School of Engineering and Technology

Title of Programme: BSc Honours in Digital Technology

Programme Code: EIT

Programme Specification

This programme specification is relevant to students entering:
 01 September 2013

Associate Dean of School (Academic Quality Assurance):
Andrew Lewis

Signature *A. P. Lewis.*

Programme Specification
BSc (Honours) Digital Technology

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	University of Hertfordshire
Teaching Institution	University of Hertfordshire
University/partner campuses	College Lane / St Albans
Programme accredited by	Institution of Engineering and Technology
Final Award	BSc Honours
All Final Award titles	1. Computer Technology & Networks
	2. Digital Film and TV Technology (last intake 2012)
	3. Broadcast Media Technology
	4. Multimedia Technology (last intake 2012)
	5. Multimedia Systems Technology
	6. Mobile & Smart Systems
	7. Film and TV Production (last intake 2012)

Note: Awards 3, 5 and 6, will be submitted for accreditation in 2015-16.

FHEQ level of award	6
UCAS code(s)	1. G420
	2. WH66
	3. P901
	4. P310
	5. P310
	6. I300
	7. HW66
Language of Delivery	English

A. Programme Rationale

The Digital Technology programme provides its students with a more `systems' approach to digital technology rather than an intensely analytical one. The latter approach is adopted in the School's BEng and MEng programmes where both the material offered and the analytical depth differ considerably from the one described here. The combination of Engineering and Technology echoes a global trend, reflected in, for example the fact that the Institute of Electrical Engineers (IEE) has renamed itself the Institute of Engineering and Technology (IET) or the government "future cities" initiative.

The Digital Technology programme has an efficient structure offering a solid core of material encompassing embedded electronics, communications and computing from which specialist subjects draw in later years to focus on applications in media and networking. The structure has inherent adaptability as it has been specifically designed to allow diversification without undermining award title integrity should individual titles not be offered subsequently.

The School has close contacts with a wide range of companies and students are encouraged to take the sandwich option spending at least 48 weeks on industrial placement between levels 5 and 6.

Graduates can expect to gain employment either within the industries directly associated with their named award or in industries associated with Digital Technology in general. These industries include small and large scale companies manufacturing digital equipment or companies that use digital technology.

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:

for the Computer Technology and Network award (September 2013 registration onwards):
- provide a high quality education which prepares the students for careers in deploying, managing or supporting the technical resources required in modern computer and network environments;
- provide the students with opportunities to gain a sound understanding of the architecture and application of modern computer hardware platforms and methods and techniques of computer network operation and deployment.

for the Broadcast Media Technology award:
- provide a high quality education which prepares the students for careers in deploying, managing or supporting the technical resources required in the modern broadcast and media industry;
- provide the students with opportunities to gain a sound understanding of the application and convergence of modern digital hardware and software in modern broadcast and media production environments.

for the Multimedia Systems Technology award:
- provide a high quality education which prepares the students for careers in deploying, managing or supporting the technical resources required in multimedia systems;
- provide the students with opportunities to gain a sound understanding of the technology of content retrieval and management in both local networks and web based systems and the governance of the media content in such systems.

for the Mobile & Smart Systems award:
- provide a high quality education which prepares the students for careers in deploying, managing or supporting the technical resources required in modern mobile and smart environments;
- provide the students with opportunities to gain a sound understanding of the architecture, interoperation, configuration, operation and multi-platform application of modern smart systems.

for the Computer Technology and Networks award (pre-September 2013 registration) , it aims to:
- provide a high quality education which prepares the students for careers in deploying, managing or supporting the technical resources required in modern computer and network environments;
- provide the students with opportunities to gain a sound understanding of the architecture and application of modern computer hardware platforms and methods and techniques of computer network operation and deployment.

for the Digital Film and TV Technologies award, it aims to:
- provide a high quality education which prepares the students for careers in deploying, managing or supporting the technical resources required in modern digital film and TV production;
- provide the students with opportunities to gain a sound understanding of the application and convergence of modern digital hardware and software in modern TV and film production environments.

for the Multimedia Technology award, it aims to:

- provide a high quality education which prepares the students for careers in deploying, managing or supporting the technical resources required in multimedia technology environments;
- provide the students with opportunities to gain a sound understanding of the technology of content retrieval and management in both local networks and web based systems and the governance of the media content in such systems.

for the Film and TV Production award:

- provide a high quality education which prepares the students for careers in film and television production and associated fields in the management of technical resources that support and enhance the creative process;
- provide students with a detailed knowledge and comprehensive understanding of technologies underpinning key production processes and professional practices relevant to film and TV production including emergent media.

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 Engineering and Computing and the Framework for Higher Education Qualifications in England, Wales and Northern Ireland (2008), and relate to the typical student. Additionally, the SEEC Credit Level Descriptors for Further and Higher Education 2010 have been used as a guiding framework for curriculum design.

