

## PROGRAMME SPECIFICATION – POSTGRADUATE PROGRAMMES

### KEY FACTS

Programme name	MSc Project Management, Finance and Risk
Award	MSc
School	School of Mathematics, Computer Science and Engineering
Department or equivalent	Department of Electrical and Electronic Engineering
Programme code	PSPMFR
Type of study	Full Time Part Time
Total UK credits	180
Total ECTS	90

### PROGRAMME SUMMARY

Manufacturers of capital goods are rapidly transforming themselves into the providers of services where the function of the capital item is sold rather than the item itself. Major capital projects are also evaluated on the basis of life cycle cost and revenue streams in an uncertain environment. In this changing environment both suppliers and project managers are faced with managing and engineering the uncertainties and risk inherent in the project and designing appropriate financial instruments and tools to optimize the performance throughout the life cycle.

This course provides a basis in risk and decision making under uncertainty, classical engineering economics, and financial engineering for those pursuing a career or planning a career in capital goods or project management. In addition the course provides practical skills in software and communication tools. As a sponsor part time student it is important that the commitment involved is recognised and that occasionally the course must take priority over other things.

#### Aims

1. To allow you to design a scientific and evidence based project management or decision support system in the face of uncertainty using the appropriate analytical, mathematical, probabilistic, statistical and financial tools.
2. To allow you to design effective and appropriate communications techniques to support risk and decision management.

The programme consists of two parts: the taught to be run in the first two semesters of the year and the project, usually carried out during the summer. The taught part provides a range of modules including 4 core modules and 4 option modules each of which carries 20 credit points. The project carries 60 credits.

Running alongside the modules, a rolling programme of one-day events, with key objectives of extending the students' range of presentation, communication, self-assessment, career awareness and team-building skills are scheduled. From 2014,

there will also be a series of Industry Lectures with invited experts from Industry.

### ***POSTGRADUATE CERTIFICATE IN PROJECT MANAGEMENT***

The first exit point is the Postgraduate Certificate in Project Management.

A candidate who successfully completes modules totalling 60 credit points (30 ECTS) with an overall average of 50 or higher, weighted by credit, on these modules and who does not proceed for any reason to qualify for the postgraduate Diploma is eligible for the award of the Postgraduate Certificate. The Postgraduate Certificate does not come with Merit or Distinction.

For those completing the Postgraduate Certificate in Project Management you will be able to examine some theories related to project life cycle, financial risks and planning, and/or decision analysis and synthesis and apply these to management of capital goods and projects which involve uncertainty. You will have critical insight into problems related to risk management, entrepreneurship and financial planning and be able to solve these using mathematical, probabilistic and statistical methods. You will also use a range of techniques to undertake your scholarly work.

### ***POSTGRADUATE DIPLOMA IN PROJECT MANAGEMENT***

The second exit point is the Postgraduate Diploma in Project Management which you are able to achieve through successful completion of 4 core modules EPM944, EPM945, EPM946, EPM947 and two options with totalling 120 credits in the taught component of the programme.

For those completing the Postgraduate Diploma in Project management.in addition to the above specified in Postgraduate Certificate you will explore knowledge related to managing uncertainties and risks, communication skills or leadership or supply chain management from different perspectives to broaden your expertise and skills. You will also evaluate critically current evidence in risk management of capital goods and provide appropriate critiques of knowledge and techniques in relation to risk analysis and financial planning.

### ***MSc IN PROJECT MANAGEMENT***

For the MSc in Project Management, you must in addition to achieving the requirements for the Postgraduate Diploma award in the taught component - complete successfully the Project/Dissertation module EPM930.

The project module provides you with an opportunity to apply the knowledge and skills learned from the taught part of the programme to a practical problem related to project management, risk analysis, financial -planning or entrepreneurship through substantial qualitative and or quantitative analysis. The dissertation writing will help you develop skills for writing an academic report with in depth literature review in the project area,

For those completing the MSc in Project Management, you will demonstrate original application of knowledge to management of capital goods, risk management, supply chain management and financial planning and in choice of approaches to practice. You will be engaged in research or scholarly activity that contributes new views to financial risks in management of capital goods, entrepreneurial behaviour, innovation and leadership, and opportunity recognition.

