# **Economics**

School of Social Sciences
Faculty of Humanities
University of Manchester

# Postgraduate Research Student Handbook for PhD/MRes in Economics

**Version 2013/14** 

Please read in conjunction with the School Postgraduate Research Programmes handbook on <a href="http://www.socialsciences.manchester.ac.uk/intranet/pg/handbooks/">http://www.socialsciences.manchester.ac.uk/intranet/pg/handbooks/</a>

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## **List of Abbreviations**

ALB: Arthur Lewis Building

AQM: Advanced Quantitative Methods

ART: Area of Research Training

**BWPI: Brooks World Poverty Institute** 

DA: Discipline Area

**DEP: Development Economics and Policy** 

**EAE: Econometrics and Applied Economics** 

eProg: Electronic Progression and Review System

**ERE: Environmental and Resource Economics** 

ESRC: Economic and Social Research Council

HoDA (R&S): Head of Discipline Area (Research and Strategy)

HoDA (T&O): Head of Discipline Area (Teaching and Operations)

MAC: Macroeconomics, Growth and Development

MME: Microeconomics and Mathematical Economics

MRes: Master of Research

MSc: Master of Science

NWDTC: North-West Doctoral Training Centre

**ORS: Overseas Research Scholarship** 

PDP: Personal Development Plan

PGR: Post-Graduate Research

PhD: Doctor of Philosophy

RAG: Research Area Group

SCI: Sustainable Consumption Institute

SoSS: School of Social Sciences

TA: (graduate) Teaching Assistant

## Welcome

The Economics Discipline Area (DA) welcomes you to its Postgraduate Research (PGR) training programme. Our PhD/MRes programme has been introduced in 2010 as a response to the Economic and Social Research Council (ESRC) sponsored *Benchmarking Review of UK Economics*. Building on our successful ESRC-recognised PhD/MPhil we have developed a new 2+2 American-style structure for our programme to meet the international standard demanded for a PhD-training in Economics. In the first year an MSc-equivalent training is provided, followed by an advanced research training year (MRes) before embarking on to two years of pure research. Our training centre is part of the ESRC's newly accredited North-West Doctoral Training Centre (NWDTC) where Economics PGR-training is provided jointly by us and by our partner institutions from Lancaster and from Liverpool:

#### http://www.nwdtc.ac.uk/

This programme handbook provides you with important information about your discipline specific programme of research training, discipline area contacts and facilities. It should be read in conjunction with the School of Social Sciences (SoSS) Postgraduate Research Student Handbook for 2013-2014, which will give you general information on regulations and policies at the level of the SoSS and the Faculty of Humanities (FoH). If you cannot find the information you require in this handbook (especially if it is not subject specific), please consult the SoSS Postgraduate Research Student Handbook:

#### http://www.socialsciences.manchester.ac.uk/intranet/pg/handbooks/

You are now entering an intense period of research training during which, we are confident, you make the transition from a graduate student to a highly skilled researcher. With your first day of registration you will be fully integrated in the academic research life of our department and we hope you take advantage of our facilities and our colleagues' expertise while advancing in your PhD-research project. We wish you an enjoyable, productive and successful research study time in the Economics DA at Manchester.

Professor Horst Zank, Director of Postgraduate Research Study

Dr. Kyriakos Neanidis, PGR-Students Coordinator

Dr. Emranul Haque, PGR-Students Admissions Officer

Ms. Marie Waite, PGR-Students Administrator

### **About Us**

### The Economics Discipline Area

Economics at the University of Manchester has a long and rich history. Important scholars in Economics who have held posts here include William S. Jevons, Harry Johnson and Nobel Laureates Arthur Lewis and John R. Hicks. Currently the discipline area has over 55 permanent members of academic staff, including thirteen professors on full-time appointments, together with three professors on part-time bases.

Economics is a leading centre for research and research-led teaching. The international reach and significance of our research was confirmed by the 2008 Research Assessment Exercise (RAE2008), which determined that 80% of our research activity achieves the highest standards of international excellence (3\*/4\*); and, 25% is world-leading (4\*). This places us in the top 10 of all UK Economics Departments.

Economics is contributing to several undergraduate programmes in economics and the social sciences, including our own Economics Specialist degree, the Bachelor of Economic Science (BEconSc-Economics). Our MSc programmes in Economics, which includes the Environmental and the Health Economics stream, in Econometrics or in Economics & Econometrics and in Financial Economics provide opportunities to acquire the quantitative skills required for advanced research and the wide range of research interests and expertise of our academics provides many opportunities for Postgraduate Research Training.

In recent years we have developed leading international research agendas in mathematical/evolutionary finance, aggregate game theory, econometric theory and applied econometrics, environmental economics and development macroeconomics. The latter's emphasis on poverty-reduction and growth is now the core central research theme of our <u>Centre for Growth and Business Cycles Research</u> (co-directed by Keith Blackburn, Denise Osborn and Pierre-Richard Agenor). In addition to this Centre, Economics also hosts many externally funded research projects, and the DA is the editorial home of the general economics journal <u>The Manchester School</u>.

Whilst supporting all aspects of intellectual enquiry through high-quality research, our strategy is to underpin this with foundations in the core of the discipline in order to maintain a profile which addresses key economics research questions of the day. To facilitate this and to provide an academically stimulating environment of discourse and debate, research is organised principally through the five research groups:

#### Microeconomics & Mathematical Economics (MME):

Research covers topics from the fundamentals of individual decision making under risk/uncertainty and the operation of markets to applications in financial economics, game theory, industrial organisation, public economics and social choice. A further focus is on foundational aspects and applied theoretical work on ambiguity, evolutionary finance as well as modern political economy, poverty measurement and behavioural economics.

