

School of Computer Science

Title of Programme: Foundation Degree in Computing Technologies (Media Systems)
Foundation Degree in Computing Technologies (Software
Development) Foundation Degree in Computing Technologies
(Networks)

Programme Code: TCFDCT

For Collaborative: Franchise at North Herts College, West Herts College

Programme Specification

This programme specification is relevant to students entering:
01 September 2017

Associate Dean of School (Academic Quality Assurance):
Simon Trainis

Signature



A programme specification is a collection of key information about a programme of study (or course). It identifies the aims and learning outcomes of the programme, lists the modules that make up each stage (or year) of the programme, and the teaching, learning and assessment methods used by teaching staff. It also describes the structure of the programme, its progression requirements and any programme-specific regulations. This information is therefore useful to potential students to help them choose the right programme of study, to current students on the programme, and to staff teaching and administering the programme.

Summary of amendments to the programme:

Section	Amendment

If you have any queries regarding the changes please email AQO@herts.ac.uk

Programme Specification

Foundation Degree in Computing Technologies

FdSc in Computing Technologies (Media Systems)
FdSc in Computing Technologies (Software Development)
FdSc in Computing Technologies (Networks)

This programme specification (PS) is designed for prospective students, enrolled students, academic staff and potential employers. It provides a concise summary of the main features of the programme and the intended learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. More detailed information on the teaching, learning and assessment methods, learning outcomes and content for each module can be found in Definitive Module Documents (DMDs) and Module Guides.

Section 1

Awarding Institution/Body Teaching Institution	University of Hertfordshire North Hertfordshire College West Herts College
University/partner campuses	Not applicable
Programme accredited by	Not applicable
Final Qualification	Foundation Degree
All Final Award titles (Qualification and Subject)	FdSc in Computing Technologies (Media Systems) FdSc in Computing Technologies (Software Development) FdSc in Computing Technologies (Networks)
FHEQ level of award	5
UCAS code(s)	FdSc Computing Technologies (Media Systems) – I150 FdSc Computing Technologies (Software Development) – I120 FdSc Computing Technologies (Networks) – I310
Language of Delivery	English

A. Programme Rationale

This level 5 programme is designed to provide the essential skills, knowledge and understanding related to media systems, software development and network technologies and computing which will enable students to enter employment and/or progress to Honours Degree top-up in Computer Science disciplines.

Job prospects related to these programmes:

Hertfordshire has a very high proportion of employment in manufacture, scientific research and development and telecommunications. All these sectors require an intake of high calibre graduates in IT and related computing technologies. Hertfordshire partners (employers-providers) in their recent successful application to Government for a Local Enterprise Partnership (LEP) expressed the desire to build on the county's key strengths in R&D, life sciences, telecoms and information technology and hi- tech engineering. Sectors such as digital media and low carbon technology were also highlighted as potential clusters

Successful completion of the FdSc in Computing Technologies (Media Systems) will allow career opportunities in the entertainment and multimedia industry such as Animator, Game Designer Interactive Writer, Sound Producer, Web Content Producer, Webmaster, CD-ROM Developer, Graphics Designer, Interface Designer, Video Producer, Web Developer.

Successful completion of the FdSc in Computing Technologies (Software Development) will allow career opportunities in the development, engineering and production of software. This could be

within a software specialised organisation as its main core business or within any organisation that develops and maintains in-house software. Among the jobs this programme could lead to one can list software developer, software engineer, web programmer, systems analyst, game developer, website development, smartphone apps and operating systems.

Successful completion of the FdSc in Computing Technologies (Networks) will allow career opportunities as a Network Technician, Network Administrator, Network (Systems) Engineer, Network Programmer/Analyst, Network/Information Systems Manager. Help Desk/Technical Support, Wireless Specialist, virtualization and cloud computing developer, Web 2.0 developer, Network Security Engineer

All three awards could also lead to a career in telecoms. The telecoms sector is one of the fastest changing in the UK as new technologies are being explored and developed. Migration from voice telephony to broadband data networks carry high volumes of multimedia traffic, which means that boundaries between telecoms and IT are blurring. (source e-Skills UK).

Most of these positions require candidates to have some excellent project management skills along with the following specialised skills: excellent programming skills particularly in C/C++ and Java, a good understanding of windows, Linux or Mac Operating systems, excellent skills in developing computer graphics and animation, very good understand of networks, wireless networks, mobile and web applications, software and systems development.

Nature of the programmes

The programmes provide an education in computing and Information Technologies and put emphasis on personal development, employability and the international context through their computing in Business module.

The programmes are designed to enable all students to sample a range of computing and computing technologies topics at level 4 before choosing a specialist route at level 5. This helps to meet the individual needs of students, allowing them to make choices which match their developing career aspirations.

The programmes are designed to recruit full-time and part-time students. Full-time students will be mainly school or college leavers who have successfully completed a Level 3 FE qualification. This may be an A level or a BTEC National Diploma/certificate or equivalent or other suitable qualification. The programmes are also accessible by part-time students and in this case a wide range of Level 3 FE qualifications and/or work experience will be accepted.