## **WHAT WILL I BE EXPECTED TO ACHIEVE?**

**On successful completion of this programme, you will be expected to be able to:**

### Knowledge and understanding:

- You will be able to demonstrate structured analytical, rational and quantitative approaches to decision making; and a critical understanding of the appropriateness, strengths and weaknesses of the techniques studied.
- You will develop a practical and critical understanding of the use of software and other tools to support risk and decision analysis.
- You will be able to design a management strategy or project plan exploiting the techniques and reflecting the needs of users and clients.
- You will be able to design appropriate communication techniques and strategies to support the conversation with users and clients.

### Skills:

- You will be able to identify and structure problems in business and industry as the basis for design.
- You will be able to design a solution incorporating the appropriate techniques to manage a project to meet user requirements.
- You will be able to synthesize the communications needs of users and the technical nature of the analysis to promote effective communication at all levels and in diverse situations.
  
- Knowledge of structured Mathematical, Probabilistic, Statistical and Decision making techniques.
- Knowledge of appropriate software and related techniques.
- Problem formulation and design of management systems.
  
- You will gain a broad knowledge of the techniques and methodologies available for quantitative decision making in project management, in particular large scale infrastructure projects.
- You will be able to design technical solutions as a meaningful response to clients' requirements.
- You will be able to carry out an extensive and coherent piece of work synthesizing an appropriate range of techniques and present this in a report.

### Values and attitudes:

- You will have a systematic and rational approach to problem identification and formulation.
- You will use a structured and systematic approach to problem solving.
- You will have an appreciation of the needs of users, clients and problem owners in the decision making process.
- You will recognise the need to translate analytical and mathematical arguments in understandable ways to support user and client needs.

This programme has been developed in accordance with the QAA Subject Benchmark

for generic master's level programme.

### **HOW WILL I LEARN?**

The programme consists of six compulsory taught modules. The modules are presented in block form and the timetable is arranged to allow you as a full time student to complete the course in one year and as a part-time student to complete the course in two years. Each module is presented in an intensive block and supported by guided reading and exercises. Coordinating group activities between the modules will ensure the continuity of the course and the cohesion of the student group. The course will make extensive use of Moodle to provide learning support outside the teaching blocks. Modules are assessed by various combinations of coursework, examination, report and presentation. Examinations are unseen.

There is a project which should preferably be industry based and related to your career development. However, there is no requirement to undertake an industry based project

### **WHAT TYPES OF ASSESSMENT AND FEEDBACK CAN I EXPECT?**

#### Assessment and Assessment Criteria

Assessment Criteria are descriptions, based on the intended learning outcomes, of the skills, knowledge or attitudes that you need to demonstrate in order to complete an assessment successfully, providing a mechanism by which the quality of an assessment can be measured. Grade- Related Criteria are descriptions of the level of skills, knowledge or attributes that you need to demonstrate in order to achieve a certain grade or mark in an assessment, providing a mechanism by which the quality of an assessment can be measured and placed within the overall set of marks. Assessment Criteria and Grade-Related Criteria will be made available to you to support you in completing assessments. These may be provided in programme handbooks, module specifications, on the virtual learning environment or attached to a specific assessment task.

#### Feedback on assessment

Feedback will be provided in line with our Assessment and Feedback Policy. In particular, you will normally be provided with feedback within three weeks of the submission deadline or assessment date. This would normally include a provisional grade or mark. For end of module examinations or an equivalent significant task (e.g. an end of module project), feedback will normally be provided within four weeks. The timescale for feedback on final year projects or dissertations may be longer. The full policy can be found at:

[https://www.city.ac.uk/\\_data/assets/pdf\\_file/0008/68921/assessment\\_and\\_feedback\\_policy.pdf](https://www.city.ac.uk/_data/assets/pdf_file/0008/68921/assessment_and_feedback_policy.pdf)

#### Assessment Regulations

In order to pass your Programme, you should complete successfully or be exempted from the relevant modules and assessments and will therefore acquire the required number of credits. You also need to pass each Part of your Programme in order to progress to the following Part.

The pass mark for each module is 50%.

If you fail an assessment component or a module, the following will apply:

1. Compensation: where you fail up to a total of 20 credits at first or resit attempt (15 for a Postgraduate Certificate), you may be allowed compensation if:
  - Compensation is permitted for the module involved (see the What will I Study section of the programme specification), and
  - It can be demonstrated that you have satisfied all the Learning Outcomes of the modules in the Part, and
  - A minimum overall mark of no more than 10% below the module pass mark has been achieved in the module to be compensated, and
  - An aggregate mark of 50% has been achieved overall.

