

**Programme Specification**

GENERAL INFORMATION	
Programme title	MRes (PG Dip / PG Cert) Advanced Quantitative Methods in Social Sciences
Awarding Institution//Body	University of Bath
Teaching Institution	University of Bath
Programme accredited by (including date of accreditation)	Recognised pathway of the ESRC-funded South West Doctoral Training Partnership (SWDT...
Subject Benchmark Statement*Subject Benchmark Statement:	n/a
Date of Specification preparation/revision	
Applicable to cohorts	
Programme Approved by	

Synopsis and academic coherence of programme

The overall objective of this MRes is to develop a systematic understanding and critical appreciation of alternative approaches, methodologies and paradigms of research in social science. In addition, some awareness of the application of these approaches in the specific areas of social, educational and political enquiry in which students are specialising, and some ability to identify and investigate their own original research questions will be outcomes of the training.

The goal of the MRes is to develop fully trained and competent social science researchers, able to understand and use research techniques appropriate to their subject area and conversant with approaches used by other social scientists. The programme has a substantial theoretical and quantitative core but also delivers complementary qualitative training, providing an essential basis for any working researcher, whether they are going on to do a (separate) PhD or otherwise engaged in research. The training aims to enable students to think through how they can use their knowledge and skills of advanced quantitative methods in different contexts and apply them to a variety of problems; and, progressively, to identify their own needs for training. For students wishing to go on to study at PhD, the MRes programme is designed to provide high quality training, both to enable them to carry out their doctoral research and to equip them to pursue other professional research activities subsequently.

This new MRes programme for 2017-18 will join a suite of interdisciplinary programmes as part of the Economics & Social Research Council South West Doctoral Training Partnership (ESRC SWDTP), a joint initiative between three universities - Bath, Bristol and Exeter. By partnering with Bristol and Exeter in the delivery of this MRes, additional expertise in particular advanced quantitative methods is made available to Bath students, significantly extending the range of opportunities for cross-institutional interdisciplinary study.

This is a stand-alone programme, totally separate to any PhD programme that some students may subsequently take. Students may take this programme on a self-funded basis, with no intention to continue to a PhD, or may obtain funding from a wide variety of funders. However, if applying for an ESRC studentship (through the SWDTP), MRes funding can only be obtained if they are also funded to go on to take their PhD (known as the '1+3' funding).

The AQM in Social Sciences MRes provides a vibrant environment for training in quantitative social science methods, and equips students with the skills to become trans-disciplinary future leaders in innovative social science research. Students are trained in state of the art techniques used in the analysis of social science quantitative data.

The course is delivered collaboratively with Bristol and Exeter. One core unit in each semester is taught intensively over three full-days, with time spent at each location. The first collaboratively delivered unit "Research Design Methods & Skills for AQM" provides the philosophical underpinning of social science enquiry, introducing the epistemological and methodological traditions in social science research and mapping the social science research space, particularly highlighting the range of quantitative methods used. The unit will also provide practical skills for designing and managing a research project.

The second collaboratively delivered unit "Mathematics and Programming Skills for Social Scientists" is designed to provide the essential mathematical skills needed to solve various types of data analysis problems and to introduce the software with which these can be solved within research contexts. The collaborative delivery of this unit will allow specific expertise from academics at each institution to be made available to students from all three universities, enhancing the training capacity of each

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In addition to the core collaboratively delivered units, two further compulsory units, one in each semester (AQM1 and AQM2), provide the core training in a range of quantitative techniques used across the social sciences. Experience of practical research planning and execution is delivered via the short and long research apprenticeship projects in semesters 1 and 2 respectively along with the dissertation. One other compulsory unit provides training in qualitative research methods, to complement the main quantitative focus. In addition, in each semester one optional unit must be taken from the range of quantitative MRes level units provided across the faculty. All MRes optional units at Bristol and Exeter will also be available as optional units to Bath students, though registration on these units will be subject to timetabling suitability.