The programmes have been designed so that full-time successful students will have the skills and knowledge to work effectively in a range of organisations. In particular they will be exposed to the application of IT and computing technologies (media, networks and software development) knowledge and skills in the work place through work-based learning, which is supported by classroom based learning.

The programmes are also designed to recruit students who are currently working in the IT industry and wish to study part-time or those who wish to pursue a career in IT. They can be undertaken by part-time students from a wide range of backgrounds and students will need to demonstrate the ability to benefit from the programme either by academic qualifications at Levels 2 and/or 3 or by demonstrating that their work experience has provided them with equivalent skills and knowledge.

Part-time students in appropriate work will be able to update their skills and knowledge to enhance their effectiveness in their current and any future role. In particular, they will use their experience of the work place to reinforce their learning and to see how their classroom based learning can be applied in their current role.

The structure of these programmes is designed such that it is modular in nature and therefore students accumulate credit as they pass each module. The programmes integrate academic and vocational learning in close collaboration with employers. The programmes have 60 credits of work - based learning (30 credits at Level 4 and 30 credits at Level 5). The Work Based Learning project

module at L5 cannot be compensated as it constitutes an essential part of the award. In addition, students are required to undertake a work-based learning project related to their chosen pathway.

Some teaching may take place at the University of Hertfordshire at both Level 4 and Level 5 although most will take place within the consortium colleges. A co-operative plan for the delivery of all programming modules and the Level 5 specialist modules in terms of location, staffing and facilities has been developed.

Full-time and part-time students can gain a Foundation degree if they complete the full 240 credits. A range of interim awards are available for those students who are not successful in all of their modules.

Foundation degree graduates will be equipped for a variety of careers in computing in industry, commerce and business. They also have the guarantee of a place on an appropriate Honours degree at the University of Hertfordshire. This may be to join the 2nd or 3rd year depending upon their overall performance.

B. Educational Aims of the Programme

The programme has been devised in accordance with the University's graduate attributes of programmes of study as set out in [UPR TL03](#).

Additionally this programme aims to:

prepare students for a career in Computing Technologies and related fields;

- provide students with a thorough understanding of computing and IT practices in local, national and international contexts through its Business in Computing module;
- develop students' practical, transferable, intellectual, study, employability and enterprise skills;
- enable students to apply their learning in work-related contexts;
- equip students for further academic study;
- provide progression routes to appropriate degree programmes at the University of Hertfordshire.

C. Intended Learning Outcomes

The programme provides opportunities for students to develop and demonstrate knowledge and understanding, skills and other attributes in the following areas. The programme outcomes are referenced to the QAA benchmark statements for Computing and the Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies (2014) and relate to the typical student. Additionally, the SEEC Credit Level Descriptors for Further and Higher Education (2016) have been used as a guiding framework for curriculum design. The development team has also given careful consideration when developing these programmes to the University of Hertfordshire Foundation degree Model.

Knowledge and Understanding	Teaching and learning methods	Assessment strategy
A1- Well-established principles of an IT professional and the way in which those principles have developed	Acquisition of knowledge and understanding is through a combination of lectures (A1 to A5), small group tutorials (A1-A3) and laboratory work (computer labs) at levels 4 and 5.	Knowledge and understanding are assessed through a combination of unseen examinations (A1 to A5), and assessed in-course assessments (A1-A5), in the form of practical assignments (A1-A5), phase tests (A1-A5), and project reports and presentations (A1-A5).
A2- How computer based technologies related to media systems, software development and networks operate and	Throughout, the learner is encouraged to undertake independent study both to supplement and consolidate what is being taught/learnt and to	

<p>communicate with one another.</p> <p>A3- A range of techniques and technologies related to media systems, software development and networks that support the processes that lead to a computerised solution to a problem.</p> <p>A4- A range of techniques and technologies related to media systems, software development and networks that support the processes that lead to a computerised solution to a problem.</p> <p>A5- A critical understanding of the development, knowledge and content of the particular vocational pathway</p>	<p>broaden their individual knowledge and understanding of the subject.</p>	
<u>Intellectual skills</u>	<u>Teaching and learning methods</u>	<u>Assessment strategy</u>
<p>B1- Initiate and undertake critical analysis of information, and to propose solutions to problems arising from that analysis.</p> <p>B2- Understand concepts related to computational thinking in media systems, software development and networks including its relevance to everyday life.</p> <p>B3- Demonstrate knowledge and understanding of essential facts, concepts, principles and theories relating to computing and computer applications.</p> <p>B4- Use such knowledge and understanding in the modeling and design of media, software</p>	<p>Intellectual skills are developed through methods and strategies outlined in section A, above. These can be through a series of computer labs and workshops sessions Analysis, problem solving and modeling skills are further developed through tutorial work, practical assignments and in- course assessments.</p> <p>Throughout, the learner is encouraged to develop intellectual skills further by independent study</p>	<p>Intellectual skills are assessed through analysis and problem solving (B1, B2,B3, B6, B7, B8).</p> <p>Modelling skills (B4) are assessed through unseen examination papers, laboratory reports and coursework related to in- course exercises.</p> <p>Systems requirements (B5,B6, B7) are assessed through assignments and case studies.</p> <p>Intellectual skills are also assessed by unseen examination papers, assignments and coursework related to in- course exercises, case study reports, presentations and project reports.</p>

