

Programme Specification

A Programme Specification provides a concise summary of the main features of a programme and its intended learning outcomes. It is intended to be used by prospective students, current students, academic staff and potential employers.

Programme Title:	
FdSc Computing	
Programme (AOS) Code(s):	FT1CTG1 / FT1CTG1A
UCAS Code:	G405
Name of Final Award:	Foundation Degree Science, FDS
Level of Qualification:	Level 5
Regime of Delivery:	Attendance
Mode(s) of Delivery:	Full Time
Typical Length of Study (Years):	2 Years / Full-Time
Professional Body Recognition / Accreditation (including specific requirements where applicable):	N/A

Brief Description of the Programme

This Foundation Degree in Computing aims to prepare students for careers in a range of Computing and IT contexts. The course combines significant practical skills (with some focus on professionally relevant material, e.g. Microsoft, Cisco), a work-related experience, and theoretical underpinning, to afford graduates that will be desirable to employers seeking “computer-literate” staff, such as those organisations based within the vibrant Thames Valley area. The course is designed with a number of core principles in mind, namely, ACCESSIBILITY, ARTICULATION, PROGRESSION, FLEXIBILITY, EMPLOYER INVOLVEMENT, PARTNERSHIP (QAA Foundation Degree qualification benchmark, 2010).

The course is based around themes that have general and specific relevance to various potential employment destinations, as follows:

- Theme 1: IT applications and programming basics
- Theme 2: Computers and networks
- Theme 3: Website development and related applications
- Theme 4: Continuing personal and professional development

These themes, with the mixed and varied experiences involved, help students to make informed choices about future careers, and also make decisions about possible “top-ups” to full BSc(Hons) Degrees in a number of specialised areas of Computing [ARTICULATION/PROGRESSION].

The course is then aimed at people who have ambitions to achieve careers in Computing and IT and/or aspirations to study to a higher level, e.g. BSc(Hons) Degree. Students who are performing well after Level 4 of the Foundation Degree may be considered for transfer to one of several appropriate BSc(Hons) Degree programmes [FLEXIBILITY] at Level 5 stage, for example, Web development, games development.

Programme Aims

1	Make students conversant with technical decisions relating to commercial computing and various types of technologies.
2	Raise student awareness of some of the challenges and opportunities presented by the Information Age and the ubiquity of computing in our daily lives.
3	Develop students who can analyse problems, devise solutions and select the most appropriate computer-based option.
4	Develop appreciation on the part of the student of the professional, moral and ethical issues involved in IT as well as a degree of adaptability in the rapidly-changing environment.
5	Produce people who can take responsibility for planning, directing, recording and achieving their own personal and professional development.
6	Provide students with the technical know-how and intellectual capabilities to progress to the final year of the BSc Computing course.

Programme Learning Outcomes

The Bucks Graduate Attributes focus on the development of innovative leaders in professional and creative capacities, who are equipped to operate in the 21st Century labour market and make a positive impact as global citizens. The attributes are developed through the programme.

ID	Learning Outcome
On successful completion of the programme a graduate will be able to:	
Graduate Attribute: Knowledge and Understanding (A)	
A1	Appreciate the role of the various disciplines of computing including programming, web development, databases and networking.
A2	Identify the practical requirements of and model a computer-based system, leading to a formal specification to be used in the solution of specific problems.
A3	Identify the key activities that comprise the typical software lifecycle.
A4	Understand the business, industrial and commercial context in which computer systems are deployed.
Graduate Attribute: Intellectual/Cognitive Skills (B)	
B1	Evaluate approaches to modelling in order to design computer-based systems, with particular regard to the Object Oriented paradigm.
B2	Solve problems in a logical and analytical manner.
B3	Make informed decisions and produce innovative solutions to software problems.
B4	Appreciate the role of evaluation and testing in ensuring that computer-based systems meet pre-determined criteria.
B5	Evaluate new computer-related technologies.
Graduate Attribute: Practical Skills (C)	
C1	Analyse, design, develop and maintain reliable software.
C2	Employ analytical techniques and design tools in the development of software artefacts.
C3	Apply sound programming principles to the construction and maintenance of software using appropriate programming paradigms and languages.
C4	Evaluate a system in terms of specific objectives.