Structure and Content:

The full programme comprises two stages: Stage 1 comprises the taught units and Stage 2 the Dissertation stage. Details of unit contents for units delivered by the University of Bath can be found from the Unit Catalogue at <http://www.bath.ac.uk/catalogues/other.html> - please note that these are updated in July each year with the information for the following academic year.

PG Certificate and PG Diploma qualifications exist as components of the full Masters' programme.

Study is on a **one year full-time basis** or a **two-year part-time basis** (allowing three months for the final dissertation). However, at the discretion of the Director of Studies (DoS), p/t students may be able to have an extension of three months (giving a total of six months for the dissertation and an overall total registration period of 27 months). Specifically:

- **Full-time students** take the taught stages over two semester, with the dissertation over the following summer, submitting their dissertation (typically) around mid-September.
- **Part-time students** : the pattern of study in terms of units to be taken in years one and two will be decided on an individual basis by the Director of Studies in discussion with the student. In principle students should complete as many of the compulsory units as possible in the first year of studies so as to provide the core knowledge for the programme, typically taking two or three units in each semester in each year, and aiming to complete 30 credits in the first year and 30 in the second year. Certain units have prerequisites, e.g. AQM 1 (Experimental and Quasi-experimental Quantitative Methods for Social Science) must be taken before AQM2 (Advanced Modelling Techniques for Social Science), Qualitative Methods 1 will need to have been taken before Qualitative Methods 2 , the Short Research Apprenticeship Project must precede the Long Research Apprenticeship Project. Unit details including any prerequisites can be found in the Unit Catalogue (<http://www.bath.ac.uk/catalogues/other.html>). Optional units will largely be taken in the second year, along with any outstanding compulsory units. It should be noted that timetabling constraints may also dictate the order in which units can be taken. There is some flexibility with the aim of providing a balanced workload from year-to-year. Students then take their dissertation over the summer of the second year with the possibility of an extension of registration into the third year.

Some units include students from other programmes, encouraging multi-disciplinarity and sharing of experiences between subjects.

Educational aims of the programme

The MRes Programme has four broad aims guided by a strong emphasis on the provision of broad-based social science research training that equips researchers with the skills to manage a successful research career and/or to contribute to the wider society in other ways.

Delivery of the skills required under the ESRC PG training guidelines is also of key importance - see <http://www.esrc.ac.uk/files/skills-and-careers/studentships/postgraduate-training-and-development-guidelines-2015/>:

1. to review systematically, and to evaluate critically, alternative approaches, methodologies and paradigms of research in social science enquiry;
2. to review systematically, and to evaluate critically, the application of these approaches in the specific areas of social science enquiry in which students are specialising;
3. to support students, within an active research community, in identifying and investigating their own original research questions;
4. to equip students with the skills to contribute to research projects using any of the main methodologies of the social sciences.

The PG Certificate focuses principally on (aim 1), the PG Diploma gives additional scope for appreciation and application of different methodologies of research in the student's specialist field (aim 2); The MRes involves a dissertation which meets (aim 3) on a still more substantial scale. Aim 4 is required for all levels increasing from the PG Certificate to the PG Diploma and the MRes, as a progressively wider range of research methodologies and their applications is critically reviewed.

The MRes in Advanced Quantitative Methods in Social Sciences also aims to

1. Strengthen the training in and understanding of quantitative research methods for students in the social sciences within an interdisciplinary setting.
2. Equip students with the numeracy, applied statistical and data handling skills sought by employers and required as preparation for doctoral study.
3. Equip students with the technical understanding of a range of quantitative techniques and the practical software/programming skills to implement these methods to address their own research questions.
4. Develop an ability to understand and use a range of quantitative research techniques appropriate to their subject area, whilst also being conversant with and sympathetic to other methodological approaches within the social sciences.
5. Provide opportunity for students to undertake advanced quantitative methods training at a Masters level, providing a pathway towards doctoral research.