Where you are eligible for compensation at the first attempt, this will be applied in the first instance rather than offering a resit opportunity.

If you receive a compensated pass in a module you will be awarded the credit for that module. The original component marks will be retained in the record of marks and your original module mark will be used for the purpose of your Award calculation.

2. Resit: Where you are not eligible for compensation at the first attempt, you will be offered one resit attempt.

If you are successful in the resit, you will be awarded the credit for that module. The mark for each assessment component that is subject to a resit will be capped at the pass mark for the module. This capped mark will be used in the calculation of the final module mark together with the original marks for the components that you passed at first attempt.

If you do not meet the pass requirements for a module and do not complete your resit by the date specified you will not progress and the Assessment Board will require that you be withdrawn from the Programme.

If you fail to meet the requirements for the Programme, the Assessment Board will consider whether you are eligible for an Exit Award, as per the table below.

If you would like to know more about the way in which assessment works at City, please see the full version of the Assessment Regulations at:

[http://www.city.ac.uk/data/assets/word\\_doc/0003/69249/s19.doc](http://www.city.ac.uk/data/assets/word_doc/0003/69249/s19.doc)

## WHAT AWARD CAN I GET?

### Master's Degree:

Part	HE Level	Credits	Weighting (%)	Class	% required
Taught	7	120	67	With Distinction	70
Dissertation	7	60	33	With Merit	60
				Without classification	50

Postgraduate Diploma:

Part	HE Level	Credits	Weighting (%)
Taught	7	120	100

**Class** **% required**

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With Distinction	70
With Merit	60
Without classification	50

Postgraduate Certificate:

Part	HE Level	Credits	Weighting (%)
Taught	7	60	100

**Class** **% required**

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Without classification	50
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**WHAT WILL I STUDY?**

The course is organised so that each module is taught in a block of four days followed by tutorial support, guided private study, coordinating activities, and coursework. Moodle will be used for communication and also for teaching support outside class contact time.

Examinations are set in the University's standard examination periods.

As a part time student the project usually relates to an application of the material learned in the course to a problem in your own workplace. As a full time student, you will carry out the project in the University, but it is common to arrange for the project to be done in a company. There is no formal requirement for an industrial placement.

The programme is structured into 6 taught modules, of which all 4 core modules you must take, and elective modules, of which you must take 2. In addition, you are required to undertake the Introductory Mathematics, Programming and Software Packages modules, and Dissertation.

Module Title	SITS Code	Module Credits	Core/ Elective	Compensation Yes/No	Level
Managing Project Risk and Uncertainty	EPM944	20	C	Y	7
Optimization and Decision Making	EPM945	20	C	Y	7
The Project Lifecycle	EPM946	20	C	Y	7
Financial Engineering and Planning	EPM947	20	C	Y	7
Communication and Presentation	EPM948	20	E	Y	7
Perspectives on Management and	EPM420	20	E	Y	7

Leadership					
Entrepreneurship, Innovation and Enterprise	EPM421	20	E	Y	7
Supply Chain Management	EPM422	20	E	Y	7
Decision Sciences 1 – Complex Systems and Networks	EPM954	20	E	Y	7
Introductory Mathematics	EPM950	0	C	N	7
Dissertation	EPM930	60	C	N	7

### **TO WHAT KIND OF CAREER MIGHT I GO ON?**

Graduates completing the course will be prepared for a wide range of careers involving project management and financial planning. It is particularly suited if you are planning to work in infrastructure management and development or if you are pursuing a career or planning a career in capital goods.

If you would like more information on the Careers support available at City, please go to: <http://www.city.ac.uk/careers/for-students-and-recent-graduates>.

### **WHAT STUDY ABROAD OPTIONS ARE AVAILABLE?**

From time to time opportunities could arise for study abroad. Such opportunities are usually through Erasmus programmes and you would be encouraged to apply.

### **WHAT PLACEMENT OPPORTUNITIES ARE AVAILABLE?**

The School Professional Liaison Unit provides support to prepare CVs, interviews and application for internships.

### **WILL I GET ANY PROFESSIONAL RECOGNITION?**

The programme is not currently accredited.

### **HOW DO I ENTER THE PROGRAMME?**

You should normally possess a second class degree in science, engineering, mathematics, statistics or a related area. If you have professional responsibility in a relevant area may be considered favourably.

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