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INTRODUCTION

This Handbook is a ‘Users’ Manual’ for your academic programme. It describes the structure of your programme, what resources are available for students and how to seek help of guidance when you need it. It directs you to the various resources on the Department website (www.ems.bbk.ac.uk) and the College website (www.bbk.ac.uk).

People, and how to reach them..

The Programme Administrator handles all administrative aspects of the Programme, and is usually the first point of contact for students.

Naomi Mintrum n.mintrum@bbk.ac.uk
Room: 720 Malet St
Tel: 020 7631 6429
Fax: 020 7631 6416

The Course Lecturers are in charge of academic issues specific to any lecture course, and first point of contact if you need any clarifications or help with the material covered in lectures. The easiest way to initiate contact with your lecturers is via email. The email address of faculty members is on the Department website, and is of the form: initial.surname@bbk.ac.uk

Programme Directors are in charge of the academic content of the programme.

- Programme Director for PG Certificate Econometrics
  Prof Ron Smith (r.smith@bbk.ac.uk)

The Programme Director is the best person to contact if your academic difficulty relates to multiple courses. It is quite helpful to keep us informed of any issues or circumstances (health-related, work-related pressures, etc.) that might affect your performance or continuation on the programme.

Personal Tutors are members of academic staff who can serve as an alternative point of contact. You can talk to your tutor about things like, choice of modules and options on your course of study, difficulties meeting deadlines, and problems outside of Birkbeck that may affect your progress on the programme. To find out who your personal tutor is, see www.ems.bbk.ac.uk/personal-tutors

See http://www.ems.bbk.ac.uk/for_students for further resources.
Learning Co-ordinator
Eva Szatmari
Office: Room 715a, Malet Street Building
Tel: 0207 631 6254
email: e.szatmari@bbk.ac.uk

Eva’s role is to support students in their studies. She is available 4 days a week to meet with students and to discuss their needs. She can offer advice on a variety of maths skills, including:

- Pre-Algebra
- Formulae
- Equations
- Functions
- Basic calculus
- Basic statistics
- Basic data analysis
Information Technology (IT) Resources

Department IT Resources
The Department of Economics, Mathematics has its own Workstation Room, Room 742, for software specific to economics, finance, mathematics and statistics.

The Department Computer Representative coordinates queries relating to your College computer account and other IT services:

Nigel Foster (n.foster@bbk.ac.uk)
Room 759 Malet St, Tel: 020 7631 6402

The Department Student Help Desk is run by the department computing staff,

Nigel Foster (room 759; tel 020 7631 6402)
Awuku Danso (room 758; tel 020 7631 6433).
Email: helpdesk@ems.bbk.ac.uk at the following times

Term: Mon – Fri 16.00 – 18.00
Vacations: Mon – Thurs 16.00 – 18.00

College IT Resources

Workstation Rooms
For more general software, College ITS manages multiple Workstation rooms in various parts to the College. These include

- College Main Building: Rooms 402, 412, 413, 422, 423 and 536;
- Gordon Square: Rooms 10 and 11, 43

College IT Services Reception/ Help Desk

Ground floor, College Main Building, telephone 020 7631 6543

Term: Mon – Fri 09.00 – 20.00
Vacations: Mon – Fri 09.00 – 18.00
Calendar

Term Dates 2016-17

<table>
<thead>
<tr>
<th>Term</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>September</td>
<td>Pre-term Quantitative Techniques</td>
</tr>
<tr>
<td>Autumn term</td>
<td>Monday 3 October 2016-Friday 16 December 2016</td>
</tr>
<tr>
<td>Spring term</td>
<td>Monday 9 January 2017-Friday 24 March 2017</td>
</tr>
<tr>
<td>Summer term</td>
<td>Monday 24 April 2017-Friday 7 July 2017</td>
</tr>
</tbody>
</table>

The College is closed on specified holidays over Christmas and Easter and on Bank Holidays. For a complete listing, and details of service availability on these holidays, see the College Calendar at [www.bbk.ac.uk/about-us/term-dates](http://www.bbk.ac.uk/about-us/term-dates)

Significant Dates in the Academic Calendar

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-term Quantitative Techniques Lectures</td>
<td>Start 5 September 2016</td>
</tr>
<tr>
<td>Statistics examination</td>
<td></td>
</tr>
<tr>
<td>Deadline for submission of proposal for</td>
<td>December 12 2016</td>
</tr>
<tr>
<td>Econometrics project</td>
<td></td>
</tr>
<tr>
<td>Deadline for submission of Econometrics</td>
<td>24 April 2017</td>
</tr>
<tr>
<td>project</td>
<td></td>
</tr>
<tr>
<td>Final Examinations</td>
<td>January and June 2017</td>
</tr>
</tbody>
</table>
Programme Structure

Our PG Certificate Econometrics Programme is completed in one year. It covers the econometrics modules available on the MSc. It is an advanced course and it is assumed that you are already familiar with introductory statistics and econometrics and are familiar with the mathematical pre-requisites including matrix algebra. Completion of the programme requires you to complete a specified number of modules, for a total of 60 credits.