Knowledge and Understanding of:	Teaching/learning methods & strategies	Assessment
A1- analytical concepts and algorithmic procedures relevant to the student's chosen discipline. A2- the fundamental science appropriate to the student's chosen discipline. A3- The technology underpinning current systems used in the students chosen discipline. A4- the professional and ethical responsibilities of those working in a technical and business environment. A5- the impact of technological solutions on society in a global context. **and in addition, for the award of Film and Television Production:** A6- the creative processes of film and television production and their relationship with the historical development of audiences, particular genres, aesthetic	Acquisition of knowledge and understanding for learning outcomes A1 and A2 is through a combination of lectures, small group tutorials, coursework and practical/project work at levels 4 and 5 of the programme. Additional support is provided through the Mathematics Drop-in Centre. Acquisition of knowledge and understanding for learning outcomes A3 and A4 is through a combination of lectures, projects and coursework throughout the programme. Acquisition of knowledge and understanding for learning outcome A5 is through lectures and coursework at level 4 and project work at levels 5 and 6. Acquisition of knowledge and understanding for learning outcomes A6 is through a combination of lectures, seminars, group and individual tutorials, practical workshops and coursework. Throughout, the learner is	Knowledge and understanding are assessed through a combination of unseen examinations/phase tests (A1, A2, A3, A5) and in-course assignments in the form of laboratory reports (A1, A2, A3, A5, A6), essay/ case study reports (A4, A5, A6), and project reports/presentations (A3, A4, A5, A6).

University of Hertfordshire

Intellectual skills - able to:	Teaching/learning methods & strategies	Assessment
traditions and forms, including contemporary work at the forefront of the discipline and a range of emergent technologies.	encouraged to undertake independent study both to supplement and consolidate what is being taught/learnt and to broaden their individual knowledge and understanding of the subject.	

Intellectual skills - able to:	Teaching/learning methods & strategies	Assessment
B1- analyse and solve engineering / computing problems using appropriate techniques; B2- model and analyse relevant digital systems and sub-systems appropriate to the students chosen discipline. B3- select commercial software packages for specific applications. B4- specify and appraise systems, components or processes appropriate to the students chosen discipline. B5- evaluate the effectiveness of appropriate technical systems, in terms of the needs of content creators and / or potential users. **and in addition, for the award of Film and Television Production:** B6 - consider and evaluate film and television production artefacts in a reflexive manner with reference to their audiences, genres, form and aesthetic traditions, conventions and current	Intellectual skills are developed throughout the programme by the methods and strategies outlined in Section A above. Analysis, problem solving, evaluation, programming and modelling skills (B1, B2) are further developed through tutorial work, laboratory work and in-course exercises. Programming, IT skills, selection of software packages and specification / evaluation of technical systems (B3, B4, B5) are further developed through project work, programming exercises and case studies. Consideration and evaluation of film and television artefacts (B6) are developed through a combination of lectures, seminars, group and individual tutorials and coursework. Feedback is given to all students on all work produced. Throughout, the learner is encouraged to develop intellectual skills further by independent study	B1, B2, B3, B4, B5 are assessed through a combination of unseen examinations/phase test, laboratory reports, portfolios, essay assignments, exercises and presentations. B6 is assessed through in-course assessment from a combination of video assignments, written reports, essays and presentations.

Practical skills - able to:	Teaching/learning methods & strategies	Assessment

University of Hertfordshire

C1- apply appropriate analytical and modelling techniques to technology-based problems; C2- perform experimental laboratory work and draw appropriate conclusions; C3- use appropriate software tools; C4- prepare technical documentation; C5- evaluate the technical performance of appropriate systems, components or processes; C6- recognise risks or safety aspects pertinent to the operation of technology-based systems; C7- plan and manage a project, taking into account commercial and industrial constraints. **and in addition, for the award of Film and Television Production:** C8- demonstrate the effective use of film and television production processes informed by an understanding of media forms, audiences, conventions and specific communication registers.	Practical skills are developed throughout the programme by the methods and strategies outlined in section A and B above. C1 is developed through laboratory work, coursework assignments and tutorial work. C2 is developed through laboratory work. C3 is developed through exercises, coursework assignments and tutorial work. C4 is developed through lectures and project work, particularly at level 6. C5 and C6 are developed through course work and project work, particularly at levels 5 and 6. C7 is developed through project work, particularly at level 6. C8 is developed through a combination of lectures, seminars, group and individual workshops and coursework.	Practical skills are assessed through a combination of in-course assessments including laboratory reports, coursework assignments, case study reports, presentations and project reports, industrial placement logbooks and reports, as well as workshop outcomes and practical assignments.
Transferable skills - able to:	Teaching/learning methods & strategies	Assessment
D1- communicate effectively, both orally and in writing; D2- use commonly available IT tools and facilities effectively; D3- manage time and resources effectively; D4- work effectively within a team;	Transferable skills are developed throughout the programme by the methods and strategies outlined in sections A, B and C above. D1 is developed through feedback on coursework reports, oral presentations and project reports. D2 is developed when preparing project reports, laboratory reports, case studies, programming etc.	In the majority of modules, transferable skills are not explicitly assessed. However, skills D1, D2, D3, D5 and D6 are assessed through project reports and oral presentations. Skill D4 is generally assessed in modules which involve project based team working.

University of Hertfordshire

D5- retrieve, manipulate and present information effectively; D6- solve problems in a logical manner.	D3 is developed through project work planning and throughout the programme. D4 is developed through group project work, particularly at level 5. D5 and D6 are developed through lectures and tutorial work throughout the programme. Throughout, the learner is encouraged to develop transferable skills by maintaining a record of evidence and completing a personal development plan.