<p>development and networks-based systems for the purposes of comprehension, communication, prediction and the understanding of trade-offs.</p> <p>B5- Understand the requirements, practical constraints on media, software development and networking systems-based in their respective context</p> <p>B6- Deploy appropriate theory, practices and tools for the requirements analysis, specification, design and implementation of IT systems (including media systems, software applications and network-based systems).</p> <p>B7- Analyse the extent to which a computer- based system (media, software development or networking system) meets the criteria defined for its current use and future development.</p>		
<p>Practical skills</p>	<p>Teaching and learning methods</p>	<p>Assessment strategy</p>
<p>C1- Apply underlying IT concepts and principles.</p> <p>C2- Operate computing equipment effectively taking into account its logical and physical properties.</p> <p>C3- Integrate media, software development and networks related computing skills via a work-based learning project. **</p> <p>C4- Deploy effectively the tools used for the construction and documentation of</p>	<p>Practical skills are developed through methods and strategies outlined in section A, above. These can be through a series of computer labs and workshops sessions Analysis, problem solving and modeling skills are further developed through tutorial work, practical assignments and in- course assessments.</p> <p>Throughout, the learner is expected to consolidate their development of practical computing skills by use of personal computers available in the learning resources centre and computer labs supported by independent study.</p>	<p>Practical skills are assessed through laboratory reports (C2, C4, C5, C6), coursework assignments (C1-C8), design exercise submissions (C1), case study reports (C2), presentations (C3, C5) and project reports (C3, C7, C8).</p>

computer applications, with particular emphasis on understanding the whole process involved in the effective deployment of computers to solve practical problems.

C5- Specify and design computer-based systems.

C6- To evaluate media, software development and networking systems in terms of general quality attributes and possible trade-offs presented within the given problem.

C7- Recognise any risks or safety aspects that may be involved in the operation of computing equipment within a given context.

C8- Recognise the professional, economic, social, environmental, moral and ethical issues involved in the sustainable exploitation of computer technology and be guided by the adoption of appropriate professional, ethical principles.

Transferable skills

D1- Present succinctly to a range of audiences (orally, electronically or in writing) rational and reasoned arguments that address a given information handling problem or opportunity. This should include assessment of the impact of new technologies

D2- Retrieve effective information (including the use of browsers, search engines and catalogues).

D3- Work effectively within a team recognising the

Teaching and learning methods

Transferable skills are developed through D1-D6 practical assignments, coursework reports, oral presentations and project reports.

Throughout, the learner is encouraged to develop transferable skills by maintaining a record of evidence and completing a personal development plan.

Assessment strategy

Transferable skills are assessed through a range of assignments built into the curriculum - coursework reports (D1, D2, D3), oral presentations (D1, D3), project reports and project management work(D1-D8).

different roles within a team and different ways of organising teams.

D4- Exercise personal responsibility and decision-making, including time management and organisational skills.

D5- Appreciate the need for continuing professional development and utilise opportunities for lifelong learning.

D6- Apply numerical and quantitative skills appropriately

D. Programme Structures, Features, Levels, Modules, and Credits

The programme is offered in full-time (2 years – 4 semesters) and part-time (2 years - 6 semesters) modes, and leads to the award of a Foundation Degree in Computing Technologies.

Entry is normally at level 4 (A-level or equivalent qualifications) but is possible at level 5 with suitable level 4 qualifications Intake is normally semester A in September

Professional and Statutory Regulatory Bodies

n/a

Work-Based Learning, including Sandwich Programmes

Work based learning (WBL) and engagement with employers is central to the foundation degree concept and has been embraced in this programme through an ethos and definition of WBL as “learning through, for and at work”. The programme has been designed to reflect the real life experience of working in a business environment and IT industry, developing the students to work independently, in teams and for themselves in a variety of business-oriented activities. Whilst the WBL modules in the programme are the focal point for developing employability skills and engagement with employers, they are not the sole points in the programme of such engagement. There is an emphasis throughout on real life case studies and briefs which culminate in the final-year WBL module putting “the needs of an organisation” at the heart of the project. Such organisations will commonly be SMEs (small and medium enterprises) but could also include large employers, public services, charities and not-for-profit groups.

Erasmus Exchange programme

n/a

Programme Structure

The programme structure and progression information below (Table 1a and 1b) is provided for the Honours award. Any interim awards are identified in Table 1b. The Programme Learning Outcomes detailed above are developed and assessed through the constituent modules. Table 2 identifies where each learning outcome is assessed. The Work Based Learning module at L5 cannot be compensated as it constitutes an essential part of the award. In addition, students are required to take on the L5 WBL project module related to their chosen pathway.