- Knowledge & Understanding:

	<p>All Students will:</p> <ol style="list-style-type: none"> 1. understand the basic principles of research design and appreciate multiple alternative approaches to research questions; 2. understand the significance of alternative epistemological positions that provide the context for theory construction, research design and the selection of appropriate analytical techniques. 3. understand the theoretical and data structure assumptions underlying a range of advanced quantitative methods; 4. understand the appropriate contexts for different analytical techniques and their limits. 5. acquire knowledge of and competence in the use of advanced quantitative techniques drawn from a range of social science disciplines. <p>For PGCert 1-4 will be covered and 5 partially covered.</p>
<ul style="list-style-type: none"> • Intellectual Skills: 	<p>All Students will:</p> <ol style="list-style-type: none"> 1. define researchable problems and formulate questions and hypotheses; 2. understand the relationships between, and the rationale for, particular qualitative and quantitative research methods and be able to select appropriate strategies for research and/or evaluation; 3. understand the role of sampling and the relationship between sampling and theory generation; 4. understand and apply concepts of generalisability, validity, reliability and replicability from a variety of standpoints; 5. acquire skills in specific data analysis methods and tools, including appropriate computer packages; 6. be proficient in using data from large scale surveys and qualitative data sets; 7. be able to construct new data sets; 8. be competent in descriptive and inferential statistics and be able to use, model and interpret multivariate statistical data; 9. be able to carry out high quality and informed research independently; 10. be able to communicate research to specialist and non-specialist audiences; 11. acquire other relevant skills for the critical evaluation of evidence; 12. assess the outcomes of interventions reported by governments and other organisations in their chosen fields of specialisation. 13. be able to critically evaluate research findings in the literature employing a variety of advanced quantitative methodologies; 14. be able to formulate the appropriate quantitative research approach for a given research question; 15. be able to critically evaluate and interpret their own research findings using advanced quantitative methods and refine research in light of findings. <p>For MRes and PGDip only:</p> <ol style="list-style-type: none"> 16. Be competent in questionnaire design, interviewing and survey design, the interpretation of measurement error, and data gathering through the Internet; 17. be competent in methods of recording, analysing and interpreting qualitative data, including observation and the interpretation of text; 18. appreciate the strengths and weaknesses of data from primary and secondary sources, and be able to select relevant information and data sources; 19. be competent in critically evaluating the collection, analysis and interpretation of qualitative data using a variety of techniques; 20. be competent at implementing a range of advanced quantitative methodologies using a variety of appropriate computer packages including Stata, R, MLWin, and Python; 21. be able to carry out high quality and informed research independently; <p>For MRes only:</p> <ol style="list-style-type: none"> 22. be able to critically evaluate and interpret their own research findings using advanced quantitative methods and refine research in light of findings.
<ul style="list-style-type: none"> • Professional Practical Skills: 	