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

The programme is offered in full-time (3 years), part-time (4 years at level 5 entry and 6 years at level 4 entry) and sandwich (4 years) modes and leads to the award of a BSc Degree with Honours in one of the named courses as listed in Section 1 (page 2). Entry is normally at level 4 (with suitable A-level or equivalent qualifications) but is possible at level 5 with suitable relevant qualifications (HND etc). Intake is normally in Semester A.

Students may also opt to study an additional Year Abroad at a partner institution normally in Europe or North America. To qualify for the Year Abroad option the studies taken at the host institution will normally be at least two semesters of full time study. Provided the student passes all assessments and a full transcript of their achievement in the host academic institution is submitted to the board of examiners, this will lead to an award of a BSc Degree with Honours in one of the named courses as listed in Section 1 (page 2) "with year abroad" on the final degree certificate.

Professional and Statutory Regulatory Bodies

The following award titles are accredited by the Institution of Engineering and Technology.
- Computer Technology & Networks
- Digital Film and TV Technology
- Multimedia Technology
- Film and TV Production

NB Accreditation of the new award titles will be sought the next time the IET are due to visit.

Work-Based Learning, including Sandwich Programmes

A designated sandwich programme leads to a University award in the sandwich mode and the word "sandwich" appears on the award certificate. In order for the BSc to lead to an award in the sandwich mode, the student must undertake a period of approved work experience (industrial placement) of not less than 48 weeks excluding holidays during year 3. To achieve this, students must start their work experience before 1st October. The work experience will normally be completed within the United Kingdom but with approval may be completed within other countries. Progress of the student's training is monitored by visits from University academic staff. Students will be required to document this period of work in accordance with the guidelines produced by the Faculty. Students on industrial placement will be registered on the Placement Year Module (6AAD0015).

Students who have not achieved the minimum progression requirements at the end of level 5 may be prevented from undertaking a sandwich placement. The policy relating to progression onto the

University of Hertfordshire

placement year from Level 5 is given in the Faculty Guidelines on Industrial Placements. Additionally, students on industrial placement, but who have level 4 or 5 modules to repeat will not normally be allowed to re-enrol on these modules until they return from industrial placement. This is to avoid a conflict between UH attendance requirements and the student's commitment to their employer.

Students who do not take the sandwich option, progressing directly to Level 6, are automatically transferred to the full-time mode and are required to complete a Careers Portfolio to demonstrate their employability skills (6ENT1021). This portfolio will include evidence of any employment experiences the student has, evidence of any voluntary work experience, an audit of their employability skills and a careers action plan to further their employability skills post graduation. It is expected that much of this evidence will have been gathered during the Career Skills Development module (4AAD0028) and Career Planning module (5AAD0032).

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 (in section 2) identifies where each learning outcome is assessed.

The following notations should be read in conjunction with tables below:

CTN = Computer Technology & Network
MSS = Mobile & Smart Systems
BMT = Broadcast Media Technology (formally Digital Film and TV Technology)
MST = Multimedia Systems Technology (formally Multimedia Technology)
MMT = Multimedia Technology
DFTV = Digital Film and TV Technology
FTPR = Film and TV Production

c = compulsory module

o = optional module

University *of*
Hertfordshire

Mode of study: Full Time/Sandwich/Part-time mode
Entry point: Semester A

Level 4

Module Title	Module Code	Award				Credit Points	Language of Delivery	% Examination	% Coursework	% Practical	Semester	Year of Study	
		CTN	MSS	BMT	MST							Full Time Mode	Part Time Mode
Career Skills Development	4AAD0028	c	c	c	c	-	English	-	100	-	AB	1	1
Sound & Psychoacoustics	4ELE0054	c	c	c	c	15	English	50	50	-	A	1	1
E-Culture	4ELE0069	c	c	c	c	15	English	-	100	-	A	1	1
Software Application	4ENT1081	c	c	c	c	15	English	-	100	-	A	1	1
Smart Technology 1	4ENT1082	c	c	c	c	15	English	-	100	-	A	1	1
Vision & Image Perception	4ENT1084	c	c	c	c	15	English	50	50		B	1	2
Media Regulatory Framework	4ENT1088	c	c	c	c	15	English	-	100	-	B	1	2
Interactive Programming	4ENT1071	c	c	c	c	15	English	-	100	-	B	1	2
Smart Technology 2	4ENT1086	c	c	c	c	15	English	50	50	-	B	1	2

Progression to level 5 requires: A minimum of 90 credits to remain on honours award. Progression to non-honours level 5 with 75 credits may be permissible. The maximum study rate in such an instance would normally be 120 credits but students would be expected to remedy any failed modules from level 4 in the first instance.

