Programme Specification for Foundation Year BSc (Hons) Computing

Table 1 programme specification for Foundation Year BSc Computing

This document applies to Academic Year 2023/24 onwards		
1.	**Awarding institution/body**	University of Worcester
2.	**Teaching institution**	University of Worcester
3.	**Programme accredited by**	N/A
4.	**Final award or awards**	BSc (Hons) Computing
5.	**Programme title**	Foundation Year Computing
6.	**Pathways available**	N/A
7.	**Mode and/or site of delivery**	Standard Taught Programme
8.	**Mode of attendance and duration**	Full Time
9.	**UCAS Code**	Tbc
10.	**Subject Benchmark statement and/or professional body statement**	QAA Subject Benchmark Statement: Computing (2019)
11.	**Date of Programme Specification preparation/ revision**	Approved March 2021 August 2021 – AQU amendments August 2022 – AQU amendments July 2023 – annual updates

12. Educational aims of the programme

The Foundation Year aims to develop students' knowledge and understanding of fundamental facts, concepts and principles of computing. On successful completion of the course students will have a range of skills and knowledge to ensure they are well prepared to progress onto Level 4 of their Computing degree.

The course is aimed at students who have not fully achieved the entry requirements for Level 4 entry into the BSc (Hons) Computing at the University of Worcester or would benefit from a Foundation Year in Computing as preparation for undertaking the degree programme, e.g., those who have not studied for some time (see section 18).

The main educational aims are:

- To provide students with the ability to develop underpinning knowledge and skills to progress further in their chosen studies of Computing or other computing-related degrees.
- To enable students to develop fundamental knowledge and skills, including academic and information technology capabilities.
- To support students to develop personal and interpersonal skills, self-awareness and personal responsibility; and to reflect on the key concepts they will encounter on future Computing or other computer-related degrees.
- To enable students to develop a variety of transferable skills that will underpin students' academic success in future studies and maximise their employability upon completion of their chosen degree.

13. Intended learning outcomes and learning, teaching and assessment methods

Table 1 knowledge and understanding outcomes for modules/codes

Knowledge and Understanding		
LO no.	On successful completion of the named award, students will be able to:	**Module Code/s**
1.	Gather and evaluate information about the operation and functioning of computers	COMP0001
2.	Demonstrate an awareness and understanding of legal and ethical aspects of Computing	COMP0001
3.	Demonstrate a practical knowledge and understanding of the key concepts of programming and coding	COMP0002
4.	Perform simple algebraic manipulations	COMP0003
5.	Describe data using descriptive statistics	COMP0003
6.	Appraise and demonstrate knowledge of a range of digital technology skills	COMP0004

Table 1 cognitive and intellectual skills outcomes for module code/s

Cognitive and Intellectual skills		
LO no.	On successful completion of the named award, students will be able to:	**Module Code/s**
1.	Test, debug, comprehend and comment code	COMP0002
2.	Reason mathematically to explain Computing related concepts	COMP0003
3.	Solve logical problems through equations and expressions	COMP0003

Table 2 skills and capabilities related to employability outcomes for module code/s

Skills and capabilities related to employability		
LO no.	On successful completion of the named award, students will be able to:	**Module Code/s**
1.	Use a range of techniques to gather and evaluate information	COMP0001
2.	Show an awareness of legal and ethical aspects of computing	COMP0001

Transferable/key skills		
LO no.	On successful completion of the named award, students will be able to:	**Module Code/s**

1.	Effectively communicate information, arguments and analysis in a variety of forms	COMP0002
2.	Effectively reflect on own work and be able to evaluate self and peers	COMP0004
3.	Apply desirable personal, interpersonal and academic skills relevant for study and employment in Computing to their own personal development	COMP0001
4.	Take personal responsibility for and expand the boundaries of their own learning	COMP0001

Learning and teaching methods used will include:

Tutor-led direct contact, University-based teaching days, including such methods as structured lectures, interactive seminars, flipped lectures, group discussions and activities, co-operative learning, individual tutorials, real-world case studies, oral presentations, e.g., computer-based tests, guest speaker inputs, and self-directed study. Students do not merely learn in isolation and using the university Virtual Learning Environment allows for online collaborative activities to take place.

Teaching
Students are taught through a combination of interactive workshops, lectures, seminars, laboratory practical sessions, practical activities, etc. Interactive workshops take a variety of formats and are intended to enable the application of learning through discussion and small group activities. Seminars enable the discussion and development of understanding of topics covered in lectures, and laboratory practical sessions are focused on developing subject specific skills and applied individual and group project work.

