PROGRAMME SPECIFICATION **(Taught Postgraduate)**		Newcastle University

1	**Awarding Institution**	Newcastle University
2	**Teaching Institution**	Newcastle University
3	**Final Award**	MSc
4	**Programme Title**	Quantitative Finance and Risk Management Quantitative Finance and Risk Management (with Study Abroad)
5	**Programme Code**	5173 F, **5488 F**
6	**Programme Accreditation**	N/A
7	**QAA Subject Benchmark(s)**	N/A
8	**FHEQ Level**	Level 7
9	**Last updated**	May 2024

10 Programme Aims

1. To provide learning opportunities which enable course participants to acquire the following:

    a. The capability to understand and analyse the behaviour of international financial markets with a view to employment in this area.

    b. The knowledge, understanding, skills and attributes required for analysing the strategies of investors in financial markets with a view to employment in this area.

    c. The knowledge, understanding, skills and attributes required to use an appropriate programming language for empirical modelling in finance and risk management.

    d. The ability to apply the knowledge, skills and understanding gained on the programme to a specific empirical focus within an individual project or dissertation which will be in the area of quantitative finance and risk management.

    e. The skills necessary to successfully enhance their CPD activity, self-directed learning, or pursue further postgraduate study.

2. To contribute to the University's objectives by increasing the number of graduate students and enhancing their key skills and employability, diversifying the teaching portfolio and developing alternative modes of delivery, and responding to the CPD agenda.

3. To provide a qualification which fully meets the expectations at Level 7 in the Framework for Higher Education Qualification.

4. To provide a programme that conforms to University policies and procedures and the QAA code of practice.

5. Offer students the opportunity to develop graduate attributes which increase employability, particularly communication and (where applicable) language skills, intercultural competencies, adaptability, resilience and global awareness.

6. Gain insight into international Higher Education and experience differences in academic approach and learning environment.

7.	Provide the opportunity to experience new areas of study outside of their usual programme of study at Newcastle University

11   Learning Outcomes

The programme provides students with opportunities to demonstrate disciplinary competency by developing the key principles and theories in their subject area and combines theory with the application of skills required to generate solutions within their discipline.

Knowledge and Understanding

On completing the programme students should:

A1 An advanced understanding of the role of finance in a modern economy.

A2 An advanced understanding of the operation and behaviour of financial markets and investors.

A3 An advanced understanding of current research and scholarship on finance theory.

A4 An advanced understanding of empirical modelling techniques and the MATLAB programming language.

A5 An ability to define the key components of countries' business environment and give examples of how environmental components differ across countries.

A6 An ability to identify ethical problems in a case and make recommendations for appropriate courses of action.

A7 Demonstrate the ability to adapt to different learning environments and cultures

Teaching and Learning Methods

The primary means of imparting knowledge and understanding is a combination of lectures (A1-6), a variety of different seminar modes (A1-6), supervision in the development of project proposals (A1-6), and tutorial supervision of a dissertation (A1-6). Each seminar mode is interactive and student-focused, including discussion of taught and read material (A1-6), individual and group projects (A1, A2, A4, A5, A6), and practical projects (A1, A2, A4, A5, A6).

As this will be essentially a conversion programme there will be a heavy emphasis on the taught components, however throughout the taught components of the course, students are encouraged and expected to engage in independent reading and are supported in this by the provision of extensive and prioritised reading lists.

Students are enabled to learn through their active participation in the different modes of course seminar (A1-6), group project work (A1, A2, A4, A5, A6), and through the supervision given to individual project work (A1, A2, A4, A5, A6).

Assessment Strategy

Knowledge and understanding are assessed by a range of approaches, chosen to accurately assess student capabilities. These comprise essays (A1, A2, A4, A5, A6), individual and group project reports (A1, A2, A4, A5, A6), a literature review and research proposal (A1, A2, A4, A5, A6), individual presentations (A1, A2), and formal seen and unseen exams (A1-6). Some, or all, of A1-6 (depending upon the topic), but especially A3, are also assessed by means of a dissertation.

Intellectual Skills

On completing the programme students should be able to:

    B1 The ability to critically engage with contemporary debates on important issues related to the operation of financial markets.

    B2 The ability to critically engage with contemporary debates on the role of empirical research on the efficiency of financial markets.

    B3 The ability to critically evaluate current research and scholarship on finance theory.

    B4 The ability to deal with complex issues both systematically and analytically, and to use the analysis to make sound judgements.

Teaching and Learning Methods

Cognitive skills are developed through seminar discussion groups (B1-4), short individual projects (B1, B2, B4), and group projects (B1-4).

All the cognitive skills (B1-4) are exercised significantly at an advanced level during the preparation and execution of the dissertation, supported by the module *Research Methods*, and tutorial supervision for individual students.

Assessment Strategy

Knowledge and understanding are assessed by a range of approaches, chosen to accurately assess student capabilities. These comprise essays (B1, B2, B4), individual and group project reports (B1, B2, B4), a literature review and research proposal (B1, B2, B4), individual presentations (B1, B2), and formal seen and unseen exams (B1-4). Some, or all, of B1-4 (depending upon the topic), but especially B3, are also assessed by means of a dissertation.

Practical Skills

On completing the programme students should be able to:

    C1 The ability to deploy the main analytical techniques in the area of finance and an advanced capability with some of these techniques.