University *of* Hertfordshire

Level 5 (2013 entry onwards)

Module Title	Module Code	Award				Credit Points	Language of Delivery	% Examination	% Coursework	% Practical	Semester	Year of Study	
		CTN	MSS	BMT	MST							Full Time Mode	Part Time Mode
Career Planning	5AAD0032	c	c	c	c	-	English	-	100	-	AB	2	4
Content & Asset Management	5ENT1043	c	c	c	c	15	English	50	50	-	A	2	4
E-Enterprise and Entrepreneurship	5ELE0086	c	c	c	c	15	English	-	100	-	A	2	5
Markup Languages and Metadata	5ENT1049	c	c	c	c	15	English	-	100	-	A	2	4
Data-Driven Web Applications	5ENT1044	c	c			15	English	50	50	-	A	2	5
Audio and Video Studio Practice	5ELE0085			c	c	15	English	50	50	-	A	2	5
Webcasting	5ENT1045	c	c	c	c	15	English	50	50	-	B	2	4
Mini Project CTN	5ELE0072	c				15	English	-	100	-	B	2	5
Mini Project MSS	5ENT1048		c			15	English	-	100	-	B	2	5
Mini Project BMT	5ENT1051			c		15	English	-	100	-	B	2	5
Mini Project MST	5ENT1050				c	15	English	-	100	-	B	2	5
Mini Project FTP	5ENT1008					15	English	-	100	-	B	2	5
Interactive Software Design	5ENT1046	c	c	c	c	15	English	-	100	-	B	2	4
Networking	5ENT1047	c	c	c	c	15	English	50	50	-	B	2	5

Progression to level 6 requires:

210 credit points and above to Honours award.

Progression to non-honours level 6 with 180 credits may be permissible. The maximum study rate in such an instance would normally be 120 credits but students would be expected to remedy any failed modules from level 5 in the first instance.

University of Hertfordshire

Level 6 (2013 entry onwards)

c = compulsory module, o = optional module. All students who do not take the Placement Year module must take the Careers Portfolio module in year 4 (year 5 if Part Time and not employed by an appropriate company).

Module Title	Module Code	Award				Credit Points	Language of Delivery	% Examination	% Coursework	% Practical	Semester	Year of Study	
		CTN	MIT	MT	MST							Full Time Mode	Part Time Mode
Industrial Placement (Placement Year)	6AAD0015	o	o	o	o	-	English	-	100	-	ABC	3	-
Year Abroad	6ENT0001	o	o	o	o	-	English	-	-	-	AB	3	-
Careers Portfolio	6ENT1021	c	c	c	c	-	English	-	100	-	AB	4	6
Distributed Systems & Network Management	6ELE0079	c				30	English	60	40	-	AB	4	6
Smart Device Convergence and Application	6ENT1032		c			30	English	60	40	-	AB	4	6
Digital Media Distribution & Delivery	6ENT1033			c		30	English	60	40	-	AB	4	6
Multimedia Systems	6ENT1034				c	30	English	60	40	-	AB	4	6
Final Year Individual Project	6ENT1012	c	c	c	c	30	English	-	100	-	AB	4	6
Visualisation & Animation Technology	6ELE0076	c	c	c	c	30	English	-	100	-	AB	4	5
Smart Systems	6ENT1030	c	c	c	c	15	English	60	40	-	A	4	5
Data Security & Biometrics	6ENT1031	c	c	c	c	15	English	60	40	-	B	4	5

The award of an Honours degree requires 360 credit points passed with 240 at levels 5 and 6 including at least 120 at level 6. Additionally, students must satisfactorily complete the Final Year Individual Project.

University *of* Hertfordshire

Level 5 (pre-2013 entry)

		Awards				Credit Pts	%Exam	%ICA	% Practical	Sem	Year of Study	
		CTN	DFTV	MMT	FTPR						Full Time Mode	Part Time Mode
Networking & Webcasting	5ELE0067	c	c	c	c	30	50	50	-	AB	2	3
Interactive Software Design	5ELE0068	c	c	c		30	-	100	-	AB	2	3
Markup Languages and Metadata	5ELE0084	c	c	c		15	-	100	-	A	2	4
E-Enterprise and Entrepreneurship	5ELE0086	c	c	c		15	-	100	-	B	2	4
Hardware Platforms & Interface Technology	5ELE0070	c				15	50	50	-	A	2	4
Mini Project CTN	5ELE0072	c				15	0	100	-	B	2	4
Audio and Video Studio Practice	5ELE0085		c		c	15	50	50	-	A	2	4
Mini-projects DFTV	5ELE0083		c			15	0	100	-	B	2	4
Web Services	5ELE0071			c		15	50	50	-	A	2	4
Mini Projects MMT	5ELE0075			c		15	0	100	-	B	2	4
Mini Project FTP	5ENT1008				c	15	0	100	-	B	2	4
Film and TV Post Production: Sound & Vision	5MMF0030				c	30	0	100	-	AB	2	4
Film and TV Media Industries: Professional Development 2	5MMF0033				c	15	0	100	-	A	2	3
Film and TV Histories and Cultures	5CTA1012				c	15	0	100	-	B	2	3
Career Planning	5AAD0032	c	c	c	c	0	-	100	-	AB	2	4

Progression to level 6 requires:
210 credit points and above to Honours award.
Progression to non-honours level 6 with 180 credits may be permissible. The maximum study rate in such an instance would normally be 120 credits but students would be expected to remedy any failed modules from level 5 in the first instance.

University of Hertfordshire

Level 6 (pre-2013 entry)

c = compulsory module, o = optional module. All students who do not take the Placement Year module must take the Careers Portfolio module in year 4 (year 5 if Part Time and not employed by an appropriate engineering company).

