University of Bolton
Teaching Intensive Research Informed

BSc (Hons) Computing with foundation year

COM001-F-RGL-2X-02 Full-time

Awarding Institution University of Bolton
Teaching Institution Regent College London
Ucas Code
JACS Code
Language Of Study English
Notes:

Professional Accreditation

None Associated with this programme

Programme Awards

Title	Type	Level	Description
Foundation Degree (BSc (Hons))	Final Award	Level 6	Computing with Foundation Year
Diploma of Higher Education (DipHE)	Exit or Fallback Award	Level 5	Computing
Certificate of Higher Education (CertHE)	Exit or Fallback Award	Level 4	Computing
Foundation Certificate (FndCert)	Exit or Fallback Award	Level 3	Computing

Benchmark Statements

The following benchmark statements apply to this programme:

- BCS Guidelines on Course Accreditation to CITP standards 2016

Internal and External Reference Points

Other Points of Reference

No other references apply to this Programme.

General Entry Requirements

Other entry requirements apply to this programme these are: You should have a minimum of two GCE A2-level passes (or equivalent), including any subjects; and five GCSEs at grade C or above (or equivalent), including English and Mathematics. If English is not your first language you will need to complete a Secure English Language Test at IELTS 5.0 with no less than 4.5 in any band (or equivalent). If you didn't study GCSEs, or don't have the required grade in English or Mathematics, please contact us for details of other acceptable qualifications.. You may be required to attend an interview and/or provide a portfolio of work.

Additional Criteria

Additional Admission Matters

There are no additional Admission Matters associated with this Programme.

Aims of the Programme

The principal aims of the programme are to:

- develop an in-depth understanding of the role, design, development and operation of computer-based information systems in the context of the information requirements of a business organisation
- provide students with a broad education in Computing with a focus on understanding and analysing problems, designing software solutions and managing implementation.
- apply appropriate tools and development methodologies to design solutions.
- equip students to adapt and learn new skills as the computer industry evolves throughout their careers.
- prepare students for success in employment or postgraduate study

Distinctive Features of the Programme

- A foundation year gives you a firm grounding in academic and technical skills
- The Computing programme at the University of Bolton has been designed collaboratively working with industrial partners to ensure that students study a comprehensive program of relevant industrial topics.
- The most flexible of all the Computing degrees available to study at Bolton with the ability to specialise in specific career-oriented pathways in the final year.
- The success of our graduates is directly related to the practical aspects covered in the course laboratory work.

Learning Outcomes

Knowledge & Understanding

On completion of the programme successful students will be able to demonstrate systematic knowledge and understanding of:

- Business, professional and ethical application of computing in industry
- Gathering, processing and securely storing information
- Developing software solutions to meet business requirements
- Building security into all aspects of computer and network usage
- Using appropriate tools and protocols to apply computing techniques to business problems
- Essential facts, concepts, principles and theories relating to computing and computer applications.

Cognitive, Intellectual or Thinking Skills

On completion of the programme successful students will be able to demonstrate the ability to:

- Identify and solve problems using a systematic approach to reach a solution.
- Use knowledge in modelling and design of computers and networks to meet specific requirements
- Critically evaluate whether solutions meet specified requirements
- Apply appropriate theory, practices and tools to develop computer and network based systems
- Integrate a variety of problem solving approaches and critically apply them to appropriate problems

Practical, Professional or Subject-specific Skills

On completion of the programme successful students will be able to demonstrate the ability to:

- Evaluate the risks and vulnerabilities of computer systems
- Specify, design, construct, test and document reliable, secure and usable computer-based systems.
- Evaluate systems in terms of quality attributes and possible trade-offs presented within the given problem.
- Plan and manage projects to deliver computing systems within constraints such as requirements, timescale and budget
- Recognise and respond to any risks and safety aspects that may be involved in the deployment of computing systems within a given context.
- Critically evaluate and analyse complex problems, including those with incomplete information, and devise appropriate solutions, within the design constraints.

Transferable, Key or Personal Skills

On completion of the programme successful students will be able to demonstrate the ability to:

- Work unsupervised, plan effectively and meet deadlines, and respond readily to changing situations and priorities.
- Undertake effective team working and project management and recognise and make best use of the skills and knowledge of individuals to collaborate
- Undertake lifelong personal development: The ability to develop learning skills and recognise their application in employment and industry.
- Clearly communicate complex ideas verbally and in writing, and to construct coherent arguments using language appropriate to their programme of study
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Programme Structure

The BSc (Hons) Computing programme is a 4 year full-time programme. Optional modules in the final year allow students to choose modules relevant to their intended career. Overall, the number and level of credits for this qualification requires successful completion of 480 credits: 120credits at Level 3, 120 credits at HE4, 120 credits (30 optional) at HE5 and 120 credits (30 optional) at HE6.

