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):	CI018S01UV	Full-time	2 Years
UCAS Code:	6I83		
Course Title:	HND Information Technology		
Hierarchy of Awards:	Higher National Diploma Information Technology awarded by the University of Wolverhampton Certificate of Higher Education Information Technology awarded by the University of Wolverhampton 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:	2012/3		
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 level minimum of grade E
- Post-16 qualifications should be science/IT based subject and AS in Maths
- Relevant equivalent qualifications are also considered
- Access to Higher Education Diploma requires candidates to accumulate 60 credits, at least 45 of which are at Level 3.
- Successful completion of the http://courses.wlv.ac.uk/course.asp?code=IC007T01UVD> International Foundation Year in Science and Engineering
- If you've got other qualifications or relevant experience, please contact The Gateway 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 apply relevant principles and techniques to the analysis, design and development of modern software solutions.

This course will enable you to apply a range of technical and methodological skills relevant to the development of computer systems.

There will be opportunity to demonstrate knowledge and understanding of the essential facts, concepts, principles and practices relating to Computing.

You will develop generic transferable skills such as problem solving, communication, working individually and in teams.

This course will develop a range of skills and techniques, personal qualities attributes and global responsibilities essential for successful performance in working life.

You will be able to demonstrate the necessary academic skills to enable progression to higher or professional qualifications.

Educational Aims of the Course:

The course focuses on meeting the needs of industry, providing you with skills and understanding of the latest innovations in Computing and Information Technology. This course can be succeeded by one of our many top-up degree courses enabling you to convert your HND into a full BSc (Hons) degree in an IT/Computing related subject. A practical approach is taken to the course delivery ensuring that you are equipped with the necessary skills for employment within the IT Industry.

The Mathematics and Computer Science department includes staff who achieved a very high rating in the recent Research Assessment Exercise. The team includes internationally recognised Professors including an Oracle Ace Director and the world's first professor in Mobile Learning.

We pride ourselves on the academic support and guidance given by our friendly and approachable staff. Students have shown their appreciation for this by the exceptionally high ratings they have given us in the National Student Survey.

Following the changing demand in recent mathematical research and applications, this course has evolved to provide a modern outlook on the subject and the important role it plays in the ever-changing world of commerce, industry and education.

This course is appropriate for those who want to proceed in teaching and we have an excellent record of producing graduates who proceed to study a Post Graduate Certificate of Education and subsequently enter a career in teaching ICT.

Intakes:

September

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	HEU	Full Time	£
2020/1	Overseas	Full Time	£
2020/1	Home / EU	Full Time	£
2020/1	Home / EU	Part Time / Full Time	£

PSRB:

None

Course Structure:

September (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 1

Module	Title	Credits	Period	Type
4CS001	Introductory Programming And Problem Solving	20	SEM1	Core
4CS015	Fundamentals of Computing	20	SEM1	Core
4CI018	Academic Skills and Team-based Learning	20	SEM1	Core
4CS017	Internet Software Architecture	20	SEM2	Core
4CS012	Server Management and Virtualisation	20	SEM2	Core
4MM013	Computational Mathematics	20	SEM2	Core

September (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
5CI021	Data Mining	20	SEM1	Core
5CS018	Cybersecurity Architecture and Operations	20	SEM1	Core
5CI022	Databases	20	SEM1	Core
5CS024	Collaborative Development	20	SEM2	Core
5CS035	Ethical Hacking	20	SEM2	Core
5CI023	Advanced Databases	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:

The course is designed with reference to the most up-to-date QAA Subject Benchmark for Computing and the accreditation requirements of BCS The Chartered Institute for IT. In addition reference has also been made to Quality Code - Part A: Setting and Maintaining Academic Standards. Including:

Qualifications Frameworks

Characteristics Statements

Credit Frameworks

Subject Benchmark Statements- *Computing*

Quality Code - Part B: Assuring and Enhancing Academic Quality

University Policies and Regulations

Equality Act (2010).

Learning Outcomes:

HNC Course Learning Outcome 1 (HNCCLO1)

Apply appropriate theory, tools and techniques (e.g. theory and practice of programming, object-oriented design and analysis, design and construction of data systems, concurrent and distributed systems) to the analysis, design and synthesis of solutions to requirements in the domain of Information Technology

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HNC Course Learning Outcome 2 (HNCCLO2)

Demonstrate mastery of the essential facts, concepts, principles, theories and practices enabling graduate employment in applications of Information Technology (e.g. Software development, media computing, systems analysis).

HNC Course Learning Outcome 3 (HNCCLO3)

Demonstrate a range of transferable skills in: problem solving; communication; project management; working individually and in teams; self-management; and the ability to gather, evaluate and reflect on information from relevant sources and synthesize new knowledge and solutions to requirements in the domain of applications of Information Technology.

HNC Course Learning Outcome 4 (HNCCLO4)

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

HND Course Learning Outcome 1 (HNDCLO1)

Apply appropriate theory, tools and techniques (e.g. theory and practice of programming, object-oriented design and analysis, design and construction of data systems, concurrent and distributed systems) to the analysis, design and synthesis of solutions to requirements in the domain of Information Technology.