Module Title	Module Code	CTN	DFTV	MMT	FTPR	Credit Pts	% exam	% ICA	%Practical	Sem	Full Time Mode	Part Time Mode
Industrial Placement (Placement Year)	6AAD0015	o	o	o	o	-	-		-		3	-
Year Abroad	6ENT0001	o	o	o	o	-	-	100	-	AB	3	-
Careers Portfolio	6ENT1021	c	c	c	c	-	-	100	-	AB	4	5
Visualisation & Animation Technology	6ELE0076	c	c	c		30	70	30	-	AB	4	5
Operating Systems	6ELE0078	c	c	c		15	70	30	-	A	4	5
Biometrics & Security	6ELE0077	c	c	c		15	70	30	-	B	4	5
Distributed Systems & Network Management	6ELE0079	c				30	70	30	-	AB	4	6
Final Year Individual Project	6ENT1012	c	c	c	c	30	0	100	-	AB	4	6
Film & TV Production Systems	6ELE0086		c		c	30	70	30	-	AB	4	6
Content Retrieval, Management & Governance	6ELE0082			c		30	70	30	-	AB	4	6
Group Project	6CTA1003				c	30	0	100	-	B	4	5
Film & TV Pre-Production Project	6CTA1012				c	15	0	100	-	A	4	5
Film & TV Media Industries: Professional Development 3	6MMF0053				c	15	0	100	-	A	4	5

The award of an Honours degree requires 360 credit points passed with 240 at levels 5 and 6 including at least 120 at level 6. Additionally, students must satisfactorily complete the Individual Major Project.

University of Hertfordshire

Transitional Arrangements

Changes to the structure will be phased in level-by-level each year. Thus existing full-time students who are embarking on levels five or six of their programme of study in September 2013, and who are not required to repeat modules will be unaffected by the new structure. Existing students who could be affected are those who;

• fail or have failed modules which become unavailable for re-take due to programme structure changes

• are part-time students who have not yet taken modules which become unavailable due to changes in programme structure.

Transitional arrangements for the above two groups can be detailed on a year-by-year basis as follows:

2013 – 2014

Module not longer running		Replacement Module	
Software Application Practice	4ELE0067 (Sem A)	Software Application	4ENT1081 (Sem A)
Computer Organisation	4ENT1076 (Sem A)	Smart Technology 1	4ENT1082 (Sem A)
Smart Technology	4ENT1072 (Sem B)	Smart Technology 1	4ENT1082 (Sem A)
Software Systems	4ENT1078 (Sem B)	Smart Technology 2	4ENT1086 (Sem B)

2014 – 2015

Module not longer running		Replacement Module	
Networking & Webcasting	5ELE0067 (Sem AB)	Webcasting Networking	5ENT1045 5ENT1047 (both Sem B)
Interactive Software Design	5ELE0068 (Sem AB)	Interactive Software Design Content & Asset Management	5ENT1046 (Sem B) 5ENT1043 (Sem A)
Hardware Platforms & Interface Technology	5ELE0070 (Sem A)	Data Driven Web Applications	5ENT1044 (Sem A)
Web Services	5ELE0071 (Sem A)	Data Driven Web Applications	5ENT1044 (Sem A)

Students who fail a Miniproject module may either be asked to repeat the project elements they failed.

2015 – 2016

Module not longer running		Replacement Module	
Operating Systems	6ELE0078 (semester A)	Smart Systems	6ENT1030 (semester A)
Biometrics & Security	6ELE0077 (semester B)	Data Security & Biometrics	6ENT1031 (semester B)
Film & TV Production Systems	6ELE0086 (semester AB)	Digital Media Distribution & Delivery	6ENT1033 (semester AB)
Content Retrieval, Management & Governance	6ELE0082 (semester AB)	Multimedia Systems	6ENT1034 (semester AB)

Students taking a year of Industrial Placement in 2014-15 will return to a new final-year whilst those going on placement in earlier years should not be affected as a result of the proposed changes.

All Students on Film & TV Production award title:

2013 – 2014
• No students were admitted onto this award route at level-4 in September 2012.
• Students currently at level-5 will progress to level-6 in September 2013 of the existing programme.
• Students retaking level-5 modules will be offered modules from the existing provision.

2014 – 2015
• Students either retaking level-6 modules or returning from an industrial placement will be offered modules from the existing provision

Honours 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:

Award	Minimum requirements	Available at end of Level
University Certificate	45 credit points at level 4	4
Certificate of Higher Education	120 credit points at level 4	4, 5
University Diploma	180 credit points including at least 60 at level 5	5, 6
Diploma of Higher Education in Digital Technology	240 credit points including at least 120 at level 5	5, 6
BSc in the named award	300 credit points including 180 at level 6/5 of which 60 must be at level 6 excluding the final year individual project.	6
BSc in the named award (Sandwich)	300 credit points including 180 at level 6/5 of which 60 must be at level 6 excluding the final year individual project. Additionally, students must satisfactorily complete the Placement Year.	6
BSc in the named award with Year Abroad	300 credit points including 180 at level 6/5 of which 60 must be at level 6 excluding the final year individual project. Additionally, students must satisfactorily complete the Year Abroad.	6
BSc (Hons) in the named award	360 credit points including 240 at level 6/5 of which 120 must be at level 6	6
BSc (Hons) in the named award (Sandwich)	360 credit points including 240 at level 6/5 of which 120 must be at level 6. Additionally, students must satisfactorily complete the Placement Year.	6
BSc (Hons) in the named award with Year Abroad	360 credit points including 240 at level 6/5 of which 120 must be at level 6. Additionally, students must satisfactorily complete the Year Abroad.	6