C5 Specify, design, implement and test computer-based information systems.

Graduate Attribute: Key/Transferable Skills (D)

D1 Employ information-retrieval skills (including browsers, search engines and catalogues)

D2 Demonstrate numeracy and literacy in both understanding and presenting cases involving a quantitative dimension.

D3 Manage one's own learning and development including time management and organisation skills.

Programme Structure

Programmes are structured in stages. The number of stages will vary depending on the mode (e.g. full-time, part-time), duration and location of study which will be detailed in the Programme Handbook.

Modules are set at a specific academic level and listed as either core (compulsory) or optional. The level indicates the relative academic difficulty which will increase through the programme. Passing modules will reward you with academic credit. The amount of credits will depend on the complexity of the module and the level of effort required, which is measured in 'notional learning hours'.

Our [Academic Advice webpages](#) provide more information on the structure of taught awards offered by the University.

Please note: Not all option modules will necessarily be offered in any one year. Other option modules may also be introduced at a later stage enabling the programme to respond to sector developments.

Level Four

Code	Module Title	Credit	Core / Option	Compensable (Normally Yes)
CO450	Computer Architectures	15	C	Yes
CO452	Programming Concepts	15	C	Yes
CO454	Digital Technologies & Professional Practice	15	C	Yes
CO456	Web Development	15	C	Yes
CO451	Networking	15	C	Yes
CO453	Application Programming	15	C	Yes
CO455	User Experience (UX)	15	C	Yes
CO457	Business Modelling	15	C	Yes

Level Five

Code	Module Title	Credit	Core / Option	Compensable (Normally Yes)
CO550	Web Applications	15	0	Yes
CO556	Network Systems	15	0	Yes
CO558	Database Design	15	0	Yes
CO567	OO Systems Development	15	0	Yes

CO551	Open Source Systems	15	0	Yes
CO557	Software Engineering	15	0	Yes
CO566	Mobile Systems	15	0	Yes
CO599	Work-Related Project	15	0	Yes

Learning and Teaching Activities

Please see the [Academic Advice pages](#) for a description of learning and teaching activities that are recognised by the University. Detailed information on this specific programme is outlined below:

The teaching, learning and assessment strategies employed throughout the course (and articulated in more detail on the **Module Descriptors**) are those judged to be the most appropriate for each module at each stage and level of the course. The strategies have been designed to ensure that there is progression from a situation in Year 1 where students are highly reliant upon their tutors for their learning to a situation in Year 2 where they take more responsibility for their own learning in and out of the classroom.

In order to effectively maintain student engagement with their studies, a variety of teaching and learning methods will be employed. This is not just thoughtlessly based upon the traditional model of lecture, tutorial, seminar and practical. There will be a carefully integrated approach within a module, with an emphasis upon learning by doing. For example, a short demonstration on the use of computer hardware or software will be immediately followed by an opportunity for students to get hands-on experience and practice; an introduction to a theoretical concept will be combined with a practical student exercise to explore or apply the concept within the framework of a real world problem. In other words, a session will contain some coherent combination of elements to encourage student learning and understanding. This thinking will be extended to a more holistic level to show links and progression between those modules forging course themes across Year 1 and Year 2.

Taught sessions will be supported by handouts, videos/DVDs and other materials; tutors will provide references to supplementary study materials in the library and on websites. Tutors will use any appropriate technologies to support learning, for example a VLE for interfacing with students off campus.

Making use of advice and feedback from tutors will play a crucial role in a student's learning experience. Students will be encouraged to reflect upon their understanding and performance and, with the help of tutors, plan ways of improving and developing. This may relate to their general development or to a specific task or assignment. Group work and discussion exercises will not only give students the experience of working with others but will also facilitate a collaborative and supportive learning environment where students can learn from their peers.