#### Macroeconomics, Growth & Development (MAC):

Research examines key issues related to growth, development, business cycles and macroeconomic policy. This work is both theoretical and empirical, using modern techniques of analytical and econometric investigation to study important issues of interest to both academics and policy makers, including: institutions, governance and corruption; innovation, public capital and human capital; foreign aid and international economics; financial markets, bankruptcy and regulation; imperfect competition and nominal rigidities; monetary and fiscal policy; inflation and unemployment; expectations, learning and agent heterogeneity. The key vehicle for research activity is the Centre for Growth & Business Cycles Research (CGBCR).

#### **Econometrics and Applied Economics (EAE):**

Research in econometric theory includes hypothesis and misspecification testing, with a particular focus on time-series econometrics and related areas of finance and international macroeconomics, whilst applied microeconometric research addresses issues in the labour market, health, applied industrial organisation and consumer behaviour. Topics of recent focus are structural instability and structural breaks in monetary policy; economic and econometric models of labour market matching; labour mobility between the EU and the Eastern Partnership Countries; the dynamics of health and economic status at older ages; the determinants of household food purchases, retailer pricing behaviour and the implications for policymakers interested in targeting diet and health. This applied agenda will continue to develop both in terms of breadth and depth, in particular building on established links with other health economists in the Faculty of Medicine.

#### **Environmental & Resource Economics (ERE):**

Research covers a range of foci at the frontiers of environmental and resource economics including climate change economics; environmental economics and politics of food, water and agroecosystems; food safety economics; economics of biodiversity conservation and ecosystem services; policy uncertainty; social capital and policy analysis; sustainable technology and consumption; environmental efficiency and technical change; environmental valuation; and applied econometrics. There are close links with the University's Sustainable Consumption Institute (SCI) and joint research across the University involving staff from both the DA and beyond (philosophy, psychology and biological sciences).

#### **Development Economics and Policy (DEP):**

Research is both theoretical and empirical, covering a wide range of topics in the broad areas of development and poverty of less developed countries. Specifically it includes industrial policy reform in Latin America and industrialisation strategies; the evolution of the transition economies with an emphasis on poverty and inequality; poverty dynamics and vulnerability in India, Vietnam, and Bangladesh; measurement of well-being and deprivation; political economy and theoretical modelling of poverty, inequality and corruption; and economic development, structural change and income distribution in China. This research group is part of a larger cross-school research area which includes researchers from the Institute for Development Policy and Management (IDPM), in the School of Environment and Development and also the Brooks World Poverty Institute (BWPI).

#### http://www.socialsciences.manchester.ac.uk/disciplines/economics/research/rag/

There is also a small group of staff in the Economics DA researching justice and property rights in 17th and 18th century thought, the history of economic and political thought, Post-Keynesian economics and critical realism.

Members of Staff have published in many leading journals, including: American Economic Review, American Journal of Agricultural Economics, Biometrika, Ecological Economics, Econometrica, Econometric Reviews, Econometric Theory, Economic Journal, Economic Theory, Environmental and Resource Economics, European Economic Review, Finance and Stochastics, Games and Economic Behaviour, International Economic Review, International Journal of Game Theory, Journal of Applied Econometrics, Journal of Development Economics, Journal of Econometrics, Journal of Economic Theory, Journal of Environmental Economics and Management. Journal of Human Resources, Journal of Labour Economics, Journal of Mathematical Economics, Journal of Monetary Economics, Journal of Money, Credit and Banking, Journal of Political Economy, Journal of Public Economics, Journal of Risk and Uncertainty, Journal of the American Statistical Association, Mathematical Finance, Quarterly Journal of Economics, Review of Economic Studies, Review of Economics and Statistics, Theoretical Economics.

#### The School:

Since 2007/8, the School of Social Sciences (SoSS; comprising the disciplines of Economics, Politics, Philosophy, Sociology and Social Anthropology) has occupied the modern Arthur Lewis Building in which almost all academic, research staff and PhD students, in Economics, are now co-located on one floor.

SoSS was set up in September 2004 within the Faculty of Humanities of the new University of Manchester. It brings together six distinct discipline areas: Economics, Politics, Philosophy, Social Anthropology, Sociology, and the new discipline area of Social Statistics formed in January 2009 (in large part comprising staff working in the Cathie Marsh Centre for Census and Survey Research, or CCSR). SoSS is a large School of over 150 core academic and research staff, with a further 30-50 postdocs and research fellows at any given time.

As previously mentioned, SoSS has a highly developed research culture as demonstrated by its performance in the 2001 and 2008 Research Assessment Exercises. The School had an excellent RAE result across all subject areas in 2008. All areas showed significant improvement on the previous RAE. The School entered 168 staff across five different Units of Assessment and the RAE assessed 59% of their research activity to be at the top two levels of international excellence (3\*) or world leading (4\*), with 26% in the world leading class.

#### The University:

With 27 Schools, 16 Research Institutes, and four Faculties, The University of Manchester is the largest campus-based University in the UK. It is a member of the prestigious 'Russell Group' – the elite group of UK research intensive universities. Major initiatives since the University's inauguration include:

- the Manchester Cancer Research Centre, creating the largest centre for cancer research in Europe in a £40M+ partnership with Cancer Research UK and the Christie NHS Trust;
- the Dalton Nuclear Institute, a £20M partnership with the UK Nuclear Decommissioning Authority and Battelle Laboratories in the USA;
- the Centre for Tissue Regeneration in a £10M partnership with the Healing Foundation;
- a joint Harvard/Manchester initiative on social change in Europe and the USA.
- the Sustainable Consumption Institute; a £25M partnership with the UK's largest retailer,
   Tesco

The University attracts world-renowned researchers and teachers and boasts no fewer than 25 Nobel Prize winners amongst its current and former staff and students – and more on its current staff than any other UK university. In October 2010 Professor Andre Geim and Professor Konstantin Novoselov were awarded the Nobel Prize for Physics, the highest accolade in the scientific world for their pioneering work with the world's thinnest material, graphene.

