APPLIED COMPUTING
BSc (Hons)

ARE YOU STIRLING?
WHY STUDY APPLIED COMPUTING?

The BSc (Hons) in Applied Computing is a highly practical degree developed in partnership with the Scottish ICT industry who are looking for an additional 45,000 professionals to join their workforce over the next five years.

INLCUDES A THREE-MONTH WORK PLACEMENT

COURSE DETAILS

Students will spend the first two years of this four-year course at the college following an enhanced Software Development HND curriculum.

During this time students will develop a range of specialist technical software development skills and knowledge in programming and systems development. Students will gain academic, technical and professional training leading to the skills necessary to design, implement, support, evaluate or manage IT systems in a vast range of industries.

In Years 3 and 4 two key components of the course are the industrial placement and the Honours project.

Students will undertake a compulsory three-month industrial work placement in the summer following the third academic year. This work placement will appear on the academic transcript.

Honours students undertake an independent project in their final year. Typically, this involves developing a major piece of software from initial requirements to final delivery.

Much of the focus of the four year degree course is on software development with particular emphasis on the development of analytical skills.

During Year 2 at the college students will take a University module to support the transition across different learning environments.

AN INTEGRATED APPROACH:

Throughout the four years there will be an integrated approach to teaching. Academics from the College and the University will work together, alongside employers, to deliver the most up-to-date and industry relevant curriculum.

All undergraduates of this course will have dual student status and be fully enrolled within both institutions. Students will have full access to all of the University of Stirling and Forth Valley College online and onsite facilities from first year onwards.

REASONS TO CHOOSE THIS COURSE

1. KEY SKILLS
   Students on this programme will be equipped with key skills in software and web development.

2. INDUSTRIAL PLACEMENT
   A core industrial placement, together with an independent research dissertation, makes our graduates uniquely experienced in industrial practices and academic rigour.

3. DUAL STATUS
   All students on this course will have dual student status and be fully enrolled within Forth Valley College and the University of Stirling.

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WHY CHOOSE STIRLING?
A shared learning approach between a Further and Higher Education College and University is one of the key attributes of this degree.

Delivery of enhanced technical skills will make graduates work-ready – a major strength of the Applied Computing degree course.

An industrial placement, together with an independent research dissertation, makes our graduates uniquely experienced in fundamental research with industrial awareness.

Research-led teaching is the key to deep learning and understanding.

Many students work closely with academics throughout their time and benefit from actively participating in research programmes.

This approach, together with industrial placements, enables students to apply the skills that they develop to 21st Century ICT careers. Forth Valley College’s STEM provision is amongst the strongest and most comprehensive to be found at any college across the UK. The College has a strong strategic commitment to STEM and close links with industry in order to deliver the skills required by employers through innovative provision.

There is an emphasis on practical skills and simulated learning in industry standard facilities to ensure learners are ‘work ready’ upon progressing to employment.

“The knowledge and skills taught in educational programmes must reflect those currently in use in the industry to ensure employability for students. Consequently, the input of businesses is necessary to ensure that they contain relevant material to the industry.”

Ross Tuffee
MD and Co-Founder, DOGFI.SH Mobile Ltd

CAREER OPPORTUNITIES
A major skills gap is opening up in Scotland’s Computing Sector and up to 11,000 job opportunities could be available each year. Overall the number of people employed in ICT and digital technology roles is forecast to increase by 15% to 84,000 by 2020. This trend is confirmed by the latest Scotland IS survey (2015) stating that ‘The demand for graduates continues to rise with 74% of businesses being likely to recruit in the current year. This is up 8% from last year’. This course gives you the necessary qualification and practical experience to excel in this field.

Furthermore, Stirling University is 3rd in the UK and 1st in Scotland for graduate employability, with almost 96% of our graduates in employment or further study within six months of graduating (HESA 2016).
### TYPICAL TIMETABLE

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<th>YEAR 2</th>
<th>YEAR 3</th>
<th>YEAR 4</th>
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<tr>
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<td>Software Development - OOP</td>
<td>Software Engineering I</td>
<td>Honours project (compulsory)</td>
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<tr>
<td>Developing Software: Introduction</td>
<td>Systems Development - Object Oriented Analysis &amp; Design</td>
<td>Multimedia and Human Computer Interaction</td>
<td>Big Optimisation Spaces</td>
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<tr>
<td>Troubleshooting Computing Problems</td>
<td>Developing Mobile Web Based Applications: an Introduction</td>
<td>Database Principles and Applications</td>
<td>NoSQL Databases</td>
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<tr>
<td>Professionalism and Ethics in Computing</td>
<td>Software Development: Developing Websites for Multiplatform Use</td>
<td>Software Engineering II</td>
<td>Concurrent and Distributed Systems</td>
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<tr>
<td>Mathematics: Calculus and Matrices for Computing</td>
<td>Graded Unit 2</td>
<td>Communications and Networks</td>
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<tr>
<td>Software Development: Programming Foundations</td>
<td>Software Development - Data Structures</td>
<td>Computer Game Technologies</td>
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<td>Computing: Introduction to Project Management</td>
<td>Relational Database Management Systems</td>
<td>Information Systems</td>
<td>Internet working on the Wide Scale</td>
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<td>Team Working in Computing</td>
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<td>Computer Security and Forensics</td>
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<td>HNC Computing: Graded Unit 1 (Exam)</td>
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<td>Telecommunications Systems and Services</td>
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<td>SQL: Introduction</td>
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<td>Web Services</td>
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<td>Software Development: Developing Small Scale Standalone Applications</td>
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<td>Computer Forensics Introduction</td>
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<td>Multi User Operating Systems</td>
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### CONTACT

Vivien Gallacher  
Curriculum Manager  
Forth Valley College  
T: 0845 64 44 44  
E: vivien.gallacher@forthvalley.ac.uk  
W: forthvalley.ac.uk/twogether

Student Recruitment and Admissions  
T: +44 (0) 1786 467046  
E: recruitment@stir.ac.uk

Visit us http://stir.ac.uk/65

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ARE YOU STIRLING?

06/17