**Programme Specification**

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| **Please note:** This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she passes the programme. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of each module can be found in the programme handbook. The accuracy of the information contained in this specification is reviewed by the University and may be checked by the Quality Assurance Agency for Higher Education. |

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| **Degree and Programme Title** \*Standard Programme Title\* with a Year in Computing |

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| 1. **Awarding Institution/Body** | University of Kent |
| 1. **Teaching Institution** | University of Kent |
| 1. **School responsible for management of the programme** | School of Computing |
| 1. **Teaching Site** | Canterbury |
| 1. **Mode of Delivery** | Full-time |
| 1. **Programme accredited by** | n/a |
| 1. **Final Award** | That of the respective programme (BA, BSc, etc.) |
| 1. **Programme** | Year in Computing |
| 1. **UCAS Code (or other code)** | n/a |
| 1. **Credits/ECTS Value** | 120 (60 ECTS) |
| 1. **Study Level** | Undergraduate [level 5] |
| 1. **Relevant QAA subject benchmarking group(s)** |  |
| 1. **Date of creation/revision** | January 2016 |
| 1. **Intended Start Date of Delivery of this Programme** | September 2016 |

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| 1. **Educational Aims of the Programme**   The programme aims to: |
| * Provide a programme that will attract and meet the needs of both those contemplating a career in computing and those motivated primarily by an interest in applying Computer Science to their primary area of study. * Provide computing knowledge and skills that will be of lasting value in a field that is constantly changing. * Provide an understanding of current, widely used, computing technologies which will be of broad applicability in students’ future employment or further study. * Develop general critical, analytical and problem solving skills that can be applied in a wide range of different computing and non-computing settings. |

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| **16 Programme Outcomes**  The programme provides opportunities for students to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas. |

**A. Knowledge and Understanding of:**

1. **Software**: Software: programming languages and practice; tools and packages; structuring of data and information.
2. **Communication and interaction**: basic computer communication concepts; interaction between computers and people; the control and operation of computers.
3. **Practice**: problem identification and analysis; design development, testing and evaluation.

**Teaching/learning and assessment methods and strategies used to enable outcomes to be achieved and demonstrated**

Acquisition of knowledge and understanding is through lectures, while its practical application is supported by classes and/or laboratory work. Self-directed learning is facilitated by directed reading, and web-based material. Assessment is through a combination of unseen written examinations (to allow demonstration of mastery of the principles), and assessed coursework and project work (both individual and group) to allow demonstration of the ability to apply those principles.

**Skills and Other Attributes**

**B. Intellectual Skills:**

1. **Modelling**: approach the modelling and design of computer-based systems in a way that demonstrates an understanding of the relationship between specification, design and implementation, and the trade-offs involved in the choices made.
2. **Reflection and communication**: present technical information succinctly to a range of audiences.
3. **Requirements**: Identify and analyse criteria and specifications appropriate to specific problems and plan strategies for their solution
4. **Criteria evaluation and testing**: Critically evaluate the extent to which a computer-based system meets the criteria defined for its current use and future development
5. **Methods and tools**: Select and deploy appropriate practices and tools for the specification, design, implementation, and evaluation of computer-based systems

**Teaching/learning and assessment methods and strategies used to enable outcomes to be achieved and demonstrated**

Students develop these skills through practical work, and critically reflect on them through verbal and written discussion of key themes and aspects. Project work contributes to the development of these skills by providing the opportunity to practice them in a larger scale and more “realistic” setting.

**C. Subject-specific Skills:**

1. **Design and implementation**: Specify, design, and implement (program) computer-based systems.
2. **Evaluation**: Evaluate systems in terms of general quality attributes and possible trade-offs presented within the given problem
3. **Information management**: Apply the principles of effective information management, information organisation, and information-retrieval skills to information of various kinds, including text, images, sound, and video.
4. **Tools**: Deploy effectively the tools used for the construction and documentation of software, with particular emphasis on understanding the whole process involved in using computers to solve practical problems.
5. **Operation**: Operate computing equipment and software systems effectively.

**Teaching/learning and assessment methods and strategies used to enable outcomes to be achieved and demonstrated**

Acquisition of computing specific skills is through lectures, classes and directed study. From the start of the stage, students receive guidance and gain practical experience via supervised practical classes and directed study. As the programme progresses, these skills are further encouraged by the introduction of larger scale problems and project work.

Assessment is through a combination of unseen written examinations, assessed coursework and project work (both individual and group). Coursework consists of both reports and practical assignments.

**D. Transferable Skills:**

1. **Communication**: Make succinct presentations to a range of audiences about technical problems and their solutions.
2. **Information Technology**: Effective use of general IT facilities; information retrieval skills
3. **Self-management**: managing one’s own learning and development including time management and organisational skills

**Teaching/learning and assessment methods and strategies used to enable outcomes to be achieved and demonstrated**

General IT facilities are used throughout the course for the preparation of written work. Browsers, search engines and catalogues are used for research and self-study material. All students work within teams during the course and provide presentations of their work to both their peers and academic staff.