	<p>All Students will:</p> <ol style="list-style-type: none"> 1. acquire bibliographic skills, enabling them to identify and use library and other bibliographic resources and maintain a personal research bibliography; 2. acquire basic computing skills including word processing, spreadsheets and database management; 3. be able to evaluate research, including undertaking refereeing and book reviews; 4. understand issues posed by social research in relation to ethics, confidentiality and legality (including intellectual property rights), and acquire the skills needed in order to respect, consider and attend to the rights of other researchers and research participants; 5. understand the role of data from large scale surveys in public and commercial life; 6. acquire language skills where appropriate; 7. be able to work in team based research contexts; 8. understand the requirements for and be able to engage with policy focussed research; 9. be familiar with the format and mechanisms for the dissemination of research through relevant professional bodies, including conference papers, posters and journal articles, and the process of peer review; 10. understand the principles of policy-relevant research – including the development of evidence-based policy; 11. develop good communication skills when delivering material to inter-disciplinary audiences. 12. be able to communicate complex quantitative methods to a lay audience with policy or societal focus; 13. understand the importance of good work-flow and analytical implementation.
<ul style="list-style-type: none"> • Transferable/Key Skills: 	<p>All Students will:</p> <ol style="list-style-type: none"> 1. develop writing, presentation and dissemination skills, including Internet-based tools; 2. be able to apply and use knowledge and skills in different research or policy contexts; <p>MRes and PGDip only (partial attainment of 6-9 for PGCert):</p> <ol style="list-style-type: none"> 3. develop competency in the presentation of research findings to practitioners and lay audiences; 4. have advanced understanding of research communication and dissemination; 5. develop research leadership skills; 6. develop an understanding of how the media communicates specialist material to lay audiences, and the skills required to engage with the media, such as writing press releases and being interviewed; 7. develop research management skills, including the development of research proposals for external funding, time and resource planning and monitoring, archiving of data and completion of end-of-award reports to sponsors; 8. develop skills in effective team working through collaboration in projects; 9. develop career management skills, including skills in using new technologies for obtaining information about new career opportunities, skills in networking and negotiation, evaluation of personal and career development needs, self-promotion and marketing.
Summary of assessment and progression regulations	
NFA - fully compliant	
Progression Regulations and Awards	
<p>The Assessment & Progression rules are governed by the University's 'New Framework for Assessment: Assessment Regulations (NFAAR)' (see http://www.bath.ac.uk/registry/nfa/nfaar-pgt.pdf). Specific regulations for the masters are summarised in Appendix 11 at http://www.bath.ac.uk/registry/nfa/nfaar-pgt-appendix-11.pdf (see Appendices 12 and 13 for the PGDiploma and the PGCertificate regulations).</p> <p>Pass Marks and Marking Schemes</p> <p>The pass mark for all assessments at the University of Bath is 40%, while marks of 60% to 69% indicate merit-level work and 70% or more indicate distinction-level work. However, for those students taking a unit delivered/marked by Bristol of Exeter, a different marking scale is used, such that their pass marks are both 50%. However, it is important to recognise the following:</p> <ul style="list-style-type: none"> • the standard of work required to pass is exactly the same as at Bath such that a piece of work achieving a bare pass of 40% at Bath would receive the bare pass of 50% at Bristol or Exeter (it is simply that the marking schemes are calibrated differently). • Merit- and Distinction-level work will receive the same marks at the three universities such that work receiving 60% at Bath will also receive 60% at Bristol or Exeter). • (in the case of a Bath student), once work has been marked by Bristol or Exeter (using their marking scheme), marks will be scaled to 'as if they had been marked using the Bath marking scheme'. This will enable Overall Stage Averages (used by Boards of Examiners to determine progression and awards decisions) to accurately reflect a uniform marking scheme (and not to be 'inflated' by outcomes expressed under the Bristol/Exeter marking schemes). <p>A set of common descriptors (known as the MRes Marking Scheme) is used for all core units. All assessed work will be marked by a lecturer and, apart from the Dissertation, a sample of work* will be moderated by an internal moderator (normally the other Unit Coordinator). All Dissertations will be marked by the dissertation supervisor and blind marked by a second marker from within the University. A sample of assessed work for all units and the Dissertation unit will be sent to the External Examiner.</p>	

Details of Work Placements Requirements / Work Based Learning / Industrial Training Requirements

A work placement is a *possible* optional component, taken during stage 2 (dissertation) during the summer. The placement is not assessed, and does not count towards the final award. Instead, it provides valuable experience to students, and it may or may not be linked to a previously agreed dissertation topic. All placement students must have a named placement manager within the host organisation and be in contact by e-mail with a placement tutor at the University who usually also acts as their dissertation supervisor.

The SWDTP employs a Collaboration Facilitator to assist SWDTP-funded students in identifying and developing external-engagement type activities: whilst most students will take placement activities later during their PhD (i.e. a separate programme to the MRes), occasionally MRes students may also incorporate such activities during their taught programme.

Students also receive subject-specific support/guidance from their Director of Studies and/or their academic supervisor. Where placement entails work experience incidental to the programme, the Director of Studies may grant extensions to deadlines (usually dissertation) if this is considered appropriate. However, where the placement is closely aligned with the dissertation, an extension may not be necessary.

All students on placement will be given appropriate preparation and training. This may include ethics support, risk and safety assessment, and language training.

Exact timings of placements will depend on the programme (and the availability) and may fall either during the MRes itself (typically in the summer after the taught component but before or during the dissertation) or later during the PhD phase (in the case of students taking the MRes as a step onto the PhD).

