

1. Awarding body	University of Surrey
2. Teaching institution (if different)	University Centre Farnborough at Farnborough College of Technology Hampshire Business School
3. Final award	BSc (Hons)
4. Programme title/route/pathway	BSc (Hons) Computing (Top-up)
5. Subsidiary award(s) and title(s)	BSc (Ordinary) Computing (Top-up)
6. FHEQ Level	6
7. Credits and ECTS credits	60 ECTS credits; UK credits 120
8. Name of Professional, Statutory or Regulatory Body (PSRB)	N/A
9. Date of last accreditation (if applicable)	N/A
10. Mode of study	Full-time
11. Language of study	English
12. UCAS Code	I100
13. QAA Subject benchmark statement (if applicable)	QAA Subject Benchmark Statement Computing February 2016
14. Other internal and / or external reference points	Association for Computer Machinery Computing Curricula Computer Science (2013) Information Systems (2010) Software Engineering (2014) http://www.acm.org/education/curricula-recommendations The Overview Report and 2014 Curriculum for Software Engineering
15. Faculty	University Centre Farnborough at Farnborough College of Technology Hampshire Business School
16. Programme Leader	Emil Naydenov
17. Date of production/revision of the specification	Sep 2019
18. Educational aims of the programme	
<ol style="list-style-type: none"> 1. Provide the opportunity for graduates to develop their computing skills to enable them to function effectively in a relevant employment setting 2. To provide a comprehensive and well-balanced programme of academic and vocationally-focused education at Honours Degree level that enables those holding a Pearsons HND, appropriate Foundation Degree, or other equivalent level qualifications or recognised prior learning from a relevant setting, to benefit from Honours Degree level study. 3. Provide an educational experience that allows graduates to critically examine their own work and make informed responses about further development. 4. Engage students in problem solving activities designed to test their ability to analyse and 	

enquire effectively within Computing including networking security strategies.

5. To enable students to critically evaluate arguments, assumptions and abstract concepts to develop skills to make judgement and frame questions that will lead to a solution(s) to complex problems within Computing.
6. To prepare students for careers in Computing or to progress to postgraduate study.

19. Programme learning outcomes – the programme provides opportunities for students to develop and demonstrate knowledge and understanding, skills, qualities and other attributes in the following areas:

Knowledge and understanding

1. Apply and evaluate Computing and associated skills appropriate to the discipline
2. Analyse a problem, and identify and define the computing requirements appropriate to investigating and developing a solution.
3. Design, implement and evaluate computer-based systems, processes, components, or programs to meet specified requirements.
4. Demonstrate an understanding of the local, national and global impacts of computing on individuals, organisations and the wider society.
5. Articulate an understanding and appreciation of the ethical and moral issues related to the computing industry and associated professions.
6. Employ various and appropriate mediums when presenting ideas or solutions to given computing scenarios and problems appropriate to the relevant vocational setting.

Teaching and Learning Strategies and Methods

- i. lectures
- ii. computer room practicals and workshops
- iii. individual and group project work
- iv. individual presentations
- v. group and individual tutorials

Assessment

- i. in-class tests and on-line tests
- ii. assessed practical work
- iii. assessed coursework / assignments
- iv. formative assessment through assignment work feedback
- v. formal examination

Skills and other attributes - Intellectual / cognitive skills

Intellectual Abilities

1. Demonstrate knowledge and understanding of essential facts, concepts and principles of Computing.
2. Use such knowledge and understanding in the modelling and design of computer-based systems.
3. Recognise and analyse criteria and specifications appropriate to specific computing

Teaching and Learning Strategies and Methods

Intellectual skills are developed through the teaching and learning programme outlined above as well as through the industrial placement. Analysis and problem solving skills are further developed through the use of examples sheets and case study exercises with learners working either individually or in groups.