Assessment is through a combination of unseen written examinations, assessed coursework and project work (both individual and group). Coursework consists of reports and practical assignments.

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| For more information on the skills developed by individual modules, see the module mapping table, located at the end of this specification. |

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| **17 Programme Structures and Requirements, Levels, Modules, Credits and Awards**  **The following description exclusively details the regulation applying to the Year in Computing stage, which is embedded in another degree programme. Please refer to the individual programme specification for that surrounding programme for details of its requirements, structures, and regulations.**  This stage is studied over one year full-time, and comprises modules to a total of 120 credits. Students must successfully complete each module in order to be awarded the specified number of credits for that module. One credit corresponds to approximately ten hours of 'learning time' (including all classes and all private study and research). Thus obtaining 120 credits in an academic year requires 1,200 hours of overall learning time. For further information on modules and credits refer to the Credit Framework at <http://www.kent.ac.uk/teaching/qa/credit-framework/creditinfo.html>  Students successfully completing this stage **and** their overarching degree will be awarded that degree “with a Year in Computing”. Students who do not successfully complete this stage will nevertheless be able to return to their studies for their overarching degree, or graduate if they have already completed it.  Each module is designed to be at a specific level. For the descriptors of each of these levels, refer to Annex 2 of the Credit Framework at <http://www.kent.ac.uk/teaching/qa/credit-framework/creditinfoannex2.html>.  Marks awarded for this stage do not contribute to classification of the overarching award.  Where a student fails a module(s) due to illness or other mitigating circumstances, such failure may be condoned, subject to the requirements of the Credit Framework and provided that the student has achieved the **programme** learning outcomes. For further information refer to the Credit Framework at <http://www.kent.ac.uk/teaching/qa/credit-framework/creditinfo.html>.  No modules from this stage may be compensated or trailed. |

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| **Code** | **Title** | **Level** | **Credits** | **Term(s)** |
| **Compulsory Modules** | | | | |
| CO581 | An Introduction to Computer Systems | 5 | 15 | 1 |
| CO582 | Human Computer Interaction and User Experience | 5 | 15 | 1 |
| CO583 | An Introduction to Programming and Web Technologies | 5 | 30 | 1 |
| CO584 | Solving Problems with Data | 5 | 15 | 2 |
| CO539 | Web Development | 5 | 15 | 2 |
| CO580 | Year in Computing Project | 5 | 30 | 2 |

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| **18 Work-Based Learning**  Disability Statement: Where disabled students are due to undertake a work placement as part of this programme of study, a representative of the University will meet with the work placement provider in advance to ensure the provision of anticipatory and reasonable adjustments in line with legal requirements. |
| N/A |

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| **19 Support for Students and their Learning** |
| * Students will be allocated an Academic Advisor in the School of Computing for the duration of this stage. * School and University induction programme * Programme/module handbooks * Library services, see <http://www.kent.ac.uk/library/> * Student Support <http://www.kent.ac.uk/studentsupport/> * Student Wellbeing [www.kent.ac.uk/studentwellbeing/](http://www.kent.ac.uk/studentwellbeing/) * Centre for English and World Languages, see <http://www.kent.ac.uk/cewl/index.html> * Student Learning Advisory Service, see <http://www.kent.ac.uk/uelt/about/slas.html> * PASS system, see <https://www.kent.ac.uk/uelt/quality/code2001/annexg.html> * Kent Union, see [www.kentunion.co.uk/](http://www.kentunion.co.uk/) * Careers and Employability Services, see [www.kent.ac.uk/ces/](http://www.kent.ac.uk/ces/) * Counselling Service [www.kent.ac.uk/counselling/](http://www.kent.ac.uk/counselling/) * Information Services (computing and library services), see [www.kent.ac.uk/is/](http://www.kent.ac.uk/is/) * Undergraduate student representation at School, Faculty and Institutional levels * International Development Office, see [www.kent.ac.uk/international/](http://www.kent.ac.uk/international/) * Medical Centre, see [www.kent.ac.uk/counselling/menu/Medical-Centre.html](http://www.kent.ac.uk/counselling/menu/Medical-Centre.html) * Introductory talks at the start of each teaching term * Course Handbook * An extensive School website containing * information on the programmes delivered; * past examination papers * staff/student liaison information including * details of student representatives * minutes of meetings * Assignment to an academic adviser who monitors individual student progress * Administrative support via the Course Administration Office |

