Template C4

Kingston University London

Programme Specification

Title of Course: *MSc Software Engineering*

Date first produced	01/01/2012
Date last revised	18/06/2025
Date of implementation of current version	01/09/2024
Version number	5
Faculty	Faculty of Engineering, Computing and the Environment
Cross-disciplinary	
School	School of Computer Science and Mathematics
Department	Department of Computer Science
Delivery Institution	Kingston University

This Programme Specification is designed for prospective students, current students, academic staff and employers. It provides a concise summary of the main features of the programme and the intended learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if they take full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes and content of each modules can be found in the course VLE site and in individual Module Descriptors.

SECTION 1: GENERAL INFORMATION

Award(s) and Title(s):	MSc Software Engineering
Exit Award(s) and Title(s):	PGDip Software Engineering PGCert Software Engineering
Course Code *For each pathway and mode of delivery*	
UCAS code *For each pathway*	G565/G501

Award(s) and Title(s):	MSc Software Engineering with Management Studies
Exit Award(s) and Title(s):	PGCert Software Engineering with Management Studies PGDip Software Engineering with Management Studies
Course Code *For each pathway and mode of delivery*	
UCAS code *For each pathway*	

Award(s) and Title(s):	MSc Software Engineering with Management Studies with Professional Placement
Exit Award(s) and Title(s):	PGCert Software Engineering with Management Studies with Professional Placement PGDip Software Engineering with Management Studies with Professional Placement
Course Code *For each pathway and mode of delivery*	
UCAS code *For each pathway*	

Award(s) and Title(s):	MSc Software Engineering with Professional Placement

Exit Award(s) and Title(s):	PGCert Software Engineering with Professional Placement PGDip Software Engineering with Professional Placement
Course Code *For each pathway and mode of delivery*	
UCAS code *For each pathway*	

Awarding Institution:	Kingston University
Teaching Institution:	Kingston University
Location:	Penrhyn Road
Language of Delivery:	English
Delivery mode:	Primarily campus based (up to 20% of scheduled L&T hours delivered online)
Learning mode(s):	Part-time Full-time With Professional Placement
Minimum period of registration:	Part-time - 2 Full-time - 1 With Professional Placement - 2
Maximum period of registration:	Part-time - 4 Full-time - 2 With Professional Placement - 3
Entry requirements	Kingston University typically uses a range of entry requirements to assess an applicant's suitability for our courses. Most postgraduate taught course requirements are based on having been awarded a relevant undergraduate degree and are normally coupled with minimum grades expectation of 2:2, specific courses in certain areas may have a stricter grade requirement. We may also use interview, portfolio and performance pieces to assess a person's suitability for some courses. We recognise that every person's journey to a postgraduate taught education is different and unique and in some cases we may take into account work experience and other non-standard pathways onto University level study. Additionally, all non-UK applicants must meet our English language requirements.

	Please see our course pages on the Kingston University website for the most up to date entry requirements.
Regulated by	The University and its courses are regulated by the Office for Students
Programme Accredited by:	BCS The Chartered Institute for IT
Approved Variants:	<u>Compensation of the project module</u> Compensation is not permitted for the following module: • CI6300 Individual Project Reassessment following failure of the first attempt will normally be: • by retake to improve the dissertation for marginal failure (Grade F5 or marks of 35-39) and the mark will be capped • or by repeat
Is this Higher or Degree Apprenticeship course?	No

SECTION 2: THE COURSE

A. Aims of the Course

- Equip students with the capability to exploit software engineering methods, tools and design skills which will enable them to design and develop applications for organisations in the 21st century.

- Enhance a student's job performance and enable him/her to contribute effectively to the knowledge base of the employer.

- Give students the means to explore in detail the technical delivery architecture, systems integration, and consumer facing software systems.

- Maintain productive links with industry which provide sufficient background for an industrial/commercial dimension to the course.

- Undertake continuing professional development and updating for established IT professionals.

- Implant an enquiring, analytical and creative approach to both personal and professional activities that leads to the critical and responsible use of informed and independent judgement.

- Undertake a more effective role in software systems design and development.

- Gain a solid foundation in this specialist area, building on knowledge and skills gained from students individual backgrounds.