Validated Modules

Title	Module Code	COE[1]
Fundamentals of Programming	CTF3301	C
Logical Analysis and Problem Solving	CTF3302	C
Computer Systems	CTF3303	C
Foundation Project	CTF3304	C
Maths for Computing	COM4301	C
Computer Science Fundamentals	COM4302	C
Computing Infrastructure	SWE4303	C

Databases	SWE4304	C
Object Oriented Programming	SWE4305	C
Systems Analysis and Design	SWE5306	C
Web Design and Programming	SWE5307	C
Cloud Technologies	SWE5308	C
Advanced Databases and Big Data	SWE5304	O
Introduction to AI	AIN5301	O
Advanced Operating Systems	SEC5304	O
Research and Professional Issues	COM6300	C
Undergraduate Project	COM6301	C
Emerging Technologies	SWE6304	C
Applied Machine Learning	SWE6302	O
Software Quality Management	SWE6303	O
Information Security Management	SEC6302	O
Operations Management	SEC6305	O
Natural Language Processing	AIN6301	O

[1]Core, Optional, Elective

Learning & Teaching Strategies

Learning and teaching methods may include lectures, seminars, tutorials and critiques, self-directed learning, e-learning and laboratory/workshop sessions, as well as online sessions and support. Practical skills are acquired through technical introduction and support, workshop sessions, demonstrations and activity-based assignments. Active learning is promoted with a strong practical theme, throughout. This programme adopts a blended style of learning and teaching including online delivery and engagement where appropriate.

Learning Activities (KIS entry)

Course Year	Level 3	HE4	HE5	HE6	HE7
Scheduled learning and teaching activities	45%	34%	23%	23%	n/a
Guided independent study	55%	66%	77%	77%	n/a
Placement/study abroad	n/a	n/a	n/a	n/a	n/a

Assessment Strategy

Summative assessment is carried out at key points during teaching. Written feedback is provided following summative assessment. Assessment tasks are linked to the objectives of each module and are normally completed by the end of each module. Types of assessment evidence can include: assignments, projects, in-class tests, portfolios, examinations and presentations. Formative Assessment, which does not contribute to the final mark, is given to help the student improve their work in future and may be given to the student verbally/written/online. Summative assessment, which does contribute towards the final result, is normally given in writing to the student, with the opportunity for the student to receive more detailed verbal explanation. Note that optional modules in the final year mean that the assessment types may vary. For more detail see the individual module specifications.

Assessment Methods (KIS entry)

Course Year	Level 3	HE4	HE5	HE6	HE7
Written exams	n/a	n/a	n/a	n/a	n/a
Coursework	87%	100%	100%	90%	n/a
Practical Exams	13%	n/a	n/a	10%	n/a

Assessment regulations

Assessment Regulations for Undergraduate Programmes apply to this programme.

Grade Bands & Classifications

Undergraduate Honours Degree

Regulations can be found at: http://www.bolton.ac.uk/studentinformation-policyzone/Home.aspx

Role of External Examiners

External examiners are appointed for all programmes of study. They oversee the assessment process and their duties include: approving assessment tasks, reviewing assessment marks, attending assessment boards and reporting to the University on the assessment process.

Support for Student Learning

- The programme is managed by a Programme Leader
- Each student has a Personal Tutor who is responsible for support and guidance
- Feedback is available on formative and summative assessments
- The opportunity to develop skills for employment
- The online Student Information – Policy Zone provides all regulatory and policy information in one place
- A subject specialist link tutor supports the programme
- Induction/Welcome Week introduces the student to the University, partner and their programme
- UoB online library services are a very good source of advice and support with excellent study skills materials available
- Partner centre has study resources
- Programme Handbooks and Modules guides provide information about the programme and university/partner regulations
- Academic Partnership Manager supports the partner centre
- The partner centre provides administrative support, information and advice
- Student representative training is available online from the Student Union

Methods of Evaluating & Enhancing the Quality of Learning Opportunities

- Student Staff Liaison Committees
- Module evaluations by students
- Programme and University Student Surveys
- Annual quality monitoring and action planning through Programme Plans including data analysis, Subject Quality Enhancement Plans, School Quality Enhancement Plans, University Quality Enhancement Plan
- Peer review/observation of teaching
- Professional development programme for staff
- External Examiner reports

Sources of Information

- Student Portal http://www.bolton.ac.uk/Students/Home.aspx
- Students Union https://www.boltonsu.com/
- External Examiner Report https://www.bolton.ac.uk/Quality/EEE/ExternalExaminersReports/
- Careers http://www.bolton.ac.uk/careers
- Student Information - Policy Zone http://www.bolton.ac.uk/studentinformation-policyzone/Home.aspx
- Regent College, London https://www.rcl.ac.uk

Audit Notes

The following changes were made from the previous version of this Programme:

Subject PRR