The results of the <u>2008 Research Assessment Exercise</u> confirm that The University of Manchester, compared with other leading universities, is a genuine research powerhouse both in the UK and further afield. The amount of data included in the RAE results means there are a number of different ways of analysing them, but by any evaluation Manchester ranks among the country's top performing universities.

The University is also acutely aware of its own sustainability responsibilities as a major organisation and employer, and is seeking to act as an exemplar institution of higher education in its own environmental performance. The University is one of only eight in the UK to have signed up to the Talloires declaration – a ten-point international action plan for incorporating sustainability and environmental literacy in teaching, research, operations and outreach at colleges and universities. (http://www.ulsf.org/programs\_talloires.html).

## **Key Contact Points in Economics**

Our physical location is on the 3<sup>rd</sup> Floor in the Arthur Lewis Building (ALB), which is building no. 36 on the Campus Map.

### **Head of the Economics Discipline Area**

Since 2007 the management duties of the Economics DA have been divided into aspects relating to research and strategy (R&S) and aspects relating to teaching and operations (T&O). Accordingly, the DA is led by two Heads of DA (HoDA):

Paul Madden is HoDA (R&S) in Economics Room 3.064 in ALB Paul.Madden@manchester.ac.uk

Ed Amann is HoDA (T&O) in Economics Room 3.022 in ALB Edmund.Amann@manchester.ac.uk The complete leadership team of the Economics DA can be found at:

http://www.socialsciences.manchester.ac.uk/disciplines/economics/about/who/

#### **Economics PGR-Team**

The Postgraduate Research (PGR) team is responsible for all managerial and strategic aspects of the PGR-training, including admissions, progress review, dealing with mitigating circumstances and day-to-day administration, and it reports to HoDAs and all academic staff in the DA at Economics leadership team (ELT) meetings and at staff meetings. Except for your PhD-supervisors, the staff on the PGR-team are your main points of contact. The Economics PGR-team consists of:

Horst Zank is the Economics PGR Director Room 3.026 in ALB Horst.Zank@manchester.ac.uk

Kyriakos Neanidis is the Economics PGR Coordinator Room 3.019 in ALB Kyriakos.Neanidis@manchester.ac.uk

Emranul Haque is the Economics PGR Admissions Officer Room 3.013 in ALB Emranul.Haque@manchester.ac.uk

Marie Waite is the Economics PGR Administrator Postgraduate Research Office, Room 2.003 in ALB Marie.Waite@manchester.ac.uk

Jill Chandler is the Economics MSc Administrator Postgraduate Research Office, Room 2003 in ALB Jill.Chandler@manchester.ac.uk

## **Research Area Group Leaders**

The five RAG leaders are:

Horst Zank (Microeconomics and Mathematical Economics-RAG Leader)

Room: 3.026 in ALB

Horst.Zank@manchester.ac.uk

Keith Blackburn (Macroeconomics, Growth and Development-RAG Leader) Room 3.018 in ALB

Keith.Blackburn@manchester.ac.uk

James Banks (Econometrics and Applied Economics-RAG Leader)

Room 3.020 in ALB

James.Banks@manchester.ac.uk

Ada Wossink (Environmental and Resource Economics-RAG Leader)

Room: 3.025 in ALB

Ada.Wossink@manchester.ac.uk

Katsushi Imai (Development Economics and Policy-RAG Leader)

Room: 3.066 in ALB

Katsushi.Imai@manchester.ac.uk

More about RAG's, their composition and their activities can be found at: http://www.socialsciences.manchester.ac.uk/disciplines/economics/research/rag/

### **Research Skills Training**

All PhD-candidates in the Economics PhD/MRes programme have to take the Research skills for Economists course unit (ECON80060) during year 2 of the programme. The lecturer of this course unit is:

James Banks
Room 3.020 in ALB
James.Banks@manchester.ac.uk

### **Computing Officer**

You will allocate yourself into one of the open plan research area desks on the 3<sup>rd</sup> floor of ALB reserved for Economics PhD-students. If you encounter difficulties with the PC or software please consult with our computer officer first. This is

Dan Rigby

Room: 3.063 in ALB

Dan.Rigby@manchester.ac.uk

#### **Graduate Teaching Assistant**

PhD-students in Economics have the opportunity to gain first hand experience with teaching students from year two of the programme onwards. We recommend that you get involved in some TA-activities as early as possible as the benefits for you include improved presentation skills, exposure to critical audiences and opportunities to enrich your knowledge in topics other than your PhD-research area. There is also a monetary reward for TA activities. If interested, please contact the TA-coordinator in Economics:

Mario Pezzino
Room 2.013 in ALB
Mario.Pezzino@manchester.ac.uk

See also: <a href="http://www.socialsciences.manchester.ac.uk/intranet/pg/gta/">http://www.socialsciences.manchester.ac.uk/intranet/pg/gta/</a>

### **Student Representatives**

For each year of study, one PhD-student will be chosen to represent that group at various levels within the University. Several meetings will be held between the Phd-student representatives and the Economics PGR-team. Further, representation of PhD-students on the SoSS PGR-committee is also required. For Year 1 students there is one PhD-student serving on the latter committee, while for Year 2 students there are two PhD-students represented on that committee. The benefits of being a student representative include an opportunity to develop leadership skills and an improved CV, and the chance to gain insights into the work and organisation of PGR-activities of the Economics DA and SoSS.