The modules and assessment methods are as follows.

**Required modules and sequence**

- **Quantitative Techniques**
  Assessed through in-class tests at the end of September
- **Econometrics for postgraduate certificate** (15 credits)
  Assessed through exams in January and June
- **Dissertation** (30 credits)
  Assessment based on written dissertation taken as part of the Econometrics module

*Either*

- **Advanced Econometrics** (15 credits)
  Assessed through a two-hour exam

*Or*

- **Forecasting Economic and Financial Time Series** (15 credits)
  Assessed through a two-hour exam

**Degree Classification**

For those who complete the requirements for the award of a PG Cert, the award is classified as one of the following: **Distinction, Merit or Pass.** The classification is based on the Common Awards Scheme (CAS). Information about this scheme is at: [www.bbk.ac.uk/reg/regs/cas/conferment/postgradtaught](http://www.bbk.ac.uk/reg/regs/cas/conferment/postgradtaught)

**Results**

The Assessment is overseen by a Board of Examiners, which meets in July. After the meeting, the Examiners usually give each student an indication of their likely degree classification (that is Distinction, Merit, Pass or Fail), conditional on successful completion of the Dissertation. University Regulations do not allow us to reveal the precise marks at this stage. These are notified routinely by the College in December. Information about the publication of results can be found at: [www.bbk.ac.uk/mybirkbeck/services/administration/assessment/exams/results](http://www.bbk.ac.uk/mybirkbeck/services/administration/assessment/exams/results)

**Failure and Re-assessment**

Our postgraduate programmes are quite challenging. The primary method of teaching involves lectures, typically held between 6pm and 9 pm in the evening. These are supplemented with problem-solving classes that allow you to reinforce the principles and techniques covered in lectures. Attending lectures and classes are only part of the overall learning experience. Private study and independent
research are crucial – this involves independent reading of texts and journal articles, working through problems and exercises, completing assignments, revising for examinations. Students must devote enough time each week to keeping up with the programme.

Inevitably some students fall short of the challenge. College regulations allow the Board of Examiners to offer students a second attempt at a module that they have not passed. This second attempt may take one of the following forms:

- **Re-take** for modules where a student obtained less than 40% at first attempt. In this case the student will be required to re-enrol on the module, attend lectures and classes and retake all the assessment associated with that module. **Students re-taking a module will be charged for that module.**

- **Re-assessment** for modules where a student obtained between 40% and 49% on the first attempt. The student is not required to attend lectures and will only need to re-attempt any failed element of that module (in most cases, the examination). **Please note that re-assessment marks will be capped at a pass (50%) from 2015/6 onwards as a change to College Policy.**

The earliest you can seek re-assessment is the subsequent academic year. The content of courses evolves from one year to the next, and it is the student’s responsibility to keep track of any variations in the material. If you require further guidance about re-assessments, please contact your Programme Director.

Please note students cannot seek reassessment purely to improve their performance in a module that they have already passed.

For further information about the Exam and Assessment procedures at Birkbeck, please see:
http://www.bbk.ac.uk/mybirkbeck/services/administration/assessment

Further information about Alternative Assessment, Re-assessment & Re-takes, and a Compensated Fail can be found in the ‘Common Award Scheme Regulations’ document located on the My Birkbeck website:
http://www.bbk.ac.uk/mybirkbeck/services/rules/casregs.pdf
## Compulsory modules

<table>
<thead>
<tr>
<th>CODE</th>
<th>Title</th>
<th>Credits</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUEM027S6*</td>
<td>Quantitative Techniques</td>
<td></td>
<td>September</td>
</tr>
<tr>
<td>BUEM007H7</td>
<td>Econometrics</td>
<td>15 credits</td>
<td>Autumn &amp; Spring</td>
</tr>
<tr>
<td>BUEM049S7</td>
<td>Dissertation</td>
<td>30 credits</td>
<td>Summer</td>
</tr>
<tr>
<td></td>
<td>1 option module</td>
<td>15 credits</td>
<td>Spring</td>
</tr>
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Module BUEM027S6

Quantitative Techniques
Compulsory module

Certificate students follow the statistical module done by second year part time MSc students. This is mainly for revision and it is assumed that Certificate Students have done a considerable amount of statistics before. It is assumed that Certificate students are familiar with the matrix algebra that is used extensively in the econometrics course. There are appendices on matrix algebra in the text books by Greene and Verbeek that can be used for revision of matrix algebra. There will also be a matrix algebra class for PG Certificate students in September.