Table 1a Outline Programme Structure

Mode of study Full time - 2 years in 4 semesters, part-time – 2 years in 6 semesters

Entry point Semester A

Level 4 all pathways

Compulsory Modules Module Title	North Herts. College Module Code	West Herts. College Module Code	Credit Points	Language of Delivery	% Examination	% Coursework	% Percentage Practical	Semesters
Developing Professional and Employability Skills	4FTC1163	4FTC1164	30	English	0	70	30	AB(C)
Understanding programming	4FTC1169	4FTC1170	15	English	0	30	70	A
Computer Systems Architecture	4FTC1160	4FTC1161	15	English	40	60		A
Systems Analysis	4FTC1166	4FTC1167	15	English	0	100	0	A
Further Programming	4FTC1172	4FTC1173	15	English	0	20	80	B
Computer networks and introduction to wireless	4FTC1154	4FTC1155	15	English	40	60	0	B
Understanding databases and data analysis	4FTC1157	4FTC1158	15	English	0	70	30	B

Level 5 All pathways

Progression to level 5 requires a minimum of 90 credits and passes in Work Based Learning module at L5. The award of an Foundation degree requires 240 credit points with minimum at 120 at level 5.

Compulsory Modules Module Title	North Herts. College Module Code	West Herts. College Module Code	Credit Points	Language of Delivery	% Examination	% Coursework	% Percentage Practical	Semesters
Advanced Programming and Paradigms	5FTC1204	5FTC1205	15	English	0	70	30	A
Designing for User Experience	5FTC1233	5FTC1234	15	English	40	60	0	A
Computing In Business	5FTC1183	5FTC1184	15	English	40	60	0	B
Web Applications and Mobile Technologies	5FTC1186	5FTC1187	15	English	0	50	50	B

Level 5 FdSc Computing Technologies (Media Systems)

Compulsory Modules Module Title	North Herts. College Module Code	West Herts. College Module Code	Credit Points	Language of Delivery	% Examination	% Coursework	% Percentage Practical	Semesters
WBL Project (Media Systems)	5FTC1189	5FTC1190	30	English	0	60	40	AB (C)
Entertainment Systems 1	5FTC1192	5FTC1193	15	English	40	0	60	A
Entertainment Systems 2	5FTC1195	5FTC1196	15	English	0	50	50	B

Level 5 FdSc Computing Technologies (Software Development)

Compulsory Modules Module Title	North Herts. College Module Code	West Herts. College Module Code	Credit Points	Language of Delivery	% Examination	% Coursework	% Percentage Practical	Semesters
WBL Project (Software Development)	5FTC1198	5FTC1199	30	English	0	60	40	AB(C)
Software Development 1	5FTC1201	5FTC1202	15	English	40	0	60	A
Software Development 2	5FTC1168	5FTC1169	15	English	0	50	50	B

Level 5 FdSc Computing Technologies (Networks)

Compulsory Modules Module Title	North Herts. College Module Code	West Herts. College Module Code	Credit Points	Language of Delivery	% Examination	% Coursework	% Percentage Practical	Semesters
WBL Project (Networks)	5FTC1171	5FTC1172	30	English	0	60	40	AB(C)
Advanced Networking 1	5FTC1174	5FTC1175	15	English	40		60	A
Advanced Networking 2	5FTC1236	5FTC1237	15	English	0	50	50	B

Structure of FdSc Computing Technologies – Full-time

Level 4: Semester A			
WBL (Part 1) Developing Professional and Employability Skills (double module)	Understanding Programming	Computer Systems Architecture	Systems Analysis
Level 4: Semester B			
WBL (Part 2) Developing Professional and Employability Skills (double module)	Further Programming	Computer Networks & Introduction to Wireless	Understanding Databases & Data Analysis

Level 5: Semester A			
WBL Project Advanced Research Methods Analysis and Evaluation Project Management in term 1	Advanced Programming & Paradigms	Designing for User Experience	Specialist Modules: Entertainment Systems (1) Software Development (1) Advanced Networking
	Level 5: Semester B		
Project Work in terms 2 and 3 Entertainment Systems Project System Development Project Networking Project	Computing in Business	Web Applications & Mobile Technologies	Specialist Modules: Entertainment Systems (2) Software Development (2) Advanced Networking (2)

Structure of FdSc Computing Technologies – Part-time

Level 4: Semester A		
Understanding Programming	Computer Systems Architecture	Systems Analysis
Level 4: Semester B		
Further Programming	Computer Networks & Introduction to Wireless	Understanding Databases & Data Analysis
Level 4: Semester C		
WBL (Parts 1 & 2) Developing Professional and Employability Skills (double module)		

Level 5: Semester A		
Advanced Programming & Paradigms	Designing for User Experience	Specialist Modules: Entertainment Systems(1) Software Development (1) Advanced Networking (1)
Level 5: Semester B		
Computing in Business	Web Applications & Mobile Technologies	Specialist Modules: Entertainment Systems (2) Software Development (2) Advanced Networking (2)
Level 5: Semester C		
WBL Project: Advanced Research Methods, Analysis and Evaluation, Project Management and an Entertainment Systems Project or System Development Project or Networking Project		

Once students have chosen their pathway at level 5, they will be required to complete all the compulsory modules relating to their chosen pathway in addition to all those that are compulsory for all students on the programme. Students will need to retake all pathway specific modules if they decide to change pathways.