Please inform the Economics PGR-coordinator if you are willing to take up this role (via Email to: <a href="mailto:kyriakos.Neanidis@manchester.ac.uk">kyriakos.Neanidis@manchester.ac.uk</a>). You may wish to consult with current representatives of what this role entails and what is expected from you. Current PhD-student representatives are:

Year 4 Representatives: Adams Adama,

Adams.Adama@postgrad.manchester.ac.uk

Keyra Primus,

Keyra.Primus@postgrad.manchester.ac.uk

Year 3 Representatives: Krzysztof Brzezinski

Krzysztof.Brzezinski@postgrad.manchester.ac.uk

Bilal Malaeb

Bilal.Malaeb@postgrad.manchester.ac.uk

Year 2 Representatives: Tadeusz Gwiazdowski

Tadeusz.Gwiazdowski@postgrad.manchester.ac.uk

Year 1 Representative: TBC

## **The Supervisory Team**

Normally, your supervisory team consists of a main supervisor and a co-supervisor. Occasionally, additional academic staff may join the existing supervisory team or replace someone there, depending on the direction of your research and the advice needed. Supervisory team arrangements are in place from the first day of registration, irrespective of your point of entry (i.e., Year 1 or 2) into the PhD/MRes programme in Economics.

Your supervisory team is responsible for agreeing an appropriate research programme, to work with you and to oversee your progress. You will have frequent meetings with your supervisors, on average once a fortnight. They will be involved in advising on the course units that you need to study, identify your training needs and will discuss your research proposal and its implementation

with you. At the beginning of your training you will be asked to sign the "Student Supervisor Guidelines for the School of Social Sciences" to ensure that you have read and understood your supervisor's responsibilities as well as your own responsibilities towards them. It is therefore important to read the relevant information regarding these joint responsibilities as outlined in the SoSS Postgraduate Research Student Handbook available at: <a href="http://www.socialsciences.manchester.ac.uk/intranet/pg/handbooks/">http://www.socialsciences.manchester.ac.uk/intranet/pg/handbooks/</a> and the Supervision Policy for Postgraduate Research:

#### http://documents.manchester.ac.uk/display.aspx?DocID=615

Your offer letter will have provided details of who will act as your supervisory team for the duration of your research studies. It is important that the PhD-student and the supervisors establish a positive working relationship with clear expectations of each other and clear plans for a programme of work.

In addition to your supervisory team, you also have an advisor who monitors your progress and who provides general advice and support. This role is taken up by the Economics PGR Coordinator. Further, you can discuss any issues relating to supervisory arrangements with the Economics PGR Director. In general, you should discuss any issues or problems first with your Supervisory team, and if not satisfactorily resolved, you should approach the PGR Coordinator, the PGR Director and finally the HoDA (R&S) in Economics, in this particular order (also listed on Pages 10-11 above).

You will have many informal meetings with your supervisors during the academic year. We advise you, and it is expected from you, to take notes at these meetings and keep a record of what has been discussed and agreed. From Year 2 onwards, however, you will have several formal meetings with the supervisory team. These meetings consist of Introductory Planning and Expectations meetings at the beginning of the academic year, followed by Milestones, which are focused on your progression. Associated with these meetings are electronic form that require completion prior to those meetings on eProg (see below). Progress reports are then completed by all members of the supervisory team and signed electronically. These reports are then submitted to the Research Degrees Review Panel, composed of the PGR-Coordinator and the PGR-Director. This panel formally meets twice a year (February and July) to monitor progress of Economics PhD-students and take decisions on their year-to-year progression.

## The 2+2 PhD-Programme in Economics

#### **Brief Structure**

The doctoral programme in Economics is a four-year programme (Full-time), with the possibility of direct entry into year two of the four years. Year one will entail one of our well-established Masters courses (MSc Economics, MSc Econometrics, MSc Economics & Econometrics, MSc Financial Economics). Year two consists of advanced PhD level coursework and preparation of a detailed research proposal. Direct entry into year two requires a prior Masters degree of appropriate standard and content, such as at least a merit (minimum 60% average) from one of the Manchester degrees mentioned above, or the equivalent from elsewhere. Research is full-time in years three and four, leading to submission of the thesis at the end of year four (although there is the possibility to

have a writing-up period beyond year four following approval by SoSS). Upon successful completion of the programme (whether entering in year one or two), degrees of PhD *and* MRes will be awarded. Further details on entry criteria are available at:

http://www.socialsciences.manchester.ac.uk/disciplines/economics/postgraduate/research/course/?code=02976&pg=3

### **Registration Week**

During registration week you will be asked to attend several induction courses held at various levels within the University. They are scheduled such that you will be able to attend all these meetings. It is important to attend these sessions as they provide you with several sets of useful information about your programme, contact points, structures and administrative and local arrangements and web pages with additional material.

It is crucial that you attend:

- The Induction for Research Students in Economics
- Introduction to the School of Social Sciences
- The Induction to the Faculty of Humanities
- The Economics TA Training Session
- The SoSS TA Training Session

Latest information about these meetings as well as updated timetables can be obtained from: http://www.socialsciences.manchester.ac.uk/intranet/pg/reg/

#### Year 1

During the first year of the Economics PhD/MRes programme you will *essentially* (but see clarification below) follow one of the MSc-programmes in Economics:

- MSc Economics (Standard Route)
- MSc Economics (Environmental Economics Route)
- MSc Economics (Economics of Health Route)
- MSc Economics and Econometrics
- MSc Econometrics
- MSc Financial Economics

Please consult the corresponding MSc-programme's Handbook at:

http://www.socialsciences.manchester.ac.uk/intranet/pg/handbooks/

In each case you will take 8 courses over the first two semesters, each worth 15 credits, followed by the writing of a 60 credit dissertation from June to August, with the deadline for submission of the dissertation being **1 September 2014**). On entry to the PhD/MRes programme you will have been assigned a supervisory team, and one member of this team will serve as supervisor for the MSc dissertation. It is your responsibility to discuss your choice of MSc-programme and the optional units

within that programme with your PhD-supervisory team, agree on the selection of the programme and the course units, and inform the PGR-director of your choices.