- Have an in-depth understanding of the new software development strategies and architectures appropriate to the design of Internet-oriented applications.

- Have an opportunity to study a subject area which is relevant to the field but also satisfies the individual's background and experience.

- Have the ability to apply specialised knowledge and skills to the analysis and solution of novel problems in commerce and the industry.

In addition the aims of the course with Management Studies is to:

- Extend the student's knowledge and skills into key areas of general management.
- Develop the skills to lead teams incorporating software engineering specialists, and systems architects, as well as other IT professionals.

B. Programme Learning Outcomes

The programme learning outcomes are the high-level learning outcomes that will have been achieved by all students receiving this award. They have been aligned to the levels set out in ‘Sector Recognised Standards in England’ (OFS 2022).

Programme Learning Outcomes					
	Knowledge and Understanding On completion of the course students will be able to:		**Intellectual Skills** On completion of the course students will be able to		**Subject Practical Skills** On completion of the course students will be able to
A1	Understanding of current developments in Software Engineering and their potential and limitations	B1	Learn independently, think logically and critically and demonstrate a systematic approach to problem-analysis and to finding solutions	C1	Select and use effectively a wide range of methods, tools and techniques used in the design and development of software applications.
A2	Understanding of the ethical, legal and professional issues in the development of software applications..	B2	Understand and define the business context that software applications can sit within, and across (e.g. a collaborative service scenario).	C2	Specify software that meets the needs and aspiration of the users. This specification should include a conceptual data model for Web business applications, identifying entities and attributes, using a recognised notation.
A3	Understanding of software engineering principles and practical techniques required for the design and development of Web business applications	B3	Critically analyse and evaluate research in the chosen area.	C3	Evaluate and select appropriate software engineering tools for a software development project,
A4	Understanding of the tools and technologies necessary for business application design and development.	B4	Identify current issues in the area of software engineering.	C4	Design optimal software architectures using appropriate methods and technologies,

C. Future Skills Graduate Attributes

In addition to the programme learning outcomes, the programme of study defined in this programme specification will engage students in developing their Future Skills Graduate Attributes:

1. Creative Problem Solving
2. Digital Competency
3. Enterprise
4. Questioning Mindset
5. Adaptability
6. Empathy
7. Collaboration
8. Resilience
9. Self-Awareness

D. Outline Programme Structure

Full details of each module will be provided in module descriptors and in the module canvas pages.
Note: As per GR5 within the general regulations, the University aims to ensure that all option modules listed below are delivered. However, for various reasons, such as demand, the availability of option modules may vary from year to year or between teaching blocks. Students will be informed of the availability of option modules through the Online Module Selection process.

MSc Software Engineering

Level 7							
MSc Software Engineering							
Core modules	**Module code**	**Credit Value**	**Level**	**Teaching Block**	**Pre-requisites**	**Full Time**	**Part Time**
Agile Project Development	CI7350	30	7	TB1		1	1
Project Dissertation	CI7000	60	7	Year Long		1	1
Software Architecture and Programming Models	CI7250	30	7	TB1		1	1
Software Architecture and	CI7250	30	7	TB1		1	1

Programming Models							
Optional Modules							
Applied Data Programming	CI7340	30	7	TB1		1	1
Beyond Optimising Interaction	CI7701	30	7	TB1		1	1
Mobile Security	CI7160	30	7	TB1		1	1
Professional Placement	CI7900	120	7	Year Long		2	4

Exit Awards at Level 7

Students exiting the programme with 60 level 7 credits are eligible for the award of Postgraduate Certificate.
Students exiting the programme with 120 level 7 credits are eligible for the award of Postgraduate Diploma.

MSc Software Engineering with Management Studies

Level 7							
MSc Software Engineering with Management Studies							
Core modules	**Module code**	**Credit Value**	**Level**	**Teaching Block**	**Pre-requisites**	**Full Time**	**Part Time**
Agile Project Development	CI7350	30	7	TB1		1	1
Business in Practice	CI7600	30	7	TB1		1	1
Professional Placement	CI7900	120	7	Year Long		1	1
Project Dissertation	CI7000	60	7	Year Long		1	1
Software Architecture and Programming Models	CI7250	30	7	TB1		1	1
Optional Modules							
Applied Data Programming	CI7340	30	7	TB1		1	1

Beyond Optimising Interaction	CI7701	30	7	Tb1		1	1

Exit Awards at Level 7

Students exiting the programme with 60 level 7 credits are eligible for the award of Postgraduate Certificate.
Students exiting the programme with 120 level 7 credits are eligible for the award of Postgraduate Diploma.