Award classification

The University has approved structure and assessment regulations common to all programmes. Full details are provided in [UPR AS14](#), Section D.

Table 1b Final and interim awards available

The programme provides the following final and interim awards:

Final Award	Award Title	Minimum requirements	Available at end of Level	Programme Learning Outcomes developed (see above)
FdSc/FdA	Foundation Degree in Computing Technologies (Media Systems) or (Software development) or (Networks)	240 credit points including at least 120 at level 5	5	All programme learning outcomes (see Table 2)

Interim Award	Award Title	Minimum requirements	Available at end of Level	Programme Learning Outcomes developed (see above)
University Certificate		45 credit points at level 4	4	See UPR AS11, section 13: http://sitem.herts.ac.uk/secreg/upr/AS11.htm
Certificate of Higher Education		120 credit points at level 4	4, 5	<i>For named awards, list all relevant learning outcomes, e.g. A1, A3, A4, B1, B2, C1, C5, D1, D2, D3</i> OR <i>For untitled awards: See UPR AS11, section 13:</i> http://sitem.herts.ac.uk/secreg/upr/AS11.htm

Programme-specific assessment regulations

The programme complies with the University's academic regulations (in particular, [UPR AS11](#), [UPR AS12/UPR AS13](#) (*delete as applicable*) and [UPR AS14](#)) with the exception of those listed below, which have been approved by the University:

The Work Based Learning module at L5 cannot be compensated as it constitutes an essential part of the award. In addition, Students are required to take on the L5 W BL project module related to their chosen pathway.

- Maximum completion period of the Foundation Degree programme is 5 years.

Progression to the University's Degree Programmes.

There is a formal articulation arrangement in place for this programme, such that students are given progression to the second (level 5) or final year (level 6) of an appropriate BSc Honours programme, normally the BSc in IT or BSc in Computer Science, depending on the overall marks obtained following the second year of study. A 50% overall mark will allow a progression onto the third year of the BSc Honours programme.

Students who enter level 5 of the BSc programme are able to progress onto any of the awards as described below:

- BSc (Hons) Computer Science
- BSc (Hons) Information Technology
- BSc (Hons) Computer Science (Artificial Intelligence)
- BSc (Hons) Computer Science (Networks)
- BSc (Hons) Computer Science (Software Engineering)

Students who enter level 6 of the BSc programme are able to progress onto the awards listed below:

FdSc Computing Technologies (Media Systems)

- BSc (Hons) Computer Science
- BSc (Hons) Information Technology

FdSc Computing Technologies (Software Development)

- BSc (Hons) Computer Science
- BSc (Hons) Information Technology
- BSc (Hons) Computer Science (Software Engineering)

FdSc Computing Technologies (Networks)

- BSc (Hons) Computer Science
- BSc (Hons) Information Technology
- BSc (Hons) Computer Science (Networks)

In addition, all students can progress onto the BSc (Hons) Computer Science (delivered online). This may be of particular interest to part-time students.

Course Code	Course Instance	Award Title	Modules (child instance codes & title)	Must be included in classification algorithm?
TCFDCT	CTMSN1F,	Foundation Degree in Computing Technologies (Media Systems)	See course structure section D above	
	CTMSN2F	Foundation Degree in Computing Technologies (Media Systems)		
	CTMSN1P-1,	Foundation Degree in Computing Technologies (Media Systems)		
	CTMSN1P-2	Foundation Degree in Computing Technologies (Media Systems)		
	CTMSN2P-1	Foundation Degree in Computing Technologies (Media Systems)		
	CTMSN2P-2	Foundation Degree in Computing Technologies (Media Systems)		
	CTSDN1F	Foundation Degree in Computing Technologies (Software Development)		
	CTSDN2F	Foundation Degree in Computing Technologies (Software Development)		
	CTSDN1P-1	Foundation Degree in Computing Technologies (Software Development)		
	CTSDN1P-2	Foundation Degree in Computing Technologies (Software Development)		
	CTSDN2P-1	Foundation Degree in Computing Technologies (Software Development)		
	CTSDN2P-2	Foundation Degree in Computing Technologies (Software Development)		

	CTNN1F,	Foundation Degree in Computing Technologies (Networks)		
	CTNN2F	Foundation Degree in Computing Technologies (Networks)		
	CTNN1P-1,	Foundation Degree in Computing Technologies (Networks)		
	CTNN1P-2	Foundation Degree in Computing Technologies (Networks)		
	CTNN2P-1	Foundation Degree in Computing Technologies (Media Systems)		
	CTNN2P-2	Foundation Degree in Computing Technologies (Media Systems)		
	CTMSW1F	Foundation Degree in Computing Technologies (Media Systems)		
	CTMSW2F	Foundation Degree in Computing Technologies (Media Systems)		
	CTMSW1P-1,	Foundation Degree in Computing Technologies (Media Systems)		
	CTMSW1P-2	Foundation Degree in Computing Technologies (Media Systems)		
	CTMSW2P-1	Foundation Degree in Computing Technologies (Software Development)		
	CTMSW2P-2	Foundation Degree in Computing Technologies (Software Development)		
	CTSDW1F	Foundation Degree in Computing Technologies (Software Development)		
	CTSDW2F	Foundation Degree in Computing Technologies (Software Development)		
	CTSDW1P-1,	Foundation Degree in Computing Technologies (Software Development)		
	CTSDW1P-2	Foundation Degree in Computing Technologies (Software Development)		
	CTSDW2P-1	Foundation Degree in Computing Technologies (Networks)		
	CTSDW2P-2	Foundation Degree in Computing Technologies (Networks)		
	CTNW1,	Foundation Degree in Computing Technologies (Networks)		
	CTNW2F	Foundation Degree in Computing Technologies (Networks)		
	CTNW1P-1,	Foundation Degree in Computing Technologies (Networks)		
	CTNW1P-2	Foundation Degree in Computing Technologies (Networks)		
	CTNW2P-1	Foundation Degree in Computing Technologies (Networks)		
	CTNW2P-2	Foundation Degree in Computing Technologies (Networks)		