COURSE AIMS AND OBJECTIVES

This module reviews the core statistical tools essential for the postgraduate programmes. On completing the course, you should be able to:

- understand the basic of probability distributions and statistical inference

COURSE PRE-REQUISITES: none

COURSE ASSESSMENT

Performance in these modules is assessed through in-class tests in September. You MUST pass the September examinations in order to proceed to the Certificate programme.

TEXTBOOKS

Lecture notes are provided but most students find it helpful to use a textbook to supplement these. We do not recommend any particular text, but in the past students have found the following useful.

- Marno Verbeek’s A guide to modern econometrics, 3rd edition, Wiley 2008
Module BUEM007H7

**Econometrics**
A compulsory course (15 credits)
Autumn and Spring Terms

**Aims and Objectives**
This course provides an introduction to theoretical and applied econometrics. It emphasizes time-series methods in the first term, and cross-section and panel data methods in the second term. The course, especially the project, aimed to help you in actually doing applied econometrics. This involves combining economic theory, statistical methods and an understanding of the data with the ability to use the appropriate software and interpret the output.

At the end of the course students will be able to demonstrate that they can:

- derive standard estimators (OLS, ML, GMM) and understand their properties;
- explain the basis for standard exact and asymptotic tests and use them in practice;
- develop and analyse basic univariate and multivariate time-series models for integrated and cointegrated data and know how to choose between alternative models;
- use standard econometrics packages and interpret their output;
- read, understand and explain empirical articles in the literature of the sort that appear in the *Economic Journal* or *American Economic Review*;
- conduct and report on an independent piece of empirical research that uses advanced econometric techniques.

**Course Pre-requisites:** Quantitative Techniques (BUEM027S6)

**Assessment**
Two hour exams in January and June.

**Indicative Reading**
A course booklet will be distributed, which will contain a fuller reading list.

- Marno Verbeek's *A guide to modern econometrics*, 3rd edition, Wiley 2008 covers most of the material in the course at a similar level.
BUEM049S7

Dissertation
Spring and Summer Terms

AIMS AND OBJECTIVES
Detailed instructions are in the Econometrics module Advice on doing projects.

SUBMISSION GUIDELINES
- A hard-copy, maximum 5,000 words
- Disk/USB with data
- Format: font and spacing should be clear
- Referencing should be included

SCHEDULE
Students must first submit a 100 word proposal. This proposal should state the basic idea of the project and the data that will be used. Detailed instructions are in the econometrics notes.

The dissertation is intended to demonstrate their ability to work independently. Students are encouraged to seek advice from faculty members teaching on the econometrics course and options during the course of their research.

Important Dates

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<table>
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<tbody>
<tr>
<td>Dissertation proposal deadline</td>
<td>December 2016</td>
</tr>
<tr>
<td>Dissertation submission deadline</td>
<td>End of the first week of the Summer Term 2017</td>
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</tbody>
</table>
EMEC035H7

Advanced Econometrics
An optional module (15 credits) for Full-time and Part-time 2
Spring Term

AIMS AND OBJECTIVES
This option covers econometric topics at a slightly more advanced technical level. The aim is to introduce students to selected linear and nonlinear econometric techniques that are used on cross-section and panel data, with applications in demand analysis and empirical industrial organization.

Students who complete this course successfully will be able to demonstrate that they can:

- understand the principles and numerical methods for non-linear estimation using Maximum Likelihood (ML) and Generalized Method of Moments (GMM);
- choose appropriate models for non-standard data (e.g. panel, limited dependent variable, ordered, count and duration data) and proceed to estimate these models based on the likelihood function or conditional and unconditional moment conditions for those models;
- understand the implications of unobserved or latent variables for the observed data and use this understanding in modeling;
- derive properties of ML and GMM estimators based on asymptotic arguments as well as the bootstrap;
- apply some such models in the context of applied demand analysis and certain applications in empirical industrial organisation.