    C2 The ability to critically assess the quality of the analytical data generated by these techniques, and to synthesise and present relevant data, conclusions and recommendations to both specialist and non-specialist audiences

    C3 The ability to apply advanced empirical modelling techniques and the MATLAB programming language.

    C4 The ability to apply, with originality and creativity, the knowledge, skills and understanding gained on the programme to complex issues within the finance and related industries.

    C5 Where relevant, numeracy by applying appropriate computational techniques to solve numerical problems in their discipline.

Teaching and Learning Methods

Subject specific and practical skills are taught through lectures and seminars (C1-5), supervision of the development of individual and group projects (C4). Apart from the lectures, all of these teaching methods are also designed to further enable student learning

and to complement their independent study and group-work. Such learning is reinforced and further developed as students apply their new skills in their dissertation (C1-5) under the guidance of their supervisor.

Assessment Strategy

Subject specific and practical skills are assessed by means of short individual project reports (C1-3, C5), short group project reports (C1-5), individual audio-visual presentations with accompanying notes (C2), essays (C1, C2), exams (C1, C2, C5), and the literature review and project proposal for *Research Methods* (C2, C4, C5). Some, or all, of C1-5 (depending upon the topic) are also examined by means of a dissertation. A feature of the programme is the use of mid-term assessments to permit the students to receive early feedback on their progress.

Transferable/Key Skills

On completing the programme students should be able to:

D1   The ability to communicate clearly and concisely to both specialist and non-specialist audiences using the appropriate written, verbal and audio-visual channels.

D2   The ability to exercise responsibility and leadership in group projects.

D3   The ability to appropriately use library and information sources, and IT resources and applications.

D4   The ability to organise and prioritise work activities and manage time effectively.The ability to work independently with professional responsibility, creative initiative and originality and in groups contributing appropriately and effectively towards the team based activity.

D5   Adapt and operate in a different cultural environment

Teaching and Learning Methods

Some key skills are formally taught in specific modules (D1-D3). They are also taught informally as an additional outcome of those teaching methods focused on group-work (D3-4), and the preparation of short Briefings (D1, D2). To promote learning, students are encouraged to acquire, develop and utilise key skills in seminars involving individual and group projects – with both audio-visual presentations and written reports (D1, D3, D4) – and individual and group projects requiring information search, analysis and interpretation (D2, D3). Planning, organisation and prioritisation and effective time management (D3) are promoted by means of a strictly enforced coursework submission timetable. Opportunities for the students to develop key skills exist in each of the components of the dissertation and associated supervision: identification of issue and construction of research plan (D4), literature review and method development (D2, D4), primary and secondary research (D1-4) and analysis and final write-up (D1-4)

Assessment Strategy

Key skills are not independently assessed. However, all the key skills (D1-4) are indirectly assessed by the main modes of coursework utilised to assess the other learning outcomes (essays, exams, short briefings, individual and group project reports, individual presentations, the literature review and project proposal). Some, or all, of D1-4 (depending upon the topic) are also assessed by means of a dissertation.

12   Programme Curriculum, Structure and Features

Basic structure of the programme

All students take 160 credits of compulsory modules, including the dissertation, and 20 credits of optional modules. An overview of module content is available online at http://www.ncl.ac.uk/postgraduate/courses/degrees/quantitative-finance-risk-management-msc/#modules and further details of the module structure will be given during the first lecture for each module.

Optional international experience – following successful completion of taught elements

Following the completion of all taught elements of the programme, registrants will have the option to undertake one additional semester of study with an existing NUBS partner institution. The exchange period will begin in late September/early October (depending on the destination institution) following the submission of the dissertation. Students participating in an exchange will be instructed to select partner modules which will add value to their NUBS degree, focussing on subjects that will enhance their graduate employability prospects

Key features of the programme (including what makes the programme distinctive)

The Business School's MSc Quantitative Finance and Risk Management (QFARM) programme builds on the School's established strengths in economics and finance and has been created in response to the increased growth of the financial services sector. Worldwide growth in the sector has furthered the demand for students with specialist skills and competencies in finance and risk management. Closely related to the School's MSc Finance and Banking and Finance programmes, the QFARM degree features compulsory modules in Risk Modelling and MATLAB for Finance. The MSc QFARM programme is particularly aimed at those interested in pursuing a career as a quantitative analyst in the investment banking and risk management sectors.

The program has many distinctive features including a mix of compulsory and optional modules, and a supervised dissertation. The programme also offers participants the opportunity to enhance their graduate employment prospects by improving their intercultural understanding and communication skills by offering an optional semester exchange abroad at one of NUBS' existing partner institutions.

Programme regulations (link to on-line version)

5173 Programme Regulations 24-25

13   Support for Student Learning

Generic information regarding University provision is available here.

14   Methods for evaluating and improving the quality and standards of teaching and   learning

Generic information regarding University provision is available here.

Accreditation reports
None.

Additional mechanisms
None

15	Regulation of assessment

Generic information regarding University provision is available here.

In addition, information relating to the programme is provided in:

The University Prospectus: http://www.ncl.ac.uk/postgraduate/courses/

Degree Programme and University Regulations: http://www.ncl.ac.uk/regulations/docs/

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