Further programme-specific regulations (requiring School-level approval) are given below:

E. Management of Programme & Support for student learning.

Management

The programme is managed and administered through:

- Programme Managers at colleges
- Student representatives
- Module Leaders
- Programme administrator

Support

Students are supported by:

- A college-based programme tutor to help students understand the course structure
- A college-based personal tutor to provide academic and pastoral support. Sessions are timetabled to provide guidance, support and monitoring of progress.
- Student representatives on programme committees, opportunities for feedback via module feedback questionnaires and student forums
- A designated programme administrator
- An induction period at the beginning of each new academic year.
- A designated UH-based link tutor.
- StudyNet, a versatile on-line interactive intranet and learning environment
- Access to extensive digital and print collections of information resources
- Excellent facilities in each college which include; fast computer intranet systems, business and computer suites, CISCO network cabinets, a gym, sports hall and fitness centre, hairdressing and beauty salons and dedicated HE areas.
- Further facilities at the University to provide access to extensive digital and print collections of information resources and access to modern study environments in 2 learning resources centres and in learning zones around the campus.
- Strong links with local employers, a careers service for all current students and graduates
- A substantial Student Centre at UH and further student support at the college that provides advice on issues such as finance, University regulations, legal matters, chaplaincy, counselling, disability, learning support, and careers.
- An equal opportunities officer
- Use of the University of Hertfordshire Student Union.

F. Other sources of information

In addition to this Programme Specification, the University publishes guidance to registered students on the programme and its constituent modules:

- A Programme (or Student) Handbook;
- A Definitive Module Document (DMD) for each constituent module;
- A Module Guide for each constituent module.

The [A-Z of the University of Hertfordshire](#) is an introduction to the academic, social, cultural and sporting services and opportunities available at the University of Hertfordshire, and includes the Student Charter and Student Code of Conduct.

As a condition of registration, all students of the University of Hertfordshire are required to comply with the University's rules, regulations and procedures. These are published in a series of documents called 'University Policies and Regulations' (UPRs). The University requires that all students consult these documents which are available on-line, on the UPR web site, at: <http://www.herts.ac.uk/secreg/upr/>. In particular, [UPR SA07](#) 'Regulations and Advice for Students' Particular Attention - Index' provides information on the UPRs that contain the academic regulations of particular relevance for undergraduate and taught postgraduate students.

The UK Quality Assurance Agency for Higher Education (QAA) has confirmed the quality and standards of provision at the University of Hertfordshire. A key part of QAA's role is to review and report on how universities maintain their academic standards and quality, to inform students and the wider public. The team of QAA reviewers visited the University of Hertfordshire in 2015/16 and judged that its academic standards, the quality and enhancement of its students' learning experience, and the quality of information about this

learning experience all meet UK expectations. In other words, the University meets national requirements for standards and quality. The QAA's report can be accessed at: <http://www.qaa.ac.uk/reviews-and-reports/provider?UKPRN=10007147#.V-KHajXy0nE>

G. Entry requirements

The normal entry requirements for the programme are:

The normal entry requirements for the programme are:

- 120 or more UCAS points which must be made up of at least one full GCE A level (A2), a BTEC National Diploma/Certificate or equivalent.
- 4 subjects at GCSE at Grade C or above including Maths and English Language or equivalent.
- Equivalent qualifications to be assessed by the Admissions Tutor.

Applications will be welcome from those working in relevant employment who may not fully meet the above entry requirements but have a number of year's relevant experience.

The programme is subject to the University's Principles, Policies and Regulations for the Admission of Students to Undergraduate and Taught Postgraduate Programmes (in [UPR SA03](#)), along with associated procedures. These will take account of University policy and guidelines for assessing accredited prior certificated learning (APCL) and accredited prior experiential learning (APEL).

If you would like this information in an alternative format please contact: Ruth Marsh School Administrator

If you wish to receive a copy of the latest Programme Annual Monitoring and Evaluation Report (AMER) and/or the External Examiner's Report for the programme, please email a request to aqo@herts.ac.uk

Foundation Degree Computing Technologies(Networks) or (Media Systems) or (Software Development)

Table 2: Development of Intended Programme Learning Outcomes in the Constituent Modules

This map identifies where the programme learning outcomes are assessed in the constituent modules. It provides (i) an aid to academic staff in understanding how individual modules contribute to the programme aims (ii) a checklist for quality control purposes and (iii) a means to help students monitor their own learning, personal and professional development as the programme progresses.