"Essentially" in the first line of this subsection has two implications. First, the programme leads, on successful completion, to the awards of an MRes and a PhD degree, but *not* MSc. Secondly, it is possible for your supervisors to recommend that you substitute an alternative course of supervised private study for one of your 8 MSc courses.

#### Year 2

Year 2 of the Economics PhD research study is the Masters of Research (MRes). In this year you take advanced post-graduate taught course units from the North West Doctoral Training College (NWDTC). Depending of your training needs, the Economics PGR-director may allow you to take a maximum of one advanced level MSc-unit if you have not been exposed to similar topics before and such training is deemed necessary for progression to Year 3 by your supervisory team.

Common to all students is that they take the Research Skills for Economics course unit. Further, you and your supervisors will agree on three further course units to be taken, which provide you with the advanced research skills needed for successful progression to the pure research part of the Economics PhD/MRes (i.e., Years 3&4).

In addition to this taught component, you will develop a detailed research proposal and a strategy on how you intend to implement your research plans. This will happen under the guidance of your supervisory team. As the research questions described in your research proposal and the approach to addressing those questions are forming a significant part of your training in Year 2, and they describe the work that will be carried out during years 3 and 4 of your PhD-study at Manchester, you are advised to start working on the research proposal as soon as possible after your registration into Year 2 of your PhD-studies.

Depending on your area of research training (ART) you will have at least one related core course unit, that is, a compulsory course unit, and up to three optional units from the NWDTC menu of taught units. As noted earlier, such course units may be delivered by any of the three institutions (Liverpool, Lancaster or Manchester), and it is your responsibility to obtain agreement from your supervisors for taking any of the optional units. While the programme directors of the three institutions make every effort to ensure that there are no clashes in the schedule of PGR course units offered by the NWDTC, such clashes cannot always be avoided. If clashes occur, the relevant PGR-Director will inform your supervisory team and alternative course units will be agreed. There is always the option of auditing and examining any NWDTC-units in the subsequent years of your PhD-study (i.e., Years 3&4), and we advise you to take up the opportunity to broaden your knowledge and expertise and learn from new approaches or complementary topics.

#### Routes of Study/Areas of Research Training

All PhD-students in year 2 will have ECON80060: Research Skills for Economists (15 Credits) as one of their compulsory course units, irrespective of their ART. Additionally, all students are required to attend the Generic and Transferable Skills Training (see SoSS PGR Student Handbook). Further compulsory, i.e., core, course units will be taken depending on your Route of Study.

#### **Financial Economics**

- Prerequisite: MSc-Financial Economics or equivalent.
- Core: ECON80041: Advanced Microeconomic Theory (15 credits)
- 2 Optional units (each 15 credits) from the list below or equivalent as approved by the Supervisory Team and PGR-Director Economics. At least one of these units must be at the equivalent of PGR-level.

#### **Behavioural Economics**

- Prerequisite: MSc-Economics or equivalent.
- Core: ECON80041: Advanced Microeconomic Theory (15 credits)
- Core: ECON80150: Advanced Topics in Microeconomics: Behavioural Economic Theory.
- 1 Optional unit (15 credits) from the list below or equivalent as approved by the Supervisory Team and PGR-Director Economics.

#### **Environmental Economics**

- Prerequisite: MSc-Economics (Environmental Economics Route) or equivalent.
- Core: ECON80072: Advanced Methods for Environmental Valuation and Decision Making (15 credits)
- 2 Optional units (each 15 credits) from the list below or equivalent as approved by the Supervisory Team and PGR-Director Economics. At least one of these units must be at the equivalent of PGR-level.

#### **Development Economics**

- Prerequisite: MSc-Economics or equivalent.
- Core: ECON80062: Dynamic Macroeconomics (15 credits) or ECON80041 Advanced Microeconomic Theory (15 credits)
- Core: ECON80081: Advanced Topics in Development Economics 1 (15 credits) or ECON80092: Advanced Topics in Development Economics 2 (15 credits)
- 1 Optional unit (15 credits) from the list below or equivalent as approved by the Supervisory Team and PGR-Director Economics.

### **Econometrics & Applied Economics**

- Prerequisite: MSc-Econometrics, MSc-Economics and Econometrics, or equivalent.
- Core: ECON80011: Advanced Econometric Theory (15 credits) or ECON80021: Applied Econometrics (15 credits)
- 2 Optional units (each 15 credits) from the list below or equivalent as approved by the Supervisory Team and PGR-Director Economics. At least one of these units must be at the equivalent of PGR-level.

#### **Microeconomics and Mathematical Economics**

- Prerequisite: MSc-Economics or equivalent.
- Core: ECON80041: Advanced Microeconomic Theory (15 credits)

• 2 Optional units (each 15 credits) from the list below or equivalent as approved by the Supervisory Team and PGR-Director Economics. At least one of these units must be at the equivalent of PGR-level.

#### **Macroeconomics**

- Prerequisite: MSc-Economics or equivalent.
- Core: ECON80062: Dynamic Macroeconomics (15 credits)
- 2 Optional units (each 15 credits) from the list below or equivalent as approved by the Supervisory Team and PGR-Director Economics. At least one of these units must be at the equivalent of PGR-level.

