 14.00 16.00. Arrangements can also be made for meetings via Skype.
- assessment and support (including specialist IT support) facilities if you have a disability, long term health problem or Specific Learning Difficulty (e.g. dyslexia).
- the Student Services Centre (SSC) to assist you with a range of general enquiries including financial matters, accommodation, exams, graduation, student visas, ID cards
- Career and Employability services, advising on job search, applications, interviews, paid work, volunteering and internship opportunities and getting the most out of your extra-curricular activities alongside your degree programme when writing your CV
- Other support that includes health services (GPs), chaplaincy (for all faiths) and 'out of hours' support for students in Halls and in the local community, (18.00-08.00)
- A Centre for Language Study, providing assistance in the development of English language and study skills for non-native speakers.

### The Students' Union provides

- an academic student representation system, consisting of Course Representatives, Academic Presidents, Faculty Officers and the Vice-President Education; SUSU provides training and support for all these representatives, whose role is to represent students' views to the University.
- opportunities for extracurricular activities and volunteering
- an Advice Centre offering free and confidential advice including support if you need to make an academic appeal
- Support for student peer-to-peer groups, such as Nightline.

#### Associated with your programme you will be able to access:

- Support of module co-ordinators. Module co-ordinators will be available at designated times during the week to discuss issues related to the particular modules you are studying at the time. This will be in addition to class contact time.
- Personal Academic Tutor. As soon as you register on this programme, you will be allocated a Personal Academic Tutor. S/he is a member of the academic team and will be available to discuss general academic issues related to the programme as well as offer advice and support on any personal issues which may affect your studies.
- Module outlines. These will be available at the start of each module (often in online format). The Handbook includes the aims and learning outcomes of the module, the methods of assessment, relevant background material to the module and a session-by-session breakdown of the module together with appropriate reading lists.
- Within the Faculty, administrative support is provided by your Student Office which deals with student records and related issues and with queries related to your specific degree programme.

# Methods for evaluating the quality of teaching and learning

You will have the opportunity to have your say on the quality of the programme in the following ways:

- · Completing student evaluation questionnaires for each module of the programme
- Acting as a student representative on various committees, e.g. Staff: Student Liaison Committees, Faculty Programmes Committee OR providing comments to your student representative to feedback on your behalf.
- Serving as a student representative on Faculty Scrutiny Groups for programme validation
- Taking part in programme validation meetings by joining a panel of students to meet with the Faculty Scrutiny Group

The ways in which the quality of your programme is checked, both inside and outside the University, are:

- · Regular module and programme reports which are monitored by the Faculty
- · Programme validation, normally every five years.
- · External examiners, who produce an annual report
- A national Research Assessment Exercise (our research activity contributes directly to the quality of your learning experience)
- · Institutional Review by the Quality Assurance Agency

Further details on the University's quality assurance processes are given in the Quality Handbook.

# **Career Opportunities**

The programme is designed to equip students with the specialist skills and knowledge necessary to pursue a career at a high level in the financial sector, for example in Research Departments of Investment Banks or in Quantitative Trading, but successful graduates will also be able find work as financial or econometric analysts in public or private sector, including central and local governments and the institutions of the European Union, in statistical offices, central banks, financial supervision authorities, international aid organisations, etc. The programme is designed to equip students to undertake independent research in finance and econometrics, and many graduates stay in academia to pursue a PhD degree. Finally, this programme also forms a solid basis for a career in private sector in management, or in consultancy.

# External Examiner(s) for the programme

Name: Dr Patrick W Marsh - University of Nottingham

Name: Professor Dieter Balkenborg - University of Exter

Name: Dr Panayiotis Pourpourides - University of Cardiff

Students must not contact External Examiner(s) directly, and external examiners have been advised to refer any such communications back to the University. Students should raise any general queries about the assessment and examination process for the programme with their Course Representative, for consideration through Staff: Student Liaison Committee in the first instance, and Student representatives on Staff: Student Liaison Committees will have the opportunity to consider external examiners' reports as part of the University's quality assurance process.

External examiners do not have a direct role in determining results for individual students, and students wishing to discuss their own performance in assessment should contact their Personal Academic Tutor in the first instance.

**Please note:** This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if s/he takes full advantage of the learning opportunities that are provided. More detailed information can be found in the programme handbook.

# **Appendix 1:**

Students are responsible for meeting the cost of essential textbooks, and of producing such essays, assignments, laboratory reports and dissertations as are required to fulfil the academic requirements for each programme of study. In addition to this, students registered for this programme also have to pay for:

#### **Additional Costs**

Туре	Details
Software Licenses	Publicly available software in public workstations and some available via iSolutions, but otherwise purchase.
Hardware	Publicly available workstations and some available via iSolutions, but otherwise purchase.
Stationery	You will be expected to provide your own day-to-day stationery items, e.g. pens, pencils, notebooks, etc.). Any specialist stationery items will be specified under the Additional Costs tab of the relevant module profile.
Textbooks	Where a module specifies core texts these should generally be available on the reserve list in the library. However due to demand, students may prefer to buy their own copies. These can be purchased from any source. Some modules suggest reading texts as optional background reading. The library may hold copies of such texts, or alternatively you may wish to purchase your own copies. Although not essential reading, you may benefit from the additional reading materials for the module.
Approved Calculators	Candidates may use calculators in the examination room only as specified by the University and as permitted by the rubric of individual examination papers. The University approved model is Casio FX-570 This may be purchased from any source and no longer needs to carry the University logo.
Printing and Photocopying Costs	In the majority of cases, coursework such as essays; projects; dissertations is likely to be submitted on line. However, there are some items where it is not possible to submit on line and students will be asked to provide a printed copy. A list of the University printing costs can be found here: http://www.southampton.ac.uk/isolutions/students/printing-forstudents.page

In some cases you'll be able to choose modules (which may have different costs associated with that module) which will change the overall cost of a programme to you. Details of such costs will be listed in the Module Profile. Please also ensure you read the section on additional costs in the University's Fees, Charges and Expenses Regulations in the University Calendar available at www.calendar.soton.ac.uk.