Template C4

Kingston University London

Programme Specification

Title of Course: *BSc (Hons) Computer Science*

Date first produced	30/06/2017
Date last revised	28/03/2025
Date of implementation of current version	01/09/2025
Version number	18
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):	BSc (Hons) Computer Science
Exit Award(s) and Title(s):	Certificate of Higher Education Diploma of Higher Education Ordinary degree
Course Code *For each pathway and mode of delivery*	UPCSC1CSC30 UFCSC1CSC20
UCAS code *For each pathway*	G400 (3 year full time)G401 (4 year sandwich)G403 (4 year with foundation)

Award(s) and Title(s):	BSc (Hons) Computer Science with Foundation Year
Exit Award(s) and Title(s):	Certificate of Higher Education Diploma of Higher Education Ordinary degree
Course Code *For each pathway and mode of delivery*	N/A UFCSC1CSC55
UCAS code *For each pathway*	

Award(s) and Title(s):	BSc (Hons) Computer Science with Professional Placement
Exit Award(s) and Title(s):	Certificate of Higher Education Diploma of Higher Education Ordinary degree
Course Code *For each pathway and mode of delivery*	N/A USCSC1CSC45
UCAS code *For each pathway*	

Award(s) and Title(s):	BSc (Hons) Computer Science with Foundation Year and Professional Placement
Exit Award(s) and Title(s):	Certificate of Higher Education Diploma of Higher Education Ordinary Degree
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):	Full-time With professional placement With foundation year
Minimum period of registration:	Full-time - 3 With professional placement - 4 With foundation year - 4
Maximum period of registration:	Full-time - 6 With professional placement - 7 With foundation year - 8
Entry requirements	Kingston University typically uses a range of entry requirements to assess an applicant's suitability for our courses. Most course requirements are based on UCAS Tariff points, usually stipulated as a range, and are sometimes coupled with minimum grades in specific relevant subjects. We may also use interview, portfolio and performance pieces to assess an applicant's suitability for the course. We recognise that every person's journey to Higher 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:	Compensation of modules:

	Compensation is permitted in at most 30 credits across the programme, excluding the CI6600 Individual Project module. A module other that CI6600, with a grade of F5 (35-39) can be compensated for a PC grade by at least 90 credits passed at that level.
Is this Higher or Degree Apprenticeship course?	No

SECTION 2: THE COURSE

A. Aims of the Course

The over-arching aim of the Computer Science course is to produce highly trained graduates with specialist technical knowledge and scientific mind set, capable of solving real world problems, are driven by passion, sustainability and wider socio-technical implications are considered at all levels. As part of Kingston University's Future Skills programme, this course also equips students with essential skills such as critical thinking, problem-solving, adaptability, and digital literacy. These future-focused skills ensure graduates are prepared for the evolving demands of the tech industry and can thrive in a rapidly changing professional landscape.
Specifically the aims are to produce graduates who:

- have the required knowledge, skills and attitudes to practice as computing professionals in both industry and commerce
- are equipped to meet the academic, professional and practical requirements for membership of appropriate professional bodies such as the British Computer Society
- are aware of the actual and potential range of information and computer-based systems and of the ways in which these interact with their material, human, organizational and social environments
- possess the appropriate ability and inclination, and are equipped, to undertake advanced studies and/or research and development in the computing and information systems disciplines
- can apply their knowledge and skills in the various contexts in which information and computer-based systems are developed. In particular, can both initiate and sustain a planned and disciplined personal effort when working alone and can participate effectively as a member of a team
- have an inquisitive and reflective attitude when modelling systems and understands the functional and qualitative properties of systems.
- have the ability to evaluate and predict security, performance and efficiency associated system properties and their context dependencies.
- understand and can articulate the legal, ethical, social, cultural and public aspects of problems and solutions.
- have the capacity to acquire new knowledge and skills independently; reflect on trends in the computing domain and their actions are demonstrative of a creative contribution.

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
A5	identify the different project management approaches commonly used in the IT industry and select, modify or construct one for a given context	B5	use different programming approaches, patterns and/or paradigms, and justify the selection of one or more for a given context	C5	specify, design and prototype human/computer interfaces using HCI and UX theory and best practices
A4	explain the different ways in which data and information may be represented, stored and transmitted	B4	elicit, evaluate and model business, customer and user requirements, incorporating considerations such as sociological and commercial contexts, user experience, aesthetics and technical practicalities	C4	implement software solutions using a variety of programming languages, environments and platforms
A3	explain security issues and evaluate risk for the safe operation of computing and information systems	B1	analyse, abstract and decompose problems to design effective solutions	C3	collaborate and communicate effectively with other professionals/stakeholders to plan, design, manage, implement and deliver IT projects
A1	explain and apply essential concepts, theories, principles and practices of computer science	B2	synthesise information from disparate and potentially incomplete sources to model and build systems, documents and other related artefacts	C2	use (and, where appropriate, modify) established systems, software development methods, techniques and tools to model and build computer based solutions

A2	explain the social, ethical, legal, commercial and other human factors that affect the design, development, deployment of computer systems	B3	analyse and evaluate the extent to which a system meets the criteria for its current use and future development	C1	develop and critically evaluate specifications for specialist computer systems and communicate these specifications to other computing professionals

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.
 Students on the Foundation Year route should refer to the Foundation Year in Computing programme specifications for details of the first year modules.

