

Course Specification

Published Date:	14-Sep-2020
Produced By:	Laura Clode
Status:	Validated

Core Information

Awarding Body / Institution:	University of Wolverhampton		
School / Institute:	School of Mathematics and Computer Science		
Course Code(s):	CC023M01UV CC023M31UV	Full-time Part-time	18 Months 3 Years
Course Title:	BSc (Hons) Computer Security (Top-Up)		
Hierarchy of Awards:	Bachelor of Science with Honours Computer Security Bachelor of Science Computer Security University Statement of Credit University Statement of Credit		
Language of Study:	English		
Date of DAG approval:	31/May/2017		
Last Review:	2015/6		
Course Specification valid from:	n: 2009/0		
Course Specification valid to:	2021/2		

Academic Staff

Course Leader:	Mrs Sheri Sankey
Head of Department:	Dr Kevan Buckley

Course Information

Location of Delivery:	University of Wolverhampton	
Category of Partnership:	Not delivered in partnership	
Teaching Institution:	University of Wolverhampton	
Open / Closed Course:	This course is open to all suitably qualified candidates.	

Entry Requirements:

Entry requirements are subject to regular review. The entry requirements applicable to a particular academic year will be published on the University website (and externally as appropriate e.g. UCAS

2017 Entry

- A Foundation Degree or HND in Computing or related subject
- Successful completion of the http://courses.wlv.ac.uk/course.asp?code=IC007T01UVD> International Foundation Year in Science and Engineering
- Successful completion of the http://courses.wlv.ac.uk/course.asp?code=CC006F31TCD Foundation Degree (Science) Computing at Telford College of Arts and Technology
- If you've got other qualifications or relevant experience, please contact <u>The Gateway</u> for further advice before applying.
- International entry requirements and application guidance can be found here

Other Requirements

Students must have studied a minimum of two years post GCSE level. However, it is expected that some applicants will be mature students with work experience, who wish to further their career development. These applicants will be processed through standard procedures, which may involve an interview as part of the process. Please see http://wlv.ac.uk/mature for further information.

Those who do not meet the entry requirements may be offered an alternative course

Distinctive Features of the Course:

You will be studying within a School of Computing which hosts both the Regional RFID Centre and the Regional WARP Centre (Warnings, Advice and Reporting Point). This is operated by the University of Wolverhampton in partnership with West Midlands Police as a security advisory service.

Educational Aims of the Course:

There is a growing demand, which will persist for the foreseeable future, for graduates with expertise in the area of computer security.

The field of computer security encompasses threats to data, the systems they are stored on and the systems used to transmit the data between locations, how to build robust systems able to defend themselves against attack and how to respond to new emerging threats.. There are still comparatively few universities offering this specialism, despite the obvious need for professionals with this expertise.

This course places an emphasis on studying both current and emerging technologies, enabling you to graduate with the ability to make a positive contribution as a computing professional, within the global community.

Intakes:

January

Major Source of Funding:

Office for Students (OFS)

Tuition Fees:

Tuition fees are reviewed on an annual basis. The fees applicable to a particular academic year will be published on the University website.

Year	Status	Mode	Amount
2020/1	Н	Full Time / Sandwich	£9250.00
2020/1	Overseas	Full Time / Sandwich	£12250.00
2020/1	Н	Part Time	£3050.00
2020/1	Overseas	Part Time	£6125.00

PSRB:

None

Course Structure:

January (Full-time)

Part time students study alongside full time students. However, they do not study more than 80 credits in each academic calendar year.

Year 2

Module	Title	Credits	Period	Type
5CS031	Network Security	20	SEM2	Core
5CS035	Ethical Hacking	20	SEM2	Core
6CS029	Advanced Networks	20	SEM2	Core
5CS018	Cybersecurity Architecture and Operations	20	SEM1	Core
6CS010	Digital Forensics	20	SEM1	Core
6CS021	Project and Professionalism with Cybersecurity Artefact	40	CRYRA	Core
6CS028	Advanced Web Development	20	SEM2	Core
6CS032	Risk and Cybersecurity Management	20	SEM2	Core

Please note: Optional modules might not run every year, the course team will decide on an annual basis which options will be running, based on student demand and academic factors, to create the best learning experience.