The fundamental tenet of advice and feedback being an important aid to learning and development has been embedded within the assessment strategy for modules. The formative benefits of assessment will be fully exploited. Students will receive structured advice and feedback throughout their modules, before and after the completion of assignments.

A variety of assessment vehicles will be used as appropriate to the module, including assignments carried out in the students own time, in-class assignment, workshops, presentations and formal examination. The form of assessment has been chosen so as to motivate students to achieve their best, and create learning activities for the students. The assessment vehicles for individual

modules are detailed in the Module Descriptors.

Additional Course Costs

There are costs associated with all studies, additional to the tuition fee, which require consideration, when planning and budgeting for expenditure. Costs are indicative and for the total length of the course shown unless otherwise stated and will increase with inflation; depending on the programme they may include equipment, printing, project materials, study trips, placement activities, DBS and/or other security checks.

Contact Hours

1 unit of credit is the equivalent of 10 notional learning hours. Full time undergraduate students study 120 credits (1200 hours) and full-time postgraduate students study 180 credits (1800 hours) per year or 'stage' of the course.

Course Stage	Scheduled Activities (Hours)	Guided Independent Study (Hours)	Placement / Study Abroad / Work Based Learning (Hours)
Year 1	360	840	0
Year 2	360	840	0

Assessment Methods

The [Assessment and Examination webpages](#) provide further information on how assignments are marked and moderated, including a description of assessment activities. These also include further information about how feedback on assessed work is provided to students, including our commitment to ensure this is provided to students within 15 working days (the 'three-week turnaround').

Assessments will be appropriate to the task, achievable, motivating and vocationally focussed and will form a constructive part of the learning process. They will develop general transferable skills as well as academic skills. Assessments will provide sufficient opportunity for the best students to exhibit a level of innovation and creativity associated with excellence. The following provides a guide to the assessment principles on the Foundation Degree.

Year 1 assessments (Level 4) will be primarily formative and will encourage the development of appropriate academic practice. The emphasis will be on frequent small-scale assessments wherever possible with a balance between formative and summative assessment. Many of the modules will emphasise using equipment and gaining practical skills to aid development of theory and knowledge at higher levels.

Year 2 assessments (Level 5) will be more demanding, with the emphasis still on development of knowledge and skills, but now encouraging learning at greater depth. Students will be expected to take more independent responsibility for finding solutions to problems, and for devising the necessary approach for tackling assignments. The emphasis will shift towards summative assessment. Nevertheless, advice and feedback from tutors will continue to form an important part of the student's learning.

As previously mentioned in Section A, the Foundation Degree is based around four coherent and inter-related themes (see Table 3).

Classification

Calculation of final award:

Distinction awarded 70% and above. Merit awarded 55% and above but below 70%. Pass awarded 40% and above but below 55%.

For full details of assessment regulations for all taught programmes please refer to our [Results webpages](#). These include the criteria for degree classification.

Admissions Requirements

Please see the [Application webpages](#) for more information on how to apply, including a statement on how we support students from a variety of backgrounds. Please also see our [general entry requirements](#) for taught programmes. Applicants who do not meet our published entry requirements are encouraged to contact our admissions team for further advice and guidance.

Typical applicant profile and any programme-specific entry requirements

Expected knowledge and skills that the entrant will have on entry to the programme: Foundation Degrees are intended to make a valuable contribution to lifelong learning by providing access to Higher Education for learners from different starting points and with different previous qualifications [ACCESSIBILITY]. The normal expectation is for entrants to possess the equivalent of 180 UCAS Tariff points, with GCSE passes at C-grade for Maths and English. However, mature, motivated and experienced candidates will be considered although they will be interviewed to ascertain their suitability for joining the programme.

Do applicants required a Disclosure and Barring Service (DBS) Check?