BSc (Hons) Computer Science

Level 4							
BSc (Hons) Computer Science							
Core modules	**Module code**	**Credit Value**	**Level**	**Teaching Block**	**Pre-requisites**	**Full Time**	**Part Time**
Computing Fundamentals	CI4250	30	4	Year long		1	1
Professional Environments 1	CI4450	30	4	Year long		1	1
Programming I – Thinking Like a Programmer	CI4105	30	4	Year long		1	1
Requirements Analysis and Design	CI4305	30	4	Year long		1	1

Exit Awards at Level 4

Progression to level 5 requires 120 credits including passes in the above 4 modules. Students exiting the programme at this point who have successfully completed 120 credits are eligible for the award of Certificate of Higher Education in Computer Science.

Level 5							
BSc (Hons) Computer Science							
Core modules	**Module code**	**Credit Value**	**Level**	**Teaching Block**	**Pre-requisites**	**Full Time**	**Part Time**
Computing Systems	CI5250	30	5	Year long		2	1
Database-Driven Application Development	CI5320	30	5	Year Long		2	1
Professional Environments 2	CI5450	30	5	Year Long		2	1
Optional Modules							
Industrial Placement	CI5999	120	5	Year long		2	1
Networking Concepts	CI5210	30	5	Year long		2	1
Programming II - Software Development	CI5105	30	5	Year long		2	1
User Centered Design	CI5330	30	5	Year long		2	1

Exit Awards at Level 5

Progression to level 6 requires 120 credits at level 5. Students exiting the programme at this point who have successfully completed 240 credits are eligible for the award of Diploma of Higher Education in Computer Science.

Placement Module

Students on the sandwich route take the module CI5999 Industrial Placement.

Level 6	
BSc (Hons) Computer Science	

Core modules	Module code	Credit Value	Level	Teaching Block	Pre-requisites	Full Time	Part Time
Individual Project	CI6600	30	6	Year Long		3	
Advanced Data Modelling	CI6416	15	6	2		3	1
Digital Entrepreneurship	CI6415	30	6	Year Long		3	
Future Skills Apply	AX6001	15	6	1		3	1
Optional Modules							
Advanced Data Modelling	CI6320	30	6	Year Long		3	
Cryptography and Network Security	CI6015	30	6	Year long		3	1
Internet Services and Protocols	CI6250	30	6	Year long	CI5210	3	1
Mobile Application Development	CI6330	30	6	Year long		3	1
Programming III – Patterns and Algorithms	CI6115	30	6	Year long	CI5105	3	1
Software Development Practice	CI6125	30	6	Year long	None	3	1
User Experience Design Thinking	CI6315	30	6	Year long	CI5330	3	1

Exit Awards at Level 6

Students exiting the programme without completing the full 120 credits but have successfully completed 60 credits at level 6 or above are eligible for the award of an Ordinary Degree.

BSc (Hons) Computer Science with Foundation Year

BSc (Hons) Computer Science with Professional Placement

BSc (Hons) Computer Science with Foundation Year and 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

External reference points which have informed the design of the course. These include:

- PSRB standards
- QAA Subject benchmarks
- Other subject or industry standards

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 4				Level 5							Level 6										
		CI4305	CI4450	CI4250	CI4105	CI5320	CI5210	CI5999	CI5330	CI5250	CI5450	CI5105	CI6315	CI6250	CI6125	CI6115	CI6320	CI6015	CI6415	CI6600	CI6416	CI6330	AX6001
Knowledge	A5	S	S	S					S		S	S	S			S			S	S	S		S

		c1	c2	c3	c4	c5	c6	c7	c8	c9	c10	c11	c12	c13	c14	c15	c16	c17	c18	c19	c20
& Understanding	A4			S	S		S		S				S		S						S
	A3		S				S		S	S	S		S	S			S				
	A1	S	S	S	S		S	S	S	S	S	S	S	S	S		S	S	S		S
	A2	S	S				S		S	S	S		S	S					S		S
Intellectual Skills	B5				S					S	S		S	S							S
	B4	S	S					S	S	S	S	S	S	S							S
	B1	S	S	S	S		S	S		S	S	S	S	S	S		S	S	S		S
	B2	S	S		S		S	S	S	S	S	S	S	S	S				S		
	B3	S	S		S		S	S	S	S	S		S	S				S	S		
Practical Skills	C5	S		S				S		S		S			S						
	C4		S	S	S				S		S			S	S			S			
	C3	S			S			S		S	S	S		S	S			S	S		
	C2	S	S	S	S		S	S	S	S	S	S	S	S	S		S	S	S		
	C1	S	S	S			S	S	S			S	S	S			S	S			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