School of Mathematical Sciences
Graduate Attributes and Employability Strategy

1 Graduate Attributes and the Curriculum

We will provide:

- a degree programme curriculum where there are opportunities to develop graduate attributes and other skills useful for students’ future employment
- accredited degree programmes in statistics

We ask you, our students, to:

- engage fully in your degree programme learning
- identify where in your degree programme the opportunities for developing graduate attributes occur and engage fully in these learning activities

Improvements we plan to make include:

- Modifying our actuarial and financial module syllabuses so that students gain exemptions from professional actuarial and accountancy examinations more easily
- Improving the information about learning outcomes and graduate attributes on our School website
- Reviewing the programmes we offer to ensure that students develop skills continuously throughout their degree programmes
- Developing our work from the Communication Skills project and MTH5117 Mathematical Writing so as to improve students’ writing and presentation skills in the first year and throughout our degree programmes

Opportunities currently provided for you include:

- Gain analytical problem-solving skills throughout your programme, from Calculus I to Extremal Combinatorics
- Improve your programming and planning skills in MTH4105 Introduction to Mathematical Computing
- Develop as an independent learner and improve your report writing skills in MTH6138 Third Year Project
- Experience teaching secondary school students in MTH6110 Communicating and Teaching Mathematics
- Apply mathematical techniques to real world problems in finance (MTH6100 Actuarial Mathematics), physics (MTH5106 Dynamics of Physical Systems) and pharmaceuticals (MTH6134 Statistical Modelling II)

2 Work Experience

We will provide:

- information on opportunities provided for students to work as ambassadors, tutors and mentors
- reminders of Queen Mary Careers events on the dedicated noticeboard and on School display screens

We ask you, our students, to:

- engage in work experience and other forms of extra-curricular activity from your first year onwards
- take up some of the wide range of opportunities open to you, such as work experience, volunteering, enterprise education and entrepreneurship

Improvements we plan to make include:

- Develop interventions to direct more students to Queen Mary Careers early in their programmes
- Improve our links with industry in research areas such as complex systems and statistics and for our new MSc programme in Mathematical Finance

Opportunities currently provided for you include:

- Work as a student ambassador for the School
- Mentor fellow students through PASS
- Tutor or mentor school students
- Volunteer with QMSU Provide Student Volunteering
- Find a job with help from Queen Mary Careers
3  Personal Development and Employability

We will provide:

- frequent feedback on your academic progress through comments on coursework
- information about support available elsewhere in Queen Mary for personal development

We ask you, our students, to:

- enhance your ability to monitor your own progress in learning and developing skills useful for employment
- sign up to an award or certificate designed to ensure you gain the most from your student experience

Improvements we plan to make include:

- Find out more about how other Schools help students to reflect on their learning and development
- Increase feedback on written English in coursework

Opportunities currently provided for you include:

- Take the Learning Institute’s Drapers Skills Certificate
- Improve your English writing skills with the Language and Learning Unit or start learning a new language

4  Careers Programme

We will provide:

- information about a broad range of careers events in collaboration with Queen Mary Careers
- advice on academic programme and module choices which may affect your career plans

We ask you, our students, to:

- be active in career decision making and preparation for employment – from your arrival at Queen Mary
- attend the careers programme in your school and the College wide activities

Improvements we plan to make include:

- Better publicity about careers and employability development for postgraduate students
- Further development of links between our current students and recent alumni

Opportunities currently provided for you include:

- Learn C++ at our free programming seminar
- Come to our Graduate Attributes Twilight Events to develop your team working and presentation skills
- Attend Queen Mary Careers events such as the Focus on Finance programme or IT & Technology Fair

5  Careers and Employability Resources

We will provide:

- video, book and web resources which explain how mathematics is used and which skills are valued by employers of mathematical science graduates

We ask you, our students, to:

- make employability information work for you, by finding out more about possible career paths
- look at these resources early and plan ahead

Improvements we plan to make include:

- Work with Queen Mary Careers to develop a dedicated Mathematical Sciences site with all our resources
- Create more video profiles and web resources

Opportunities currently provided for you include:

- Read our booklet “Where the maths you learn is used”
- See alumni case studies in “Your career, your future”
- Watch our “Advice from Employers” videos