HND Course Learning Outcome 2 (HNDCLO2)

Demonstrate mastery of the essential facts, concepts, principles, theories and practices enabling graduate employment in applications of Information Technology (e.g. Software development, media computing, systems analysis).

HND Course Learning Outcome 3 (HNDCLO3)

Demonstrate a range of transferable skills in: problem solving; communication; project management; working individually and in teams; self-management; and the ability to gather, evaluate and reflect on information from relevant sources and synthesize new knowledge and solutions to requirements in the domain of applications of Information Technology.

HND Course Learning Outcome 4 (HNDCLO4)

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

Overview of Assessment:

Module	Title	Course Learning Outcomes
4CI018	Academic Skills and Team-based Learning	HNCCLO1, HNCCLO2, HNCCLO3, HNCCLO4
4CS001	Introductory Programming And Problem Solving	HNCCLO1, HNCCLO2, HNCCLO3
4CS012	Server Management and Virtualisation	HNCCLO1, HNCCLO2, HNCCLO3
4CS015	Fundamentals of Computing	HNCCLO1, HNCCLO2, HNCCLO3
4CS017	Internet Software Architecture	HNCCLO1, HNCCLO2, HNCCLO3, HNCCLO4
4MM013	Computational Mathematics	HNCCLO1, HNCCLO2, HNCCLO3
5CI021	Data Mining	HNDCLO1, HNDCLO2, HNDCLO3
5CI022	Databases	HNDCLO1, HNDCLO2, HNDCLO3
5CI023	Advanced Databases	HNDCLO1, HNDCLO2, HNDCLO3
5CS018	Cybersecurity Architecture and Operations	HNDCLO1, HNDCLO2, HNDCLO3
5CS024	Collaborative Development	HNDCLO1, HNDCLO2, HNDCLO3, HNDCLO4
5CS035	Ethical Hacking	HNDCLO1, HNDCLO2, HNDCLO3, HNDCLO4

Teaching, Learning and Assessment:

You will engage with a range of learning activities which will include lectures, tutorials, workshops and on-line forums and in class discussions. 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 first equipping you with theory and knowledge of software engineering and then coupling it with practical application of current techniques. The final year of the course includes tasks similar to those faced by many software engineers in their first job, covering maintenance and extension of legacy systems, reverse engineering, automated regression testing and the application of refactoring and design patterns. The course also aims to make you aware of emerging techniques and technologies.

In addition to the development of Learning Outcomes pertaining to Computing and Information Technology, students will develop competency in teaching skills. During each of the three years of the course you will be required to complete credit bearing learning in a secondary school.

Learning activities to support the learning outcomes will include:

- Reflective Journal Entries
- University Professional Studies Sessions
- University Specialist Subject Sessions
- Audit and action planning
- Construction of personal timeline of education
- Review of progress towards standards to Qualified Teacher Status
- Experience in school, including:
- Professional studies placement
- Primary School placement
- Two major teaching placements
- School-based activities and tasks
- Personalised opportunities for enhanced professional development
- Compiling teaching files
- Record of Professional Development
- Subject Specific Research Project

- Career Entry and Development Portfolio.

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:

Digitally Literacy: All Computer Science graduates will 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 is expected as a secondary school teacher in Computer Science.

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:

Students are supported in many ways.

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.

The following can be booked:

- Harvard Referencing
- Referencing with RefWorks
- Get Ahead With Information Searching
- Finding Journal Articles

- Introduction to Academic Writing
- APA Referencing
- Oxford Referencing
- Good Academic Practice and writing: paraphrasing, referencing and TurnItIn
- Introduction to Critical Thinking
- Improving your Presentation Skills
- Preparing for your Exam
- Report Writing
- Planning your Dissertation
- Reading and Note-making.

In addition, there are drop in support facilities for students to seek help from the Learning Centre Staff. These cover assessment related topics such as:

- exam revision
- planning and writing your academic assignments
- how to use your time efficiently and organise your academic study
- how to take effective notes during lectures
- tips on delivering effective presentations.

Faculty of Science and Engineering students are supported by a designated subject librarian who is available to support research and project work.

Course support:

Each student will be allocated a personal tutor who can provide general help, advice, guidance and, if required, direct them to services such as “Here2Help”, Counselling Services, Student Enabling Centre, Student’s Union, Chaplaincy (all Faiths), Study Skills (Learning centre).

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 Faculty 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.

Your 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:

Module-specific support is provided through the module team via face-to-face and electronic tutorials, scheduled drop-in sessions or SAMS (Student Appointment Management System) appointments. 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.

Feedback from formative and some summative assessments is designed to support learning by assisting the student in identifying and improving areas of weakness, and further developing areas of strength. 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.

The Faculty of Science and Engineering also offers a Student Support Team (located in the Faculty Administration Office) and this is a key additional source of support, particularly for non-academic related matters. This tends to be a student's first port of call and the team can advise students and, if required direct them to further University services as mentioned above.

Employability in the Curriculum:

This course could lead to a career in a wide range of industrial and commercial organisations in both private and public sectors such as;

- IT Technician
- IT and User Support Services
- Web Developer
- Network Technician
- Programmer

You may also choose to progress to full degree in a related subject area or with an appropriate education qualification you could pursue a career in Information Technology teaching as there is a current shortage of ICT teachers nationally.