In addition, meetings (both individual and group) with personal academic tutors are scheduled throughout the academic year. The University places emphasis on enabling students to develop the independent learning capabilities that will equip them for lifelong learning and future employment, as well as academic achievement. A mixture of independent study, teaching and academic support from Student Services and Library Services, and also the personal academic tutoring system enables students to reflect on progress and build up a profile of skills, achievements and experiences that will help them to flourish and be successful graduates.

Contact time
In a typical week students will have around 12 to 13 hours contact hours of teaching.

Typically class contact time will be structured around:

- Information giving, facilitated discussions, small group work, presentations
- Practical skills – the opportunity to practise group facilitation, presentation, communication and listening skills
- Visiting speakers and opportunities to visit other settings are regular features of the course.
- Most of the computing seminars take place in state-of-the-art PC labs using a variety of software specific to each module.

Independent self-study
In addition to the contact time, full-time students are expected to undertake around 24 hours of personal self-study per week, plus additional preparation for assessments. Typically, this will involve meeting with individual tutors to discuss progress and feedback, completing online activities, reading journal articles and books, working on

individual and group projects, undertaking research in the library and online. In addition to this, students will spend time sharing ideas with fellow students, taking part in extra-curricular learning activities.

Independent learning is supported by a range of excellent learning facilities, including the Hive and library resources, the virtual learning environment, and extensive electronic learning resources as well as our network of employers and entrepreneurs.

Teaching staff
Students will be taught by a teaching team whose expertise and knowledge are closely matched to the content of the modules on the course. The team includes senior academics, professional practitioners with industry experience and business leaders and employers.

Teaching is informed by research and consultancy, and many lectures are Fellows of AdvanceHE. Teaching is informed by the research and consultancy work carried out by staff and staff profiles can be viewed at the WBS Staff Profile Page.

Assessment
The assessment strategy has been designed so that:

- All modules have both formative and summative assessment elements. Formative assessment allows tutors and students to recognise strengths and weaknesses in learning and to address those issues immediately. Summative assessments are graded and count towards the final module grade, and they are assessed against the specific module learning outcomes.
- Typically, 30 credit modules will have 2-3 assessments
- Throughout the year the concept of continuous assessment and/or building up expertise in different assessment types applies. A variety of assessment types (report, portfolios, presentation, and case study) are designed to suit different learning styles
- Different types of employability skills are embedded in all modules.

Table 3 types of employability skills

Module	Module Title	Mandatory or optional	Presentation/demo	Portfolio	Case Study	Poster and written report	Quiz	Project	Reflective Journal	Exam/Written test
COMP0001	Studying Computing with Confidence	M			50	50				
COMP0002	Introduction to Coding	M		50			25	25		
COMP0003	Mathematical Fundamentals	M		50						50
COMP0004	Computing & Digital Technologies	M	20	40					40	

Inclusivity
The learning and teaching strategies for individual modules have been undertaken in accordance with the University's Curriculum Design Policy. There is constructive alignment of the learning outcomes with teaching and learning approaches and

assessment, research-informed teaching and Business School Employability Standards have been embedded within modules to meet the learning needs of a diverse range of learners.

Research
The importance of research in the curriculum is a strategic goal of the Worcester Business School (WBS), and a variety of methods to enhance research into the curriculum are detailed:

- Research-informed teaching in enhancing students' learning experience is fully appreciated. Research-active tutors use their research within their disciplines and all tutors use research-inspired inquiry led learning, which keeps programmes of study current and relevant.
- Worcester Business School Employability Standard of Research and Problem-solving is covered by the majority of modules in the programme.
- A student-centred learning approach ensures that students learn through their own enquiry and the assessment strategy supports this through investigative, explorative and applied assessment tasks.
- Invitations to include eminent research-active guest speakers in modules is encouraged.

Internationalisation is embedded in the curriculum and the programme also includes a number of modules with an international or global theme. Students study in a culturally diverse environment with peers and tutors from a range of cultural backgrounds.

The themes of ethical and sustainable practice are addressed throughout the curriculum. Students are encouraged to evaluate their own courses of action in relation to organisational ethical dilemmas and to consider the implications of ecological changes for business and communities, now and in the future, and responses to these changes. The use of the VLE to provide learning materials and student support promotes the paperless/low carbon learning processes, as do online submission and marking of assignments.

14. Assessment strategy

A grid showing assessment methods and weightings mapped to modules at each level, together with an assessment calendar of submission dates is included in the course handbook.

The Assessment strategy has been designed to provide a variety of challenges appropriate to students on a multi-disciplinary academic undergraduate programme. Modules include assessments which encourage the development of academic and employability skills, wider reading and research and advanced scholarship.