Assessment

<p>and technology problems and plan strategies for their solution.</p> <ol style="list-style-type: none"> 4. Analyse the extent to which a computer-based system meets the criteria defined for its current use and future development. 5. Deploy appropriate theory, practices and tools for the specification, design, implementation and evaluation of computer-based systems. 6. Demonstrate critical thinking in problem solving in areas specific to computing. 7. Recognise the professional, moral, ethical and legal issues involved in the application computer technology. 	<p>This is a mix of formal examination, coursework assignments, and practical demonstrations. The overall range of assessment provides the opportunity for the student to demonstrate the ability to analyse problems and propose solutions in a clear, logical and structured manner.</p>
<p><u>Skills and other attributes - Professional practical skills</u></p> <p>Practical Skills</p> <ol style="list-style-type: none"> 1. The ability to critically evaluate systems in terms of their quality and commercial viability for specific computing operations or environments. 2. The ability to analyse, evaluate and where appropriate to resolve risks or safety aspects for specific computing operations or environments. 3. To deploy effectively the tools used for the construction, documentation and support of computer applications, demonstrating an understanding of the whole process. 4. To operate computing equipment and software tools effectively, taking into account their logical and physical properties. 5. Identify appropriate professional conduct taking account of legal, environmental and ethical practices involved in the production, maintenance and development of computer-based solutions. 6. Plan and manage a complex project through to a successful conclusion, meeting deadlines, producing workable deliverables and articulating the process to stakeholders in a professional manner. 	<p>Teaching and Learning Strategies and Methods</p> <p>Techniques are applied in a sophisticated and industry relevant environment.</p> <p>Assessment</p> <p>Assessment will be throughout course work assignments and examinations for all modules except the Project. This will be assessed though the Project Report and a presentation.</p>

Skills and other attributes - Key / transferable skills

1. Taking an independent and professional standpoint and be able to appropriately challenge others' views.
2. To undertake the analysis and critique of a wide range of academic perspectives and theory.
3. To develop relevant skills in writing academic essays and reports.
4. Undertaking appropriate research utilising a variety of sources.
5. Interpreting and applying information for critical analysis.
6. Using theory and data analysis to critique, evaluate and improve existing practice.
7. The formulation of researchable problems within a general area of concern.
8. Managing one's own learning and development including organisational skills.
9. Develop skills of reflection and analysis that apply to continuing professional development.

Teaching and Learning Strategies and Methods

- i. development of transferable skills is reinforced and applied throughout the programme in a progressive manner
- ii. oral presentations for the Final Year Project
- iii. classroom and computing room activities promoting interaction at peer and tutor level
- iv. group work

Assessment

- i. included as part of the overall assessment for appropriate modules

20. Programme structure – including the route / pathway / field requirements, levels modules, credits, awards and further information on the mode of study.

The programme consists of 6 compulsory modules including the Project. All taught modules are worth 15 credits except for the Project module which is worth 45 credits. Each 15 credit module is indicative of 150 hours of learning, comprised of student contact, private study and assessment. Achievement of the BSc (Hons) Computing (Top-up) requires the successful completion of 120 credits at FHEQ Level 6. Classification of the degree is in accordance with the University of Surrey Regulations.

An exit award may be awarded to students who have accrued academic credit but wish to leave the College before completing their programme of study. The Intermediate exit award for this programme is BSc (Ordinary) Computing (Top-up) and is awarded in accordance with the University of Surrey Academic Regulations on successful completion of 60 credits at Level 6.

The programme is offered for study to full-time candidates who will complete the award in one academic year.

On successful completion of the programme, students may apply for professional body membership once further requirements have been met. They may also progress to taught or research Master's degrees.

Programme adjustments (if applicable):					
Not applicable					
Programme pathways and variants:					
There are no optional modules or alternative pathways.					
FHEQ Level 6: Potential award: BSc (Hons) Computing (Top-up) (120 credits) FHEQ Level 6: BSc (Ordinary) Computing (Top-up) (60 credits)					
Module code	Module title	Compulsory / optional	Credit volume (credits)	Semester	Award requirements
HBS6001	Project	Compulsory	45	1&2	120 credits required for the award of BSc (Hons) Computing (Top-up). 60 credits required for the award of BSc (Ordinary) Computing (Top-up). Classification for the degrees are in accordance with University of Surrey Regulations.
HBS6002	Advanced Networks	Compulsory	15	1&2	
HBS6003	System Integration	Compulsory	15	1	
HBS6005	Real-Time Embedded Systems (RTES)	Compulsory	15	1	
HBS6007	Artificial Intelligence	Compulsory	15	2	
HBS6008	Cyber Security	Compulsory	15	1&2	
How many optional modules must a student choose in order to achieve the necessary amount of credits to achieve this level?					
N/A					
21. Opportunities for placements / work-related learning / collaborative activity – please indicate if any of the following apply to your programme					
Data supplied by an external source for student analysis which contributes to an assessment					
Guest / external / associate lecturer (please detail the extent of their contribution, i.e. do they mark?)					✓ (but do not assess)
Professional Training Year (PTY)					
Placement, study or work placement outside of the PTY (please indicate if this is one day, one month, six months, a year etc)					
Clinical Placements (that are not part of the PTY Scheme)					
ERASMUS Study (that is not taken during Level P)					
Study exchanges (that are not part of the ERASMUS Scheme)					
Dual Degree					
Joint Degree					
Further information					
The Project module provides opportunities to for students to research and to address industry-related solutions. This may involve an element of collaboration in a relevant industry setting.					