COURSE PRE-REQUISITES: Quantitative Techniques (BUEM027S6)

ASSESSMENT
A two-hour examination,

COURSE OUTLINE
1. Maximum Likelihood Estimation: Asymptotic Theory and Computational Aspects
2. Applications: Qualitative and Limited Dependent Variable Models; applications in empirical Industrial Organisation
3. Generalized Method of Moments
4. Quantile Regression
5. Bootstrap
**Indicative Reading**

A reading list with suggested textbook chapters and journal articles will be distributed, and the additional reading is covered in the same books as listed in the compulsory Econometrics course.
BUEM033H7

**Forecasting Economic and Financial Time Series**
An optional module (15 credits) for Full-time and Part-time 2
Spring Term

**Aims and Objectives**
This module examines the principles and practice of forecasting economic and financial time series for decision making in government and business. The first part of the course will cover the basics of point forecasts and their statistical evaluation. The second part will cover more advanced techniques designed to construct, combine and evaluate forecast densities. We make use of the EViews software to build forecasting models and to make and assess forecasts.

Students who complete the course should be able to:

- use a range of models to produce point forecasts of economic and financial variables;
- undertake both economic and statistical evaluation of point forecasts;
- understand the limitations of point forecasts and be able to quantify forecast uncertainty through the use and evaluation of density forecasts.

**Course Pre-requisites:** Quantitative Techniques (BUEM027S6)

**Course Assessment**
A two-hour examination.

**Recommended Texts**

- Clements, MP & DF Hendry (Eds.), *A Companion to Economic Forecasting*, 2002, Blackwell, Oxford
- Elliot, G, Granger, CWJ. &Timmermann, A, (Eds.), *Handbook of Economic Forecasting*, Volume 1, 2006, North-Holland
Timetables

Term timetables can be viewed by using this link: www.bbk.ac.uk/ems/for_students/PGCE
Employability

*Careers and Employability Service*

We provide comprehensive careers, recruitment and employability advice, events and information services for our students, both online and face-to-face at our dedicated support space on the Birkbeck campus in Bloomsbury. These include: speaking to a careers advisor; panel discussions with employers, Birkbeck alumni and careers consultants; workshops and events on finding work, CV and application writing, and preparing for interviews; and online social media support.

We also work closely with Birkbeck Talent, our in-house recruitment service, to provide bespoke support for student pursuing employment and internship opportunities.

To find out more, visit bbk.ac.uk/careers

*Birkbeck Talent: a dedicated in-house recruitment service for students*

Birkbeck Talent is a professional recruitment service aimed exclusively at assisting Birkbeck students to find work whilst studying and after graduation. We work with London’s top employers to offer innovative internships, prestigious job vacancies and exciting graduate opportunities.

To find out more, visit bbk.ac.uk/talent

*Business Engagement Team*

The School of Business, Economics and Informatics has a dedicated Business Engagement team where you can take advantage of extra support - in addition to what is offered by Birkbeck Talent and the Careers and Employability Service. Based in Malet Street, the team deliver a range of activities to support you in your career aspirations including:

*Mentoring Pathways*

Mentoring Pathways pairs successful applicants with industry professionals for individual advice and guidance. There are approximately 100 places available for final year undergraduates and post-graduate students. We have partnerships with a number of employers including Credit Suisse, PwC, University London College Hospital, Enfield Council, Hounslow Council and work alongside Birkbeck alumni, who are employed in a range of exciting and dynamic businesses.

*Enterprise Pathways*

Whether you are setting out in your journey as an entrepreneur or have already established a thriving business, we offer a range of initiatives to support you. These include workshops, access to digital resources, opportunities for networking, competitions and coaching.

*Events*
An events schedule can be found overleaf and our events will also be advertised through emails, the Business Engagement student newsletter and social media. These events will help you to find out more about industry sectors, entrepreneurs and professional bodies.

To accommodate for busy lives and responsibilities at work, many of these events are filmed and later uploaded to our bespoke on demand video service, BEInspired.

Please visit our website www.bbk.ac.uk/business/business-services for resources and information about all of these initiatives.

Insiders’ Guides

We would like to take a small number of students to visit workplaces and ask questions about the culture, the roles and career progression. If your employer would like to participate, or you have a particular industry or sector that you would like included as part of this series, please contact us at developus@bbk.ac.uk for further details. Look out for opportunities to be part of the student group via our newsletter and social media.

You can also follow BEI on social media for information and conversations:

• Twitter: @BirkbeckBEI
• Facebook: BirkbeckBEI
Helping you get the best possible start to your course

At Birkbeck we want to make sure you get all the help you need to get your studies off to a great start and to provide you with support during your course. On the Get Ahead: Stay Ahead website you can access a range of online resources to help you:

- consider how you can achieve your goals
- find out what studying at Birkbeck is like
- improve your study skills and succeed on your course

The online materials are interactive tutorials that are free to use and you can work through them at your own pace.

www.bbk.ac.uk/ahead