No

Opportunities for students on successful completion of the programme

Why students should choose this award:

IT skills, in particular, have been highlighted as being fundamental to the competitiveness of every sector and to the prosperity of the UK economy in the 21st Century (Skills for Business – Sector Skills Development Agency). With 21.5 million jobs in the UK requiring skills in the use of IT, this exemplifies the economic need for training, education and work-related experience/context in these areas. The ‘2020 Ambition’ report (UKCES) predicts the most dominant further growth to be in jobs concerning IT and related business services, and demands that HEIs (in co-operation with employers) play a crucial role in supporting and developing the future workforce, including the delivery of improved higher level skills (notably, Level 4 and Level 5).

Opportunities available for students after completion of the award:

The course will provide students with the appropriate skills and knowledge to pursue a number of careers within the Computing & IT, including IT Support, Software Development, Networking and Retail. The programme will place great emphasis on developing the student’s employability skills, thus providing them with the competence and confidence to succeed in this demanding field. Importantly, CO599 Work-Related Project is one major opportunity for students to develop links with employers via project work [EMPLOYER INVOLVEMENT/PARTNERSHIP]. Students can also progress to higher awards.

Recognition of Prior Learning

Previous study, professional and / or vocational experiences may be recognised as the equivalent learning experience and permit exemption from studying certain modules. Please refer to our [Credit Accumulation webpages](#) for further guidance.

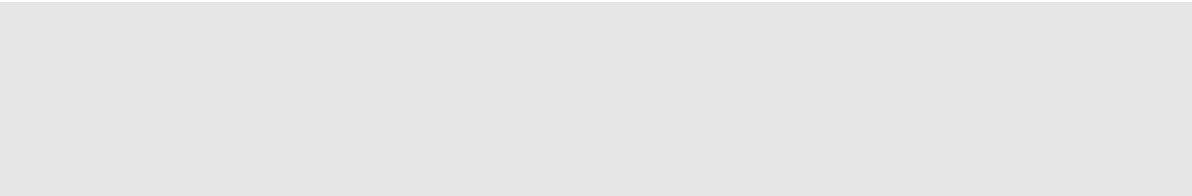
Student Support

During the course of their studies, students will be supported in the following ways:

- At the start of their studies all students will receive a full **induction** to the programme which will include introduction to the staff responsible for delivering the course, and access to library and IT facilities
- The **Programme Handbook** will outline the exact nature of the course and how it is structured, including the availability of option modules

- Each student will be allocated a **Personal Tutor** who will support their academic development, be able to advise and guide them with their studies and, where necessary, give advice on study options
- Students will be able to access our full range of **support services**, including the Learning Development Unit for skills and study support, the Library, the Careers and Employability Team, Student Finance Team, Accommodation and Counselling Services

Programme specific support (if applicable)



Appendices

Quality Assurance

Awarding Body:	Buckinghamshire New University
Language of Study:	English
QAA Subject Benchmark Statement(s):	Computing (2007) Foundation Degree qualification benchmark (2010)
Assessment Regulations:	<i>Academic Assessment Regulations</i> , accessible via the Academic Advice webpages (https://bucks.ac.uk/students/academicadvice)
Does the Fitness to Practise procedure apply to this programme?	No
Ethics Sub-committee	
Date Published / Updated:	January 2019
Date programme re-approval required:	2025

Other awards available on programme (Exit Qualifications)

Please refer to the *Academic Qualifications Framework* for Exit Qualifications recognised by the University and credit and module requirements.

Name of Exit Qualification:	Certificate of Higher Education (CertHE)
Full name of Qualification and Award Title:	CertHE computing
Credits requirements:	120 credits
Module requirements:	ALL 120 Credits at Level 4
Learning Outcome	
Comprehend and apply a simple requirement in a structured manner and implement a software solution; with appropriate application of programming techniques and coding skills.	
Demonstrate competence in the design and development of a cross-platform Web 'front-end' solution, paying appropriate attention to user expectations and process needs.	
Understand the operation of the major hardware units of computers and appreciate the fundamental components and protocols of network systems.	
Adopt a systematic approach to the design and evaluation of human computer interaction, as part of different development projects.	
Demonstrate an understanding of digital technologies within a professional context, and how different tools and environments can be used for handling information, communication and other purposes.	