		Programme Learning outcomes(As identified in section 1 and the following page)																									
		Knowledge				Intellectual				Practical Skills				Transferable Skills													
Module Title		Module Code	A1	A2	A3	A5	B1	B2	B3	B	B5	B6	B7	C1	C2	C3	C4	C5	C6	C7	C8	D1	D2	D3	D4	D5	D6
Level 4	Developing Professional and Employability Skills	See Table 1a	X					X													X	X	X		X	X	
	Understanding Programming	See Table 1a			X	X	X	X	X													X					X
	Further Programming	See Table 1a			X	X	X	X	X					X								X					X
	Computer Systems Architecture	See Table 1a		X			X		X	X	X	X	X	X	X		X	X	X	X		X	X				
	Computer Networks and Introduction to Wireless	See Table 1a		X		X				X	X	X	X	X			X	X	X	X		X					
	Understanding databases and data analysis	See Table 1a	X	X	X	X	X	X	X			X	X									X					X
	Systems Analysis	See Table 1a	X	X	X	X	X	X	X	X		X	X			X						X		X			X
	WBL Project (Networks)	See Table 1a	X	X	X	X	X	X	X		X	X		X		X	X	X	X	X	X	X	X		X	X	X
	WBL Project (Software Development)	See Table 1a	X		X	X	X	X	X		X	X		X		X	X	X	X	X	X	X	X		X	X	X
	WBL Project (Media Systems)	See Table 1a	X		X	X	X	X	X		X	X		X		X	X	X	X	X	X	X	X		X	X	X
Level 5	Advanced Programming and Paradigms	See Table 1a			X	X	X	X														X					
	Web Based Systems - HCI	See Table 1a	X		X				X	X	X		X	X					X		X	X					
	Computing in Business	See Table 1a	X	X										X								X	X	X			
	Web Applications and Mobile Technologies	See Table 1a				X			X	X				X	X							X					
	Entertainment Systems 1	See Table 1a				X	X		X	X		X															
	Entertainment Systems 2	See Table 1a				X	X			X																	
	Software Development 1	See Table 1a				X	X	X	X	X		X															X
	Software Development 2	See Table 1a				X	X	X	X		X					X											X
	Advanced Networking 1	See Table 1a		X		X	X		X	X					X				X	X	X						
	Advanced Networking 2	See Table 1a		X		X	X		X						X				X	X		X					
Designing for User Experience	See Table 1a							X	X		X							X		X							

KEY TO PROGRAMME LEARNING OUTCOMES

Knowledge and Understanding

- A1- Well-established principles of an IT professional and the way in which those principles have developed
- A2- How computer based technologies related to media systems, software development and networks operate and communicate with one another.
- A3- A range of techniques and technologies related to media systems, software development and networks that support the processes that lead to a computerised solution to a problem.
- A4- A range of techniques and technologies related to media systems, software development and networks that support the processes that lead to a computerised solution to a problem.
- A5- A critical understanding of the development, knowledge and content of the particular vocational pathway

Practical Skills

- C1- Apply underlying IT concepts and principles.
- C2- Operate computing equipment effectively taking into account its logical and physical properties.
- C3- Integrate media, software development and networks related computing skills via a work-based learning project. **
- C4- Deploy effectively the tools used for the construction and documentation of computer applications, with particular emphasis on understanding the whole process involved in the effective deployment of computers to solve practical problems.
- C5- Specify and design computer-based systems.
- C6- To evaluate media, software development and networking systems in terms of general quality attributes and possible trade-offs presented within the given problem.
- C7- Recognise any risks or safety aspects that may be involved in the operation of computing equipment within a given context.
- C8- Recognise the professional, economic, social, environmental, moral and ethical issues involved in the sustainable exploitation of computer technology and be guided by the adoption of appropriate professional, ethical principles.

Intellectual Skills

- B1- Initiate and undertake critical analysis of information, and to propose solutions to problems arising from that analysis.
- B2- Understand concepts related to computational thinking in media systems, software development and networks including its relevance to everyday life.
- B3- Demonstrate knowledge and understanding of essential facts, concepts, principles and theories relating to computing and computer applications.
- B4- Use such knowledge and understanding in the modeling and design of media, software development and networks-based systems for the purposes of comprehension, communication, prediction and the understanding of trade-offs.
- B5- Understand the requirements, practical constraints on media, software development and networking systems- based in their respective context
- B6- Deploy appropriate theory, practices and tools for the requirements analysis, specification, design and implementation of IT systems (including media systems, software applications and network- based systems).
- B7- Analyse the extent to which a computer- based system (media, software development or networking system) meets the criteria defined for its current use and future development.