University of Hertfordshire
UH

E. Support for students and their learning

Students are supported by;

- an induction week at the beginning of each new academic session;
- an extensive Learning Resources Centre, incorporating a library and computer centre;
- guided student-centred learning through the use of StudyNet;
- a student handbook that is specific to the programme;
- a Programme Tutor who can advice on programme issues;
- a Programme Administrator and admin assistants in the school office;
- Deputy Programme Tutors who provide personal tutoring support;
- Module teaching teams who provide academic support;
- Computer and technical laboratories facilities and technical support staff;
- a project supervisor;
- student representatives on the programme committee;
- the Mathematics Drop-in Centre;
- the Careers and Placement Service that support students looking for either graduate employment or a industrial placement.
- a visiting tutor for students on placement;
- a substantial Student Centre that provides advice on issues such as finance, University regulations, legal matters etc;
- the Medical Centre;
- the Accommodation Office;
- the International Students Centre who organise an Overseas Student Orientation induction programme;
- printing, photocopying, laminating and document binding facilities;
- Nightline – a confidential student listening and information service in the evening when other services are not available;
- a confidential counselling service;
- University Disability Advisors;
- an Equal Opportunities Officer;
- the Students' Union.

.

F. Entry requirements

The normal entry requirements for the programme are:

- 260 UCAS points plus GCSE Maths, and English Language and Science grade C or above.

The UCAS points will typically come from:

- Any 3 A-levels excluding General Studies and Critical Thinking.

Applications are also welcomed from those holding other qualifications including equivalent BTEC National Diploma, Scottish Higher or Irish Higher Certificates, International Baccalaureate, and appropriate equivalent international qualifications.

Applicants from Overseas

In addition to the requirements stated above, students entering the programme and whose first language is not English will be required to demonstrate a proficiency in English to TOEFL 550/IELTS 6.0 or an equivalent recognised qualification.

Direct Entry at Second and Final Year level

In accordance with University Admissions Policy to allow flexible entry at different levels, it may be possible for applicants to enter the programme at second and final year level. In all instances, candidates will be required to discuss their individual circumstances with the Admission Tutor.

University of Hertfordshire

- An exception is made for the Film and TV Production award title where direct entry at any level will not be permitted due to the nature of this award.

The programme is subject to the University's Principles, Policies, Regulations and Procedures for the Admission of Students to Undergraduate and Taught Postgraduate Programmes and will take account of University policy and guidelines for assessing accredited prior certificated learning (APCL) and accredited prior experiential learning (APEL)

University of
Hertfordshire

Section 2

Programme management

Relevant QAA subject benchmarking statements   Engineering & Computing, Film and Cultural Studies
Date of validation/last periodic review   January 13
Date of production/ last revision of PS   January 13
Relevant intakes   All students from September 13
Administrative School   School of Engineering and Technology

Course details		
Course code	Course description	JACS
EIT	BSc Honours in Digital Technology	H600, I150 & W612, H640

Course Instances

Instances code	Intake	Stream	Instances Year	Location:	Mode of study
CTN1S	A	Computer and Network Technology	1	Hatfield	Full-time/sandwich
CTN2S	A	Computer and Network Technology	2	Hatfield	Full-time/sandwich
CTN3F	A	Computer and Network Technology	3	Hatfield	Full-time
CTN3S	A	Computer and Network Technology	3	Hatfield	Sandwich
CTN4S	A	Computer and Network Technology	4	Hatfield	Sandwich
CTN1P	A	Computer and Network Technology	1	Hatfield	Part-time
CTN2P	A	Computer and Network Technology	1	Hatfield	Part-time
CTN3P	A	Computer and Network Technology	2	Hatfield	Part-time
CTN4P	A	Computer and Network Technology	2	Hatfield	Part-time
CTN5P	A	Computer and Network Technology	3	Hatfield	Part-time
CTN6P	A	Computer and Network Technology	3	Hatfield	Part-time
MSS1S	A	Mobile and Smart Systems	1	Hatfield	Full-time/sandwich
MSS2S	A	Mobile and Smart Systems	2	Hatfield	Full-time/sandwich
MSS3F	A	Mobile and Smart Systems	3	Hatfield	Full-time
MSS3S	A	Mobile and Smart Systems	3	Hatfield	Sandwich
MSS4S	A	Mobile and Smart Systems	4	Hatfield	Sandwich
MSS1P	A	Mobile and Smart Systems	1	Hatfield	Part-time
MSS2P	A	Mobile and Smart Systems	1	Hatfield	Part-time
MSS3P	A	Mobile and Smart Systems	2	Hatfield	Part-time
MSS4P	A	Mobile and Smart Systems	2	Hatfield	Part-time
MSS5P	A	Mobile and Smart Systems	3	Hatfield	Part-time
MSS6P	A	Mobile and Smart Systems	3	Hatfield	Part-time
BMT1S	A	Broadcast Media Technology	1	Hatfield	Full-time/sandwich
BMT2S	A	Broadcast Media Technology	2	Hatfield	Full-time/sandwich