A mixture of assignments is intentionally set in order to maximise opportunities for all students to perform and develop skills relevant to their future academic or professional careers. An appropriate balance of formative and summative assessments is included. The assessment structure has been developed to support student learning by providing assessment procedures that reflect the nature of the learning experience of each module, and by ensuring that the students are able to demonstrate ability in a wide range of qualities and skills appropriate to the course. This structure is under continuous review via WBS quality enhancement procedures including student feedback, comments from the external examiner and other review processes.

Marking of student work is internally and externally verified. Typically work is anonymously marked, except where this is impracticable (e.g. oral presentations). Student work is graded according to the University's Generic Grade Descriptors. Specific assessment criteria, which reflect the Intended Learning Outcomes are also published for each

assessment. Constructive, timely and relevant feedback is an integral part of the assessment process.

15. Programme structures and requirements

Table 7 heading for course title

Course Title: Foundation Year BSc (Hons) Computing

Year 0

Table 7 year 0 award map

Module Code	**Module Title**	**Credits** (Number)	**Status** (Mandatory (M) or Optional (O))
COMP0001	Studying Computing with Confidence	30	M
COMP0002	Introduction to Coding	30	M
COMP0003	Mathematical Fundamentals	30	M
COMP0004	Computing & Digital Technologies	30	M

16. QAA and professional academic standards and quality

This award is located at Level 3 of the OfS sector recognised standards, and has been developed with reference to the QAA (2019) Subject Benchmark Statement Computing and SEEC Credit Level Descriptors for Higher Education (Level 3) and the Framework for Higher Education Qualifications

17. Support for students

General approaches to student support

The fundamental approach of Worcester Business School to student support is centred on the need to motivate and inspire our students. Given the nature of the subject material, the need for active learning is emphasised through the award.

Students are supported during in-class activities with verbal formative feedback on their progress during seminar activities. They are also supported on a one-to-one basis, as required, outside the classroom through individual tutorials. Tutors allocate timetabled office hours to support student learning.

Student induction

Worcester Business School runs a week of induction events at the start of the academic year. This varies in detail from year to year but includes the following elements: Introduction to the course, introduction to fellow students, introduction to UW support services, meetings with academic tutors, introduction to key ICT and library resources, introduction to study skills, introduction to group activities. Support is available beyond Induction Week to ensure that students receive appropriate support at the point of need through the WBS Academic Support Unit Hub and Personal Academic Tutoring.

Personal Academic Tutoring
Each student has a nominated Personal Academic Tutor (PAT) to provide academic advice and guidance, personal development planning and pastoral support as appropriate throughout their programme of study. Key aspects of the role include:

- To support the academic development of their allocated tutees
- To act as the first point of call for any tutees experiencing issues or problems arising whilst at University
- To provide the official University reference for tutees
- To advise students on academic planning
- To identify 'at-risk' students and implement intervention
- Improve graduate outcomes by focusing on students' ultimate career goal, providing information and guidance on graduate options (further study, employment and entrepreneurship)
- To lead to increased student engagement, achievement and attendance.

In addition, to the above, the following activities and documents have been put in place to provide development and support for undergraduate students at Worcester Business School:

- Handbooks are provided for the Course.
- Module outlines which include module code, module title, level, planned teaching activities, attendance requirements, assessment briefs, assessment criteria and reading lists.
- Learning and study guides.
- A Virtual Learning Environment to provide module-specific material, documents, activities and networking, as well as more general announcements and updates.
- Course Leaders to advise on curriculum and other course-related issues.
- Student course representatives on Course Management Committee to address course-wide issues.
- The University's Disability & Dyslexia Service provides advice and support for students who have mental health difficulties, dyslexia, sensory or physical impairments and other difficulties. There is a dedicated Assistant Disability Coordinator for students with sensory impairments. Advice is also available on access technology such as voice recognition and text-to-speech software.

https://www2.worc.ac.uk/firstpoint/
https://www.worcester.ac.uk/life/help-and-support/services-for-students/home.aspx
https://www2.worc.ac.uk/disabilityanddyslexia/

18. Admissions

Admissions policy
We welcome applications from people over 18 years of age and all backgrounds with an interest in studying Computing and computing-related subjects at degree level. The University aims to be accessible; it is committed to widening participation and encouraging diversity in the student population.

Worcester Business School works closely with central student support services, including the Admissions Office, the Disability and Dyslexia Service and the International team (student services), to support students from a variety of backgrounds. We actively encourage and welcome people from the widest range of economic and cultural backgrounds, and value the contribution of mature learners.