Details of Study Abroad Requirements

Details of Professional Accreditation

The programme is awaiting accreditation by the Economics & Social Research Council, specifically, as part of the larger South West Doctoral Training Partnership (ESRC SWDTP)*.

[subject to accreditation, announcement due September 2016, as one of up to 15 ESRC-funded DTP's in the UK. The SWDTP is a joint initiative between three universities - Bath, Bristol and Exeter, with University of Plymouth and University of the West of England.].*

The ESRC's accreditation of Masters courses and outlets is part of its quality assurance procedures and is designed to ensure that students funded by the ESRC receive high quality training, supervision and support in an active research environment. The core requirements for ESRC recognition are detailed in the Postgraduate Training Guidelines

(<http://www.esrc.ac.uk/files/skills-and-careers/studentships/postgraduate-training-and-development-guidelines-2015/>)

Admissions Criteria including APL/APEL arrangements

1. Students should normally have a 2.1 or above in a first degree with substantive quantitative elements, for example any Q Step programme, (note: substantive is normally considered as at least 30 ECTS plus a quantitative dissertation).
2. A strong command of spoken and written English is required for all candidates. Those who have not undertaken a first degree delivered in English will be expected to achieve:
 - IELTS 6.5 (with not less than 6.0 in each of the four components), or
 - PTE Academic of 69 with no less than 62 in any component
3. Accredited Prior Learning or Accredited Prior Experiential Learning (APL or APEL) - exemptions may be offered for up to 12 credits of the Certificate, 24 credits of the Diploma and the MRes programmes, taking account of a student's previous academic and/or experiential learning.
4. A student who has already been awarded the University of Bath PG Certificate in Research or PG Diploma in Research within the particular discipline (within five years of initial registration) may be admitted directly onto the next Stage of the programme, subject to agreement by the Admissions Tutor, payment of the necessary fees and rescinding the previous certificate.

All decisions are subject to agreement by the Director of Studies/Admissions Tutor.

Details of Support Available to Students

Support services offer information, advice and support in relation to accommodation, emotional difficulties, assessment of needs and provision of support relating to disability, student funding, general welfare, academic problems, student discipline and complaints, careers, international students, spiritual matters, part time work, security and personal safety. The Students' Union can also provide advocacy for students. More information about these services can be accessed via: <http://www.bath.ac.uk/students/support/>. There are also Medical and Dental Centres, and a Chaplaincy on campus that are very experienced in meeting the needs of a student population, as well as a University nursery and vacation sports schemes are sometimes available for older children during the school holidays.

Extensive library, including 24-hour access to computers, the web and many on-line journals and databases.

High class sports and arts facilities enable students to develop themselves in an all-round manner. There is a Health Centre which includes dental services and a Chaplaincy centre.

Department and Programme Specific Support Information

- Initial induction programme to clarify expectations, identify computing training needs, brief students on available learning resources, strengthen group identity and reflect upon diverse learning styles.
- Detailed programme handbook and outlines for each Unit.
- Each student has a home department and a personal tutor. The personal tutor will meet frequently with the student, to review progress during the Master's. Where student's might be progressing to a (separate) PhD, the personal tutor *may* also facilitate the transition from MRes to MPhil/PhD. Access to a wide range of additional staff within the Faculty able to assist in more specialised areas. Staff in these roles will be able to respond to many of the questions and concerns raised by their students. However, there is also a range of specialist student support services that will offer both information and advice to support these staff working with their students, as well as take referrals to work more directly with the students. Students can also self-refer to these services.
- Membership of a wider academic community (through seminars and social activities) for those engaged in applied social science research and study.
- Student internet communications and VLEs.
- Mutual support among those enrolled together on the programme is also very important, and students are encouraged to develop this, particularly during the induction phase and quarterly organised student lunches.
- In the case of jointly-delivered core units which necessitate travelling to other university campuses (UoBristol or UoExeter), daily travel expenses (from the UoBath) would be reimbursed to students.
- Graduate School website at <http://www.bath.ac.uk/hss/graduate-school/>.