University of Hertfordshire

BMT3F	A	Broadcast Media Technology	3	Hatfield	Full-time
BMT3S	A	Broadcast Media Technology	3	Hatfield	Sandwich
BMT4S	A	Broadcast Media Technology	4	Hatfield	Sandwich
BMT1P	A	Broadcast Media Technology	1	Hatfield	Part-time
BMT2P	A	Broadcast Media Technology	1	Hatfield	Part-time
BMT3P	A	Broadcast Media Technology	2	Hatfield	Part-time
BMT4P	A	Broadcast Media Technology	2	Hatfield	Part-time
BMT5P	A	Broadcast Media Technology	3	Hatfield	Part-time
BMT6P	A	Broadcast Media Technology	3	Hatfield	Part-time
MST1S	A	Multimedia Systems Technology	1	Hatfield	Full-time/sandwich
MST2S	A	Multimedia Systems Technology	2	Hatfield	Full-time/sandwich
MST3F	A	Multimedia Systems Technology	3	Hatfield	Full-time
MST3S	A	Multimedia Systems Technology	3	Hatfield	Sandwich
MST4S	A	Multimedia Systems Technology	4	Hatfield	Sandwich
MST1P	A	Multimedia Systems Technology	1	Hatfield	Part-time
MST2P	A	Multimedia Systems Technology	1	Hatfield	Part-time
MST3P	A	Multimedia Systems Technology	2	Hatfield	Part-time
MST4P	A	Multimedia Systems Technology	2	Hatfield	Part-time
MST5P	A	Multimedia Systems Technology	3	Hatfield	Part-time
MST6P	A	Multimedia Systems Technology	3	Hatfield	Part-time
MMT2S	A	Multimedia Technology	2	Hatfield	Full-time/sandwich
MMT3F	A	Multimedia Technology	3	Hatfield	Full-time
MMT3S	A	Multimedia Technology	3	Hatfield	Sandwich
MMT4S	A	Multimedia Technology	4	Hatfield	Sandwich
DFTV2S	A	Digital Film and TV Technology	2	Hatfield	Full-time/sandwich
DFTV3F	A	Digital Film and TV Technology	3	Hatfield	Full-time
DFTV3S	A	Digital Film and TV Technology	3	Hatfield	Sandwich
DFTV4S	A	Digital Film and TV Technology	4	Hatfield	Sandwich
FTPR2S	A	Film and Television Production	2	Hatfield	Full-time/sandwich
FTPR3F	A	Film and Television Production	3	Hatfield	Full-time
FTPR3S	A	Film and Television Production	3	Hatfield	Sandwich
FTPR4S	A	Film and Television Production	4	Hatfield	Sandwich

The programme is managed by;

- Dean of School;
- Associate Dean of School (AQA) who has overall responsibility for quality assurance;
- Associate Dean of School (L&T) who has overall responsibility for Learning & Teaching;
- the Programme Tutor who is responsible for chairing the programme committee and advising students on the programme as a whole;
- the Programme Administrator responsible for the administration associated with the programme;
- Deputy Programme Tutors who are responsible for the day to day management;

- the Award Liaison Tutor, from the School of Creative Arts, to support students studying Film and TV Production only;
- an Admissions Tutor, with specific responsibility for selection;
- a programme committee that includes the above plus student representation and the Link tutor for combined studies (NB Combined studies study some of the modules);
- module leaders who are responsible for individual modules.

Programme-specific assessment regulations

The programme is compliant with the University's generic assessment regulations (Structure and Assessment Regulations for Academic Programmes, UPR AS14) with the exception of those listed below, which have been specifically approved by the University:

In order to satisfy the requirements of the accrediting body:

- The classification algorithm used from September 2014 will be based on the average of the best 120 credit points at level 6 (weighted by 75%) and the best 120 credit points at level 5 (weighted by 25%). This will apply to all students enrolling on level 4 from September 2012 and taking the full time route and any students joining this cohort or subsequent cohorts due to taking the sandwich year, year abroad, repeating a year or joining these cohorts as a direct entry student at level 5. Direct entry students at level 6 from September 2014 onwards will have their degree classification based on the best 120 credits points at level 6 only.
- A compensated pass cannot be awarded for the Final Year Individual Project (6ENT1012).
- The Final Year Individual Project (6ENT1012) must also be included in the calculation of an honours degree classification.

Course Code	Course Instance	Award Title	Modules	Must be included in Award degree algorithm
EIT	CTN3F, CTN4S, CTN6P	BSc (Hons) Computer Technology & Networks	6ENT1012	*Yes*
EIT	MSS3F, MSS4S, MSS6P	BSc (Hons) Media Smart Systems	6ENT1012	*Yes*
EIT	BMT3F, BMT4S, BMT6P	BSc (Hons) Broadcast Media Technology	6ENT1012	*Yes*
EIT	MST3F, MST4S, MST6P	BSc (Hons) Multimedia Systems Technology	6ENT1012	*Yes*
EIT	MMT3F, MMT4S, MMT6P	BSc (Hons) Multimedia Technology	6ENT1012	*Yes*
EIT	DFTV3F, DFTV4S, DFTV6P	BSc (Hons) Digital Film and TV Technology	6ENT1012	*Yes*
EIT	FTPR3F, FTPR4S, FTPR6P	BSc (Hons) Film and TV Production	6ENT1012	*Yes*

Further points of clarification and interpretation relevant to this specific programme are given below:

In order to satisfy the requirements of the accrediting body:

- the Final Year Individual Project (6ENT1012) must be passed at the first attempt to gain an accredited award.