#### List of Approved NWDTC Course Units (each worth 15 credits):

- ECON80021: Applied Econometrics (Semester 1 and 2, Manchester based)
- ECON 80031: Generalized Methods of Moments (Semester 1, Manchester based)
- ECON 80041: Advanced Microeconomic Theory (Semester 1, Manchester based)
- ECON 80150: Advanced Topics in Microeconomics: Behavioural Economic Theory (Semester 2, Manchester based)
- ECON 80062 : Dynamic Macroeconomics (Semester 2, Manchester based)
- ECON80072: Advanced Methods for Environmental Valuation and Decision Making (Semester 2, Manchester based)
- DTLA81011: The Economics of Human Capital (Semester 1, Lancaster based)
- DTLA81022: Applied Macroeconomics (Semester 2, Lancaster based)
- ECON 80011: Advanced Econometric Theory (Manchester based)\*
- ECON80572: Advanced Topics in Economic Theory (Manchester based)\*
- ECON80082: Advanced Topics in Development Economics 1 (Manchester based)\*
- ECON80092: Advanced Topics in Development Economics 2 (Manchester based)\*
- DTLA81001: Applied Behavioural Economics (Lancaster based)\*

**Note:** Units marked with a "\*" are not available in the academic year 2013/14.

Further units from North-West Doctoral Training Centre (to be confirmed) not necessarily restricted to the economics pathway (such as SOST70292: Multilevel Modelling), as advised by your supervisory team and approved by the PGR-Director, may be available.

Moreover, units from the School of Mathematics of the University of Manchester ( such as Numerical Optimization, Dynamical Systems, Linear Algebra, Functional Analysis, Measure Theory, Topology, Statistical Inference, Linear and Generalised Linear Models, as appropriate), as advised by your supervisory team and approved by the PGR-Director, may be available.

#### Years 3&4

During the post MRes period of research training you will continue taking the Generic Skills Training, implement your Research Proposal, participate at the PhD-conference and in the RAG seminars and the Manchester Economics Seminar series.

#### Year 5

If deemed necessary by your supervisory team and conditional on approval being obtained from the Economics PGR-Director, you will be allowed to enter a writing-up period after Year 4 of the programme. The maximum length of the writing-up period is 12 months and it depends on your circumstances and progress made. Please note that "writing-up" is taken literally and you will not be allowed to carry out additional new research during the writing-up period. Further, it is the responsibility of candidates to verify any restrictions applied by funding bodies with respect to obtaining a writing-up period.

Extensions beyond year 5 are not possible. PhD-students who reach the end of year 5, and who have not registered for the submission pending period, will automatically be registered to the status "submission pending". Please note that, in this case, additional fees will be charged which will not be reimbursed, and that only limited access to university facilities will be permitted as well as limited supervision. See:

http://www.socialsciences.manchester.ac.uk/intranet/pg/handbooks/

## **Progression**

### **Progression from Year 1 to Year 2:**

To progress from year 1 to year 2 of the Economics PhD/MRes you need to obtain:

- An average of 60% or better across all 120 credits of course work (i.e., eight taught course units, each worth 15 credits) taken in year 1.
- A minimum mark of 50% on each course unit.
- A minimum mark of 60% on the dissertation.

Failure to meet these criteria means that you may be offered an exit degree in accordance with the regulations of the MSc-programme that you have registered as your Year 1 component of the Economics PhD/MRes programme.

#### **Progression from Year 2 to Year 3:**

To progress from year 2 to year 3 of the Economics PhD/MRes you need to obtain:

- An average of 60% or better across all 60 credits of course work (i.e., four taught course units, each worth 15 credits) taken during year 2.
- A minimum mark of 50% on each course unit.
- A minimum mark of 60% on the research proposal.
- Completed Generic and Transferable Skills Training.

Failure to meet these criteria means that you may, at the discretion of SoSS, be offered an exit award of MRes if the following is obtained:

- A minimum average mark of 50% on the course unit element.
- A minimum mark of 50% on the research proposal.

Note: Unlike MSc-level units, there is no opportunity to re-take exams on MRes-level course units during the summer. Failure to obtain an MRes-exit degree means that you may, at the discretion of SoSS, be offered an MSc-exit degree.

### **Progression from Year 3 to Year 4:**

To progress from year 3 to year 4 of the Economics PhD/MRes you need to have:

- Completed a substantive chapter that corresponds to a publishable research paper in your research area. Such a research paper should have the potential to become an article in an international peer reviewed economics journal, or similar, as is the standard in your research area.
- Presented your research chapter at the annual PhD-student conference.

During June of your Year 3 studies, and following approval by your supervisory team, you will be asked to submit a substantive research paper/chapter to your external evaluator for assessment. The completed research paper(s) will be assessed by the evaluator, who is not a member of your supervisory team (but will consult with the team, and will typically belong to the same RAG), in June/July of Year 3. In some cases the external evaluator may recommend further work on the paper to be completed by beginning September.

By beginning July the Research Degree Review Panel meets to decide on the progression of all PhD-students. With the exception of those who have been granted a further period to revise/improve the research chapter during July and August, all PhD-students will be informed about their progression status.

Please note that failure to make satisfactory progress during Year 3 means that you may be offered an MRes-exit degree under the same considerations as above.

#### **Year 4 & Writing-up Year:**

You should aim to have your final PhD-thesis ready for submission by the end of Year 4. The expectation is that your final thesis will consist of at least two substantive chapters of research each corresponding to a publishable research paper in your area of study. Each research paper should have the potential to become an article in an international peer reviewed economics journal, or similar, as is the standard in your research area.

If deemed necessary by your supervisory team and conditional on approval being obtained from the Economics PGR-Director and SoSS, you will be allowed to enter a writing-up period. The maximum length of the writing-up period is 12 months and it depends on your circumstances and the progress made during Years 3&4. Please note that "writing-up" is taken literally and you will not be allowed to carry out further research during the writing-up period.