Learning, Teaching and Assessment

Academic Regulations Exemption:

None

Reference Points:

- Framework for Higher Education Qualifications
- QAA Subject Benchmark for Computing
- HEA Employability Profiles for Computing
- Skills Framework for the Information Age
- e-Skills
- British Computer Society
- Equality Act 2010
- University Documents

Learning Outcomes:

Topup Course Learning Outcome 1 (ORDCLO1)

Demonstrate a broad understanding, knowledge and experience of the principles, practice and applications of Security.

Topup Course Learning Outcome 2 (ORDCLO2)

Demonstrate and apply knowledge of computer hardware and software with particular reference to Security.

Topup Course Learning Outcome 3 (ORDCLO3)

Apply appropriate theory, tools and techniques to the Security development process.

Topup Course Learning Outcome 4 (ORDCLO4)

Demonstrate and apply knowledge and understanding of: the essential facts, concepts, principles, theories and practices enabling graduate employment in Security.

Topup Course Learning Outcome 5 (ORDCLO5)

Demonstrate the development of a range of transferable skills in: problem solving; communication; project management; working individually and in teams; self management; and the ability to gather, synthesise, evaluate and reflect on information from relevant sources.

Topup Course Learning Outcome 6 (ORDCLO6)

Demonstrate a range of social, legal, ethical and professional skills required for continuing professional development in Security within a world-wide context.

Topup Course Learning Outcome 1 (DEGCLO1)

Demonstrate a broad understanding, knowledge and experience of the principles, practice and applications of Security.

Topup Course Learning Outcome 2 (DEGCLO2)

Demonstrate and apply knowledge of computer hardware and software with particular reference to Security.

Topup Course Learning Outcome 3 (DEGCLO3)

Apply appropriate theory, tools and techniques to the Security development process.

Topup Course Learning Outcome 4 (DEGCLO4)

Demonstrate and apply knowledge and understanding of: the essential facts, concepts, principles, theories and practices enabling graduate employment in Security;

Topup Course Learning Outcome 5 (DEGCLO5)

Demonstrate the development of a range of transferable skills in: problem solving; communication; project management; working individually and in teams; self management; and the ability to gather, synthesise, evaluate and reflect on information from relevant sources.

Topup Course Learning Outcome 6 (DEGCLO6)

Demonstrate a range of social, legal, ethical and professional skills required for continuing professional development in Security within a world-wide context.

Overview of Assessment:

Module	Title	Course Learning Outcomes
5CS018	Cybersecurity Architecture and Operations	
5CS031	Network Security	
5CS035	Ethical Hacking	
6CS010	Digital Forensics	DEGCLO1, DEGCLO2, DEGCLO3, ORDCLO1, ORDCLO2, ORDCLO3
6CS021	Project and Professionalism with Cybersecurity Artefact	DEGCLO1, DEGCLO2, DEGCLO3, DEGCLO4, ORDCLO1, ORDCLO2, ORDCLO3, ORDCLO4
6CS028	Advanced Web Development	DEGCLO1, DEGCLO2, DEGCLO3, ORDCLO1, ORDCLO2, ORDCLO3
6CS031	Cyber Threat Intelligence	DEGCLO1, DEGCLO2, DEGCLO3, ORDCLO1, ORDCLO2, ORDCLO3
6CS032	Risk and Cybersecurity Management	DEGCLO1, DEGCLO2, DEGCLO3, DEGCLO4, ORDCLO1, ORDCLO2, ORDCLO3, ORDCLO4

Teaching, Learning and Assessment:

The learning activities on your course will develop distinctive graduate attributes that will make you stand out and enhance your employability. These skills will be embedded into the curriculum throughout your course. Examples include:

Security Skills: You will also have an opportunity to learn the practical skills required to defend existing systems through the implementation of robust barriers to attack and penetration. You will increase your awareness of the types and severity of threats which face businesses across the globe, through the analysis of case studies and the contributions from speakers from the worlds of industry and commerce.