MSc Software Engineering with Management Studies with Professional Placement

MSc Software Engineering with Professional Placement

E. Teaching, Learning and Assessment

This course uses a range of teaching and assessment methods which have been designed to support students' learning and achievement of the learning outcomes. The course has been developed with reference to the Kingston University Academic Framework which sets-out core principles relating to Course and Credit Structure (including Module delivery Structure and Pattern, and Learning Hours and Learning Formats); Curriculum Design (inclusion Learning Design Principles and Inclusive Curriculum); and Future Skills.

Teaching and Learning on the course consist of Scheduled Learning and Teaching and Guided Independent Study (self-managed time). Scheduled Learning and Teaching includes the following, and the format for each module is set out in the module specification:

- Laboratory Sessions
- Lectures
- Seminars
- Tutorials
- Workshops
- Placements

Guidance for students on the use of independent study time is communicated through the 'Succeed in your module' section on the Canvas Virtual Learning Environment and through other communications during the course.

In addition to the core Scheduled Learning and Teaching activities for the course, the University may offer students additional optional opportunities for learning. Examples of these include Study abroad and Work-based learning.

The course will provide students with the opportunity to develop their knowledge and skills relating to at least two United Nations Sustainable Development Goals (UN SDGs). We are committed to empowering students with the knowledge, skills and opportunities to understand and address the UN SDGs: each course is thus also required to prepare students for at least two of the SDGs (not including Quality Education, which all courses must deliver).

F. Support for Students and their Learning

Students are supported through a range of services that provide academic and wider support. These include:

- A Module Leader for each module
- A Course Leader to help students understand the course structure
- Personal Tutors to provide academic and personal support
- Technical support to advise students on IT and the use of software
- Student Voice Committee – to ensure the views of students are heard
- Canvas – Kingston University's Virtual Learning Environment
- Student support facilities that can provide advice on issues such as finance, regulations, legal matters, accommodation, international student support
- Disabled student support
- The Kingston Students' Union

Student Development and Graduate Success

G. Ensuring and Enhancing the Quality of the Course

The University has policies and procedures for evaluating and improving the quality and standards of its provision. These include:

- Continuous Monitoring of courses through the Kingston Course Enhancement Programme (KCEP)
- Student evaluation including Module Evaluation Questionnaires (MEQs), the National Student Survey (NSS)
- Internal and external moderation of graded assignments

H. External Reference Points

QAA Benchmark statement website: http://www.qaa.ac.uk/docs/qaa/subject-benchmark-statements/sbs-masters-degree-computing.pdf?sfvrsn=c490f681_16

The British Computer Society (The Chartered Institute for IT) https://www.bcs.org

Guidance on Enterprise and Entrepreneurship
http://www.qaa.ac.uk/docs/qaa/about-us/enterprise-and-entrpreneurship-education-2018.pdf?sfvrsn=20e2f581_10

I. Development of Course Learning Outcomes in Modules

This table maps where programme learning outcomes are **summatively** assessed across the **core** modules for this course. It provides an aid to academic staff in understanding how individual modules contribute to the course aims, a means to help students monitor their own learning, personal and professional development as the course progresses and a checklist for quality assurance purposes.

Module Code		Level 7							
		CI7350	CI7340	CI7000	CI7701	CI7160	CI7250	CI7600	CI7900
Knowledge & Understanding	A1			S					
	A2							S	
	A3								
	A4						S		
Intellectual Skills	B1			S					
	B2	S						S	S
	B3								
	B4								
Practical Skills	C1						S		
	C2								
	C3						S		
	C4							S	

Students will be provided with formative assessment opportunities throughout the course to practise and develop their proficiency in the range of assessment methods utilised.

Additional Information