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| **20 Entry Profile**  The minimum age to study a degree programme at the university is normally at least 17 years old by 20 September in the year the programme begins. There is no upper age limit. |
| 20.1 **Entry Route** |
| Students must currently be undertaking Stage 2 (or a subsequent stage) of a non-Computing undergraduate degree programme at the University of Kent. Their average performance in their latest completed stage (at the time of application) must be at least 50%. Applicants who will return to their overarching programme at the end of the Year in Computing must be clear to do so before commencing this stage.  Applicants will be interviewed to assess their suitability for, and commitment to, the programme. |
| 20.2 **What does this programme have to offer?** |
| * Teaching that is informed by the School’s research activity and understanding of current professional practice * The development of a broad range of skills that are highly sought after by employers and which open up a wide range of careers to graduates, within Computing and other professional fields. * Programming, modelling and design skills that can be used throughout a career in Computing, and in more general business activities |
| 20.3 **Personal Profile** |
| Desirable qualities include:  • an enthusiasm about computing and related subjects  • a willingness to accept new ideas and be flexible in your thinking  • a willingness to work with others  • good oral and written communication skills  • an interest in developing a career in a computing related area, or applying computing to an existing subject of study. |

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| 21 **Methods for Evaluating and Enhancing the Quality and Standards of Teaching and Learning** |
| 21.1 **Mechanisms for review and evaluation of teaching, learning, assessment, the curriculum and outcome standards** |
| * Student module evaluations * Annual programme and module monitoring reports, see <http://www.kent.ac.uk/teaching/qa/codes/taught/annexe.html> * External Examiners system, see <http://www.kent.ac.uk/teaching/qa/codes/taught/annexk.html> * Periodic programme review, see <http://www.kent.ac.uk/teaching/qa/codes/taught/annexf.html> * Annual staff appraisal * Peer observation * Quality Assurance Framework, see <http://www.kent.ac.uk/teaching/qa/codes/index.html> * QAA Higher Education Review, see <http://www.qaa.ac.uk/InstitutionReports/types-of-review/higher-education-review/Pages/default.aspx> * Student representation on key committees * Active staff development programme * Continuous monitoring of student progress and attendance * Vetting process of examination questions by module team, and external examiners * Departmental staff acting as external examiners at other institutions * Double marking and/or moderation of examinations and some assessed work * Industrial links * Evaluation of graduate destination statistics * School Director of Learning and Teaching * Module teams * Programme Teams |
| 21.2 **Committees with responsibility for monitoring and evaluating quality and standards** |
| * Staff-Student Liaison Committee * School Learning and Teaching Committee * Faculty Learning and Teaching Committee * Faculty Board * Learning and Teaching Board * Board of Examiners |
| 21.3 **Mechanisms for gaining student feedback on the quality of teaching and their learning experience** |
| * Student module evaluations * Staff-Student Liaison Committee * Student rep system (School, Faculty and Institutional level) * Annual NSS * Annual University Internal Student Surveys * Discussions with academic advisors |
| 21.4 **Staff Development priorities include:** |
| * PGCHE requirements * HEA (associate) fellowship membership * Annual appraisals * Institutional Level Staff Development Programme * Academic Practice Provision (PGCHE, ATAP and other development opportunities) * Professional body membership and requirements * Programme team meetings * Research seminars * Conferences * Study leave * Staff members have an individual allocation of funds which they may use to develop any of their interests, including those of teaching and learning * Staff training of various kinds including appraiser training, interview training, meeting skills etc. * Participation in staff development week * Research group support for research-led teaching * Annual away-days that cover a number of staff-related issues * Module team meetings * Regular formal and informal collaboration in programme development * Attendance at relevant industry/business conferences/seminars * Minimum expected qualifications for appointments to lecturing posts * Minimum expected research record for appointments to lecturing posts |

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| 22 **Indicators of Quality and Standards** |
| * Results of periodic programme review (2012) * QAA Higher Education Review 2015 * Annual External Examiner reports * Annual programme and module monitoring reports |
| 22.1 **The following reference points were used in creating these specifications:** |
| * QAA UK Quality Code for Higher Education * QAA Benchmarking statement for Computing (for guidance only, not strictly relevant to this single Stage) * Requirements of the BCS (for guidance only, this stage is not accredited by the BCS) * School and Faculty plan * University Plan/Learning and Teaching Strategy * Staff research activities |

*October 2015*

**Programme Title: “Year in Computing”**

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|  | **Knowledge and Understanding** | | | **Intellectual Skills** | | | | | **Subject-specific Skills** | | | | | **Transferable Skills** | | |
| A1 | A2 | A3 | B1 | B2 | B3 | B4 | B5 | C1 | C2 | C3 | C4 | C5 | D1 | D2 | D3 |
| An Introduction to Computer Systems | **X** | **X** |  |  | **X** | **X** |  | **X** | **X** | **X** |  | **X** | **X** | **X** | **X** | **X** |
| HCI and the User Experience | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** |  |  | **X** | **X** | **X** | **X** |
| An Introduction to Programming and Web Technologies | **X** | **X** | **X** | **X** |  | **X** | **X** | **X** | **X** | **X** | **X** | **X** |  | **X** | **X** | **X** |
| Solving Problems with Data | **X** |  | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** |  |  | **X** | **X** | **X** |
| Web Development | **X** | **X** |  |  | **X** | **X** |  | **X** | **X** | **X** |  | **X** | **X** | **X** | **X** | **X** |
| Project | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** |