Digitally Literacy: All IT Security graduates will surely be users of advanced technologies. However, on your course you will develop your skills to encompass literacy more fully such as learning how to find information

and how to take best advantage of digital resources and the Internet to make you effective in the Information Age.

Global Citizenship: On each level of your course you will learn about social, legal and ethical aspects of Computing, which will broaden your understanding of the way the world works and how communication and collaboration are evolving.

Knowledgeable and Enterprising: Throughout your course you will build up your professional and employability skills and learn to apply the knowledge you have acquired in an enterprising way. You will constantly nurture your own intellectual curiosity. The tools, methodologies and techniques that you will learn have been carefully selected to prepare you with the skills that employers demand and the opportunities for work based learning and placements will allow you to gain the vital experience that they often expect.

Assessment Methods:

At the University of Wolverhampton, a variety of modes of assessment will be used to support and test your learning and progress and to help you develop capabilities that are valued beyond your University studies and into your working life. Your course may include a variety of assessment activities:

Written examinations (including online examinations, open and closed book examinations and quizzes)
Coursework (for example, essays, reports, portfolios, project proposals and briefs, CVs, poster presentation)
Practical (for example, oral and video presentations, laboratory work, performances, practical skills assessment)

In the final year of your undergraduate degree, and at the end of your postgraduate degree, you are likely to be expected to write an extended piece of work or research, such as a dissertation or a practice-based piece of research.

Student Support:

University provided support:

As well as providing general counselling support the University Counselling Service provides short courses on topics such as "Self Confidence", "Stress Management and Relaxation" and "Life Skills". They also provide study skills and academic support, providing short courses such as provide help in areas such as "Writing and Assignment Skills", "Exam Techniques", "Enhancing Professional Skills", "Personal Development Planning" and "Making Choices for the Future.

University Learning Centres provide general academic skills support to all students. You can make an appointment with a study skills advisor for advice on areas such as academic writing, assignment planning, exam preparation, and time management. In addition, there is a regular timetable of drop-in and bookable workshops covering information and digital literacy skills, including academic referencing. School of Computing and IT students are supported by a designated subject librarian who is available to support research and project work.

Course support:

At the start of each year of your course you will be assigned a Personal Tutor who will guide you through the induction process and provide support and academic counselling throughout the year on an appointment basis. They should be able to offer you advice and guidance to help you liaise with other staff and support facilities in the School and University. You should meet your Personal Tutor at least 3 times a year, which must include meetings that you are invited to at critical points in your course.

The Personal Tutor provides academic counselling and will be accessible throughout the week on a drop-in or appointment basis to discuss timetables, requests for extensions, requests for extenuating circumstances, general concerns about study and student life and general programme planning. The Personal Tutor will act as a first point of contact in relation to leave of absence (including returning after leave), withdrawal, transferring to another course (internal and external) and changes to mode of attendance. Your Course Leader will be available thereafter for meetings by appointment to discuss leave of absence, withdrawal, transferring to

another course (internal and external), changes to mode of attendance, returning after leave of absence and direct entrants.

Subject support:

Tutorials, workshops, seminars and meetings - provide the primary opportunities for students to interact with staff on topics relating to modules. All modules provide at least one of these forms of face-to-face support.

Formative feedback - tutors provide personalised written feedback on most summative assessments. The mechanism for feedback from purely formative tasks varies between assessments, but will always be provided in some form. Online formative tasks often provide feedback straight away. On occasions tutors may provide generalised verbal feedback to the whole class on points relating to an assessment

Assessment and subject-based surgeries provide additional student support for subjects that students often need extra help with. They are often concentrated around the times when assessments take place. Revision sessions are provided for many modules that have exam-like tests and enable you to interact with tutors to review parts of the course. Mock exams and tests may provide opportunities to experience an examination environment before the final summative test and give you feedback on your understanding.

Employability in the Curriculum:

Security is a threat in every facet of our lives. There will always be a need for computer security specialists and there are very good career opportunities in this field, both nationally and internationally. You could also consider further study towards an MSc or other higher qualifications.