Entry requirements
The normal minimum entry requirement for Foundation Year is 40 UCAS points and English and Mathematics level 2 (GCSE) at C Grade/4 or above.

The current UCAS Tariff requirements for entry to this course are published in the prospectus and on the UW website https://www.worc.ac.uk/journey/a-z-of-courses.html

See Admissions Policy for other acceptable qualifications.
Applicants with no formal qualifications may be considered for Mature Student Entry Routes.

The University welcomes applications from candidates holding qualifications outside the UCAS Tariff including those awarded by professional bodies and overseas qualifications, including the International and European Baccalaureate.

Students whose first language is not English will be expected to have reached a sufficient standard on admission to the programme (e.g. IELTS of 6.0 of higher or Pearson 59 or 51 or higher in each component). Please note that IELTS exams must be no more than two years old at the start of the course. Further details regarding minimum entry requirements can be found on the University web site.

International students must hold a qualification equivalent to the UK standard entry requirements for undergraduate courses. International students can check their qualification with the International Recruitment Team at: international@worc.ac.uk.

Recognition of Prior Learning
Details of acceptable Level 2 and 3 qualifications, policy in relation to mature students or applicants with few or no formal qualifications can be found in the prospectus or on the University webpages. Information on eligibility for recognition of prior learning for the purposes of entry or advanced standing is also available from the University webpages or from the Registry Admissions Office (01905 855111).

Further information on Recognition of Prior Learning can be found at http://www.worcester.ac.uk/registryservices/941.htm

Admissions procedures
Full-time applicants apply through UCAS. The UCAS code for each course is shown on the website. Applicants are normally considered on the basis of their UCAS application forms. Those who accept an offer will be invited to an Applicant Day to experience studying at Worcester.

Admissions/selection criteria
Offers are made in line with the entry requirements specified above, demonstrated via the application form with a strong interest in computing and suitability and preparedness to meet the requirements of the course. The reference provided as part of the application is also taken into account.

See Section 19 of the Programme Specification for information regarding the admissions arrangements for progression to the linked Honours Degree.

19. Regulation of assessment

The course operates under the University's Taught Courses Regulatory Framework

Requirements to pass modules

- Modules are assessed using a variety of assessment activities which are detailed in module specifications.
- The minimum pass mark is D- for each module.
- A student is required to submit all items of assessment in order to pass a module, and in some modules, a pass mark in each item of assessment may be required.
- Full details of the assessment requirements for a module, including the assessment criteria, are published in the module outline.

Submission of assessment items

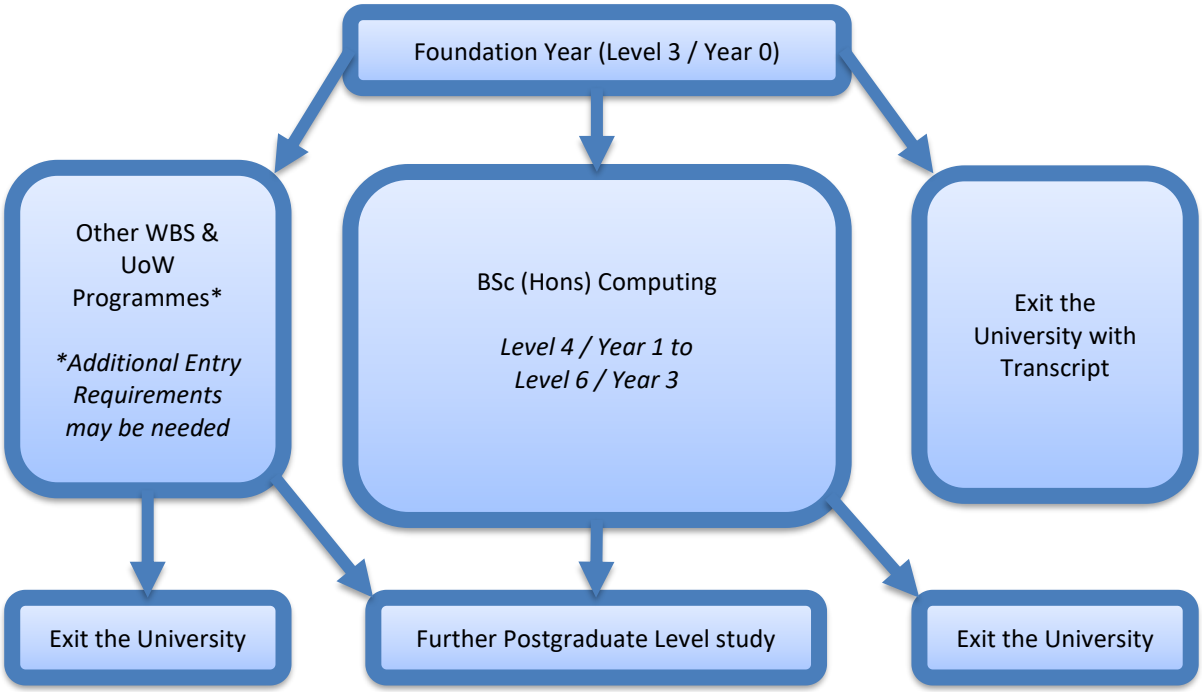
- A student who submits course work late but within 7 days (one week) of the due date will have work marked, but the grade will be capped at D- unless an application for mitigating circumstances is accepted.
- A student who submits work later than 7 days (one week) will not have work marked unless they have submitted a valid claim of mitigating circumstances.
- For full details of submission regulations please see the Taught Courses Regulatory Framework.