Transferable Skills

- D1- Present succinctly to a range of audiences (orally, electronically or in writing) rational and reasoned arguments that address a given information handling problem or opportunity. This should include assessment of the impact of new technologies
- D2- Retrieve effective information (including the use of browsers, search engines and catalogues).
- D3- Work effectively within a team recognising the different roles within a team and different ways of organising teams.
- D4- Exercise personal responsibility and decision-making, including time management and organisational skills.
- D5- Appreciate the need for continuing professional development and utilise opportunities for lifelong learning.
- D6- Apply numerical and quantitative skills appropriately

Section 2

Programme management

Relevant QAA subject benchmarking statements

Computing 2012

Type of programme

Undergraduate

Date of validation/last periodic review

February 12

Date of production/ last revision of PS

June 16

Relevant to level/cohort

Choose a level entering September 2017

Administrative School

School of Computer Science

Table 3 Course structure

Course details					
Course code		Course description			JACS
TCFDCT		Foundation Degree in Computing Technologies			I100
Course Instances					
Instances code	Intake	Stream	Instances Year	Location:	Mode of study
CTMSN1F,	A	Foundation Degree in Computing Technologies (Media Systems)	1	North Herts College	Full-time
CTMSN2F	A	Foundation Degree in Computing Technologies (Media Systems)	2	North Herts College	Full-time
CTMSN1P-1,	A	Foundation Degree in Computing Technologies (Media Systems)	1	North Herts College	Part-time
CTMSN1P-2	A	Foundation Degree in Computing Technologies (Media Systems)	1	North Herts College	Part-time
CTMSN2P-1	A	Foundation Degree in Computing Technologies (Media Systems)	2	North Herts College	Part-time
CTMSN2P-2	A	Foundation Degree in Computing Technologies (Media Systems)	2	North Herts College	Part-time
CTSDN1F	A	Foundation Degree in Computing Technologies (Software Development)	1	North Herts College	Full-time
CTSDN2F	A	Foundation Degree in Computing Technologies (Software Development)	2	North Herts College	Full-time
CTSDN1P-1	A	Foundation Degree in Computing Technologies (Software Development)	1	North Herts College	Part-time
CTSDN1P-2	A	Foundation Degree in Computing Technologies (Software Development)	1	North Herts College	Part-time
CTSDN2P-1	A	Foundation Degree in Computing Technologies (Software Development)	2	North Herts College	Part-time
CTSDN2P-2	A	Foundation Degree in Computing Technologies (Software Development)	2	North Herts College	Part-time
CTNN1F,	A	Foundation Degree in Computing Technologies (Networks)	1	North Herts College	Full-time
CTNN2F	A	Foundation Degree in Computing Technologies (Networks)	2	North Herts College	Full-time

CTNN1P-1,	A	Foundation Degree in Computing Technologies (Networks)	1	North Herts College	Part-time
CTNN1P-2	A	Foundation Degree in Computing Technologies (Networks)	1	North Herts College	Part-time
CTNN2P-1	A	Foundation Degree in Computing Technologies (Networks)	2	North Herts College	Part-time
CTNN2P-2	A	Foundation Degree in Computing Technologies (Networks)	2	North Herts College	Part-time
CTMSW1F	A	Foundation Degree in Computing Technologies (Media Systems)	1	West Herts College	Full-time
CTMSW2F	A	Foundation Degree in Computing Technologies (Media Systems)	2	West Herts College	Full-time
CTMSW1P-1,	A	Foundation Degree in Computing Technologies (Media Systems)	1	West Herts College	Part-time
CTMSW1P-2	A	Foundation Degree in Computing Technologies (Media Systems)	1	West Herts College	Part-time
CTMSW2P-1	A	Foundation Degree in Computing Technologies (Media Systems)	2	West Herts College	Part-time
CTMSW2P-2	A	Foundation Degree in Computing Technologies (Media Systems)	2	West Herts College	Part-time
CTSDW1F	A	Foundation Degree in Computing Technologies (Software Development)	1	West Herts College	Full-time
CTSDW2F	A	Foundation Degree in Computing Technologies (Software Development)	2	West Herts College	Full-time
CTSDW1P-1,	A	Foundation Degree in Computing Technologies (Software Development)	1	West Herts College	Part-time
CTSDW1P-2	A	Foundation Degree in Computing Technologies (Software Development)	1	West Herts College	Part-time
CTSDW2P-1	A	Foundation Degree in Computing Technologies (Software Development)	2	West Herts College	Part-time
CTSDW2P-2	A	Foundation Degree in Computing Technologies (Software Development)	2	West Herts College	Part-time
CTNW1,	A	Foundation Degree in Computing Technologies (Networks)	1	West Herts College	Full-time
CTNW2F	A	Foundation Degree in Computing Technologies (Networks)	2	West Herts College	Full-time
CTNW1P-1,	A	Foundation Degree in Computing Technologies (Networks)	1	West Herts College	Part-time
CTNW1P-2	A	Foundation Degree in Computing Technologies (Networks)	1	West Herts College	Part-time
CTNW2P-1	A	Foundation Degree in Computing Technologies (Networks)	2	West Herts College	Part-time
CTNW2P-2	A	Foundation Degree in Computing Technologies (Networks)	2	West Herts College	Part-time