A submitted PhD-thesis is defended in an oral examination involving at least (and most often) two examiners. One examiner will be internal to the University, and usually a member of staff in the Economics DA, and one examiner will be external to the University. Your lead supervisor is responsible for selecting the appropriate examiners.

Possible outcomes of the oral examination include: a Pass, a Pass subject to (minor) changes, resubmission following substantial changes, or fail.

Once a thesis has obtained an unconditional Pass, the degree of PhD *and* MRes will be awarded. The MRes award reflects the substantive research training obtained during Years 1&2 of the Economics PhD/MRes programme.

## **Monitoring Research Progress/eProg**

eProg is a University-wide system for postgraduate researchers to record and monitor progression throughout their programme and manage skills training activities. We use this system to monitor your progress. There are several elements of eProg that need to be completed each year by you and several elements that your supervisory team need to complete. The University Policy on Progress and Review of Postgraduate Research Students is set out at:

http://documents.manchester.ac.uk/DocuInfo.aspx?DocID=612

More information about eProg is available in the SoSS PGR Study Handbook: http://www.socialsciences.manchester.ac.uk/intranet/pg/handbooks/

## **Research Proposal and its Evaluation**

At the end of Year 2 of the Economics PhD/MRes- programme PhD-students need to submit a written research proposal for evaluation by the external examiner to the supervisory team.

#### What Constitutes a Research Proposal?

A written document constitutes a research proposal if it fulfils a minimum set of criteria:

- It articulates the basic research questions to be addressed and explains how these questions relate to the extant literature in this area.
- It explains the methods used to answer the research questions.
- It describes any software required for the analysis.
- It demonstrates the availability of any data needed for the empirical analysis, if this applies.

The Research Proposal would ideally run to 20-30 pages and should not exceed 40 pages.

## **Timeline for Preparing the Research Proposal**

As the research proposal forms a significant component of your Year 2 training, you should be meeting frequently with your supervisory team to discuss your research ideas. Such meetings should start immediately after the registration week into Year 2 of the programme.

In Year 2, you will also have the opportunity to discuss your research proposal in the ECON80060: Research Skills for Economists course unit. This is a year-long core unit consisting of practical exercises, presentations and an essay. The essay and presentations relate to your intended research; hence, they lead naturally into the research proposal. This means that, during semester 2 of Year 2,

you will already start working on details and content of your research proposal as part of ECON80060.

Your aim should be to have a first version of your research proposal ready by the beginning of May in Year 2 of the Economics PhD/MRes-programme. This version shall be circulated to your Supervisory team for feedback. Following the discussion and feedback from your supervisors, you continue working on the proposal and a final version of the research proposal is provided to your supervisors by beginning June.

Once your supervisors approve the research proposal it will be submitted to an external evaluator, chosen by your supervisory team. Subsequently, you give a presentation of the research proposal to the external evaluator and your supervisory team. The external evaluator will assess the quality and feasibility of your research plans and whether, if completed, it would form the basis for a PhD in Economics.

### **Evaluation Procedure of the Research Proposal**

The following process is used to evaluate your research proposal:

- During Semester 1 of Year 2, the student meets regularly with their supervisory team to discuss research questions and details of implementing these.
- During Semester 2 of Year 2, the student writes up the research proposal and submits it for feedback to the supervisory team. A deadline set for the beginning of May should be aimed for.
- Following feedback and revision of the research proposal, the supervisors are asked to approve the proposal. The supervisors, who are responsible for making arrangements for an external evaluator, will inform the PhD-student about these arrangements, so that the research proposal can be submitted to the external evaluator by mid June.
- Normally, one week after the submission of the research proposal, the external evaluator and the supervisory team are given a presentation of the research proposal by the PhDstudent.
- By end June the external evaluator submits a research report that assesses the feasibility of the research plan and whether, if completed, it can form the basis for a PhD in Economics.
- By beginning July the Research Degree Review Panel meets to decide on progression of students. All PhD-students will then be informed about their progression status.
- If the research proposal is not deemed to be of a satisfactory standard in June/July, the PhDstudent may, in exceptional cases, be granted a further period to revise/improve the research proposal.

## **Seminar Series**

Economics at Manchester runs two tiers of seminars. The RAG series seminars run on weekly during term time on Tuesdays, Wednesdays and Thursdays, and the DA-wide seminar series is held Wednesdays, normally four times per academic year.

All students in Years 2-4 are expected to attend the RAG-seminar series of the RAG they are associated with. This, usually, is the RAG-series organised by the group where your main supervisor belongs. All students in Years 2-4 are expected to attend the DA-wide seminars. Further, PhD-students in Year 1 are invited to attend their RAG's seminar series and the DA-wide ones. You are also welcome to attend any of our seminar series.

In Years 3 or 4 you will be given the opportunity to present your research to your RAG. Our expectation is that you will present your work at least once during your PhD-study in one of our seminar series.

More about our seminar series can be found on: <a href="http://www.socialsciences.manchester.ac.uk/disciplines/economics/research/workshops/">http://www.socialsciences.manchester.ac.uk/disciplines/economics/research/workshops/</a>

## **PhD-Students Conference**

Every year, usually at the beginning of May, the Economics PhD-students organise their own conference. Attendance at these conferences is compulsory for year 2-3 students, but we hope that also year 1 students will attend. Year 3 PhD-students are responsible for the organisation of this conference. All students in Years 3&4 will present their research at the annual PhD-student conference.