Retrieval of failure

- A student is entitled to resit failed assessment items for any module that is awarded a fail grade.
- Reassessment items that are passed are capped at D-.
- If a student is unsuccessful in the reassessment, they have the right to retake the module (or, in some circumstances, take an alternative module); the module grade for a re-taken module is capped at D-.
- A student will be notified of the reassessment opportunities in the results notification issued via the secure student portal (SOLE). It is the student's responsibility to be aware of and comply with any reassessments.

Requirements for Progression

- A student will be permitted to progress from Level 3 to Level 4 if, by the time of the reassessment Board of Examiners, they have passed 120 credits at Level 3.
- A student who, by the time of the reassessment Board of Examiners, has failed 90 credits or more (after exhausting all reassessment opportunities) during the academic year, will have their registration with the University terminated.
- If a student has not passed 120 credits by the reassessment Board of Examiners, the student is not permitted to progress to the next level and will be required to either complete outstanding reassessment or retake the failed modules the following academic year. Students will be able to carry forward any passed modules.



20. Graduate destinations, employability and links with employers

Graduate destinations

- After 15 months of course completion 68% of BSc (Hons) Computing graduates are in full-time employment and 62% are in highly skilled roles, e.g. professional roles (2020).
- Employment may initially be as a trainee in a large organisation or a junior role in a smaller organisation. Alternatively, students may decide to establish their own business.
- Some organisations that Worcester Business School graduates have worked for include such prestigious firms as:
    - o Amazon UK
    - o Cisco Systems
    - o DHL
    - o HSBC
    - o Mazda
    - o Sainsburys
    - o Vodaphone

Student employability

- Short-term work placement and job opportunities are advertised via Worcester Business School's intranet for existing students.
- Career guidance – A range of opportunities are provided to enhance students' employment. Students will benefit from the close links that have been developed with local and national employers. Further careers guidance is available through the University of Worcester Career Advisory Service and periodic Career Fairs are organised by Student Services.

Strategies used to embed employability into the curriculum and enhance employability within a complex global world include:

- the targeting of selected Employability Standards in every module (designed by Worcester Business School in conjunction with employers)
- access to a broad network of business managers and employers
- employment preparation workshops which include CV preparation, mock interviews/ assessment centres and meetings with employers

Links with employers

- Worcester Business School aims to promote closer links with employers through the work of its Business and Professional Development Team and is supported by its Employers' Advisory Group, which meets on a regular basis.
- The Business School works closely with a number of professional organisations including the Chartered Institute of Management, Institute of Commercial Management, Chartered Institute of Marketing, Chartered Institute of Personnel and Development, Chartered Institute of Public Relations, Institute of Financial Accountants, Chartered Institute of Payroll Professionals, and British Computer Society.
- The Business School has worked with a number of business clients in developing and delivering its programmes including the NHS, local government, police constabularies, the Ministry of Defence, Royal Air Force, the Prison Service, Royal Mail, financial services, housing associations and many other local organisations and businesses.
- The Business School has well-developed working relations with the local business community many of whom contribute to undergraduate programmes to give a real-world insight into the future world of work.
- These professional and business networks also involve external events, many of which are open to students, as well as employers.
- The School liaises with external agencies, such as the Institute of Directors, Federation of Small Businesses, Chamber of Commerce and Confederation of British Industry.
- Media Lab - Worcester Business School's 'Media Lab is a dedicated purposefully equipped space to provide students with the experience of working on 'live' projects with clients from the local business community. Projects include: mobile applications, games, website and software development. The Lab is also working as a test bed for learning and teaching and sustainability methodologies.

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 s/he takes full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of each module can be found in associated course documentation e.g. course handbooks, module outlines and module specifications.