22. Criteria for admission

Applicants will be considered individually and may be interviewed to determine interest and commitment. Applicants should have IELTS 6.5 to enable them to achieve at Honours Degree level. We expect all applicants to demonstrate a high level of commitment and motivation for the programme.

The normal entry requirement will be a Pearson HND Computing or a validated Foundation Degree from an appropriate subject area, preferably with an overall grade of Merit or higher. Candidates with an overall grade of Pass may be admitted at the discretion of the Programme Leader, normally following interview and satisfactory references from the leader of the relevant programme. Any such admissions may be subject to satisfactory completion of additional bridging studies designed to address gaps in the candidate's knowledge and/or to provide evidence of his/her capacity to achieve at Honours level.

If bridging studies are deemed necessary for acceptance on to the programme, students may be asked to complete a research project that will be supported through the summer, prior to attending formal classes. We reserve the right to make an additional charge for this activity.

The University of Surrey Regulations on recognition of prior learning (RPL) apply in full. Applications from mid-career professionals from relevant settings are welcomed. An interview and satisfactory references will be required from the current or most recent employer.

23. Assessment regulations

Please click on the following link for the full Regulations
(http://www.surrey.ac.uk/quality_enhancement/regulations/index.htm)

All programmes within the University of Surrey adhere to the Regulations. All taught programmes also reference and follow the *Code of practice for assessment and feedback*.

24. Support for students and their learning

Support Sessions

In addition to the taught modules, students on this programme will have the benefit of support provision as follows:

Tutorials

Tutorials are regarded as an essential part of the Learning and Teaching strategy. Four 'types' of tutorial are embedded in programmes within the School:

- Post Induction tutorial
- Group Tutorials
- Tutorial requested by students (pastoral and academic)
- 'Fixed Point' Academic Tutorials (academic)

Moodle

Moodle is the virtual learning environment (VLE) provided for learners. Moodle is a web-based application that can be accessed using an internet browser. The application is hosted on a server within the College but it can be accessed from anywhere in the world, connection permitting.

Access to Moodle will enable students to benefit from peer group support via the forum facility. Moodle

will also provide tutors with a facility for communicating group messages and providing programme-related updates. Moodle includes some of the following features:

- Creation and management of information;
- Social networking capabilities
- Quizzes and tests;
- Assignment management with converged TurnItIn access;
- Timetables and assessment schedules;
- News and information.

Cross College Support

The College provides a wide range of support from pastoral care, academic study skills, finance, learning support, careers and counselling. This is outlined by personal tutors and on media such as posters and the student intranet.

Blended Learning

The course team continues to extend the material available to students via the Moodle VLE. Theory notes, on-line exercises and assessments are available for most modules and are supported by tutors in person and via email and telephone.

25. Quality management – indications of quality and the methods for evaluating and improving quality

The College's policy on Student Engagement and quality enhancement and development is followed. An annual cycle of self-assessment and quality improvement planning takes place. This is informed by feedback from students (via on-course survey; NSS; module survey; student representation on Board of Study and student representation on School HE Forum), programme team and external stakeholders (via External Examiner's Report and informal feedback from employers).

26. Further information

Further information can be found on our webpages and within the Programme Handbook, which is provided electronically on entry to the programme.

The *Regulations* and *Codes of practice* for taught programmes can be found at

http://www.surrey.ac.uk/quality_enhancement/regulations/index.htm

http://www.surrey.ac.uk/quality_enhancement/standards/index.htm