Occasionally we organise this conference together with other students from the NWDTC. For example, during 2013/14 the conference will be organised by and held in Manchester with all PhD-students from the Economics Pathway of the NWDTC. To obtain an impression of the programme and to have a look to past PhD-student conferences please go to:

http://www.socialsciences.manchester.ac.uk/disciplines/economics/postgraduate/phd/conference/

## **Discussion Papers**

Depending on your research progress, during Year 3 or 4 you may wish to publish some of your research findings in order to disseminate your work widely. The Economics DA can facilitate this process as it has its own Discussion Paper Series. Publication of your work in the Economics Discussion Paper (EDP) series can only be made through your PhD-supervisors.

More about EDP is found at: http://www.socialsciences.manchester.ac.uk/disciplines/economics/research/discussionpapers/

## **Conference Attendance/Research Expenses**

We encourage you to submit your research papers to national or international conferences. When your paper is accepted, the Economics DA can, up to certain limits set by the University, usually cover expenses incurred in excess of your own research budget. During your PhD-training, at most

one national and one international conference can be supported by the Economics DA. Sometimes, attending a workshop instead of a national conference may be allowed, upon approval by your supervisory team.

If you require financial support for conference attendance, then you need to:

- Discuss this with your supervisory team (usually during the mid-year or and of year progress review meetings) to obtain approval for attending an appropriate conference.
- Submit Travel request to the Economics PGR-Director.
- Obtain full or partial cost approval from the Economics DA (from the PGR-Director).
- Note that funding availability will depend on funding reserves of the Economics DA, and we may not always be able to cover expenses.

Please discuss these and all other expenses related to your research (such as specialised software or extra hardware requirements) with your supervisory team and the PGR-Director (in that order) before committing to any expenses, and use the online application form at:

http://www.socialsciences.manchester.ac.uk/intranet/pg/phdexpenses/

## **Your Presence on the Economics Web Page**

All PhD-students in Economics are required to provide us with information and material about their qualifications, research interests and other relevant information (such as further studies, research papers or TA-activity) to be used for generating your own entry on the current PhD-students in Economics web-page.

You are asked to submit this information in electronic format to the Economics PGR-coordinator as soon as possible after registration into Semester 1. In subsequent years we will ask you to update your information regularly, in order to reflect your current achievements, conference participation or additional qualifications. This web-page is, in some sense, an opportunity to present yourself as forthcoming researcher to interested parties outside Economics at Manchester. You can also provide a link from here to your own personal web-page. For examples of PhD-student web-pages, please see: www.socialsciences.manchester.ac.uk/disciplines/economics/postgraduate/phd/

## **Job Market Support**

Every year, halfway into Semester 1, the Economics DA provides some resources to support students going to the job-market. These include introductory talks on the UK and US job-markets, aimed at Year 3&4 PhD-students but open to all PhD-students, and interview practice to those who are active on the job-market.

Information about these resources will be provided to you by e-mail after registration.

## **Generic and Transferrable Skills**

The Faculty of Humanities is responsible for providing you with information regarding the Generic and Transferrable Skills training. This training is Compulsory for all students in Economics. You are advised to attend the induction talks held in the registration week and the immediately subsequent week (see above under "Registration Week" for details on induction courses).

Further details can be obtained at:

http://www.humanities.manchester.ac.uk/postgraduate/research/skills/

## **Personal Development Plans**

A Personal Development Plan (PDP) is a formalised process of individual reflection, planning and recording your own research progress during the PhD-training period. Such planning is supported by online skills audits, formal review meetings with your supervisory team, individual records of your informal meetings with supervisors, own records of achievements, and personal reflection on your progress. The entire process is facilitated via eProg.

See also the "Researcher Development Planning" section in the SoSS-PGR-handbook: http://www.socialsciences.manchester.ac.uk/intranet/pg/handbooks/

## **General Advice/Grievance**

If you have any questions regarding:

- Academic Advice: Please consult with your PhD-supervisors.
- PhD/MRes-programme: please consult with the Economics PGR-Coordinator or the Economics PGR-Director.
- Administrative queries: please consult with the PGR-Administrator.

If you have any grievance the please contact us strictly in the following hierarchy:

- 1. Your Supervisor
- 2. Economics PGR-Coordinator
- 3. Economics PGR-Director
- 4. HoDA-Economics
- 5. SoSS PGR-Director.

## **Exam Invigilation Opportunities**

PGR/MRes Economics students can apply to be an Exam Invigilator for the Exams Office at both the January and May-June examination periods. This opportunity, however, is limited for students in years 3 and 4 of their studies and is available for undergraduate examinations only. Interested students should:

- 1. Obtain a written permission from their supervisory team,
- 2. Inform and consult the PGR Economics coordinator (Dr Kyriakos C. Neanidis), and
- 3. Contact Ms Kerry Mycock (<a href="mailto:kerry.mycock@manchester.ac.uk">kerry.mycock@manchester.ac.uk</a>) of the Directorate for the Student Experience for more details and Application and Availability Forms.

## **Important Web Pages**

In addition to the links to web pages provided in the main text, the following list of useful web pages is presented in alphabetical order:

**Economics DA:** 

http://www.socialsciences.manchester.ac.uk/disciplines/economics/

**Economics Network UK:** 

http://www.economicsnetwork.ac.uk/

**Economics PhD-site:** 

http://www.socialsciences.manchester.ac.uk/disciplines/economics/postgraduate/

**Economics Staff-List:** 

http://staffprofiles.humanities.manchester.ac.uk/StaffList.aspx?ou=I4035

Economics PhD-student Research Support Application:

http://www.socialsciences.manchester.ac.uk/intranet/pg/phdexpenses/

Faculty of Humanities PGR-site:

http://www.humanities.manchester.ac.uk/researcherdevelopment/PGR/index.html

North-West Doctoral Training Centre:

http://www.nwdtc.ac.uk/index.html

Royal Economic Society:

http://www.res.org.uk/view/index.html

### SoSS-student intranet:

http://www.socialsciences.manchester.ac.uk/intranet/pg/