Other sources of information

- Definitive Module Documents
- Module Guides
- Student Handbook
- A-Z guide
  http://www.studynet1.herts.ac.uk/ptl/common/support.nsf/support?ReadForm
- University of Hertfordshire Course website:
  http://www.herts.ac.uk/courses/
- QAA Benchmark Statement website:
  http://www.qaa.ac.uk/AssuringStandardsAndQuality/subject-guidance/Pages/Subject-benchmark-statements.aspx
- The Framework for Higher Education Qualifications in England, Wales and Northern Ireland, 2008:
  http://www.qaa.ac.uk/AssuringStandardsAndQuality/Qualifications/Pages/default.aspx
- SEEC Credit Level Descriptors for Further and Higher Education 2010:
  http://www.seec.org.uk/sites/seec.org.uk/files/SEEC%20Level%20Descriptors%202010.pdf
- External Quality Review report website:
  http://www.qaa.ac.uk/reviews/reports/instReports.asp?ukprn=10007147
  Professional or Statutory Regulatory Body information:
  http://www.theiet.org/
- UNISTATS website:
  http://www.unistats.com/
- University of Hertfordshire Academic Quality website:
  (StudyNet → Staff → Department Lists → Academic Quality Office)
- Structure & Assessment Regulations - Undergraduate & Taught Postgraduate Programmes, UPR AS14:
  http://sitem.herts.ac.uk/secreg/upr/AS14.htm
- Learning and Teaching Policy and Graduate Attributes, UPR TL03:
  http://sitem.herts.ac.uk/secreg/upr/TL03.htm
- Admissions - Undergraduate & Taught Postgraduate Students, UPR SA03:
  http://sitem.herts.ac.uk/secreg/upr/SA03.htm
- Academic Quality, UPR AS17:
  http://sitem.herts.ac.uk/secreg/upr/AS17.htm
  Index of UPRs for students:
  http://sitem.herts.ac.uk/secreg/upr_azlist_info.htm

Other information relevant to the programme

None

University policies relevant to the Programme

The University undertakes to use all reasonable endeavours to deliver, assess and administer this programme in accordance with this Programme Specification. At the same time it is recognised that it is in the nature of academic developments that changes, for example to the structure, curriculum, and assessment of a programme may be necessary in order to ensure that the programme remains up to date, in response to issues raised as a result of on-going monitoring and evaluation, and/or in order to conform to new regulatory requirements imposed by this institution, by professional or statutory bodies, or by national or governmental bodies.

The programme operates within the guidelines and policies relating to equal opportunities and environmental issues which may be agreed from time to time by the Board of Governors and/or the Academic Board of the University.

Where the programme is offered in collaboration with another institution these policies and guidelines will normally be those of the partner institution.

University of Hertfordshire

The programme operates in accordance with the University's Regulations Governing Studies Involving the Use of Human Subjects (UPR RE01) agreed from time to time by the Academic Board of the University. However, where the programme is offered in collaboration with another institution (for example through a franchise arrangement for all or part of the programme) then specific approval must be obtained from the University for the operation of the programme within ethical guidelines prepared by the partner institution. The partner institution will be responsible for all insurance liability in connection with the observance of ethical guidelines.

Signed ……………………………………………………....   Date…………………..

Choose an item.

Associate Director Academic Quality Assurance/Deputy Director Academic Quality Assurance

If you would like this information in an alternative format please contact the School's Administration Manager.

University of Hertfordshire UH

Table 5a: Development of 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.

Module Title	Module Code	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	C1	C2	C3	C4	C5	C6	C7	D1	D2	D3	D4	D5	D6
E-Culture	4ELE0069				x	x											x		x				x	
Interactive Programming	4ENT1071	x	x	x			x						x	x	x									x
Smart Technology 1	4ENT1082			x											x									
Sound & Psychoacoustics	4ELE0054	x	x										x	x										
Media Regulatory Framework	4ENT1088				x	x											x		x				x	
Smart Technology 2	4ENT1086			x				x			x		x	x		x							x	
Software Applications	4ENT1081													x					x	x				
Vision & Image Perception	4ENT1084	x	x										x	x										
Career Skills Development	4AAD0028				x														x	x	x	x	x	x
Interactive Software Design	5ELE0068			x			x					x							x					x
Markup Languages and Metadata	5ELE0084	x							x		x			x		x				x		x		
E-Enterprise and Entrepreneurship	5ELE0086				x	x												x	x		x	x		
Webcasting	5ENT1045	x					x			x	x					x								
Networking	5ENT1047	x						x	x	x				x							x		x	
Data-Driven Web Applications	5ENT1044						x				x													
Mini Project CTN	5ELE0072			x			x			x	x	x		x				x	x		x			x
Career Planning	5AAD0032			x															x				x	
Industrial Placement (Placement Year)	6AAD0015				x	x	x				x				x				x				x	
Year Abroad	6ENT0001				x	x	x				x				x				x				x	
Visualisation & Animation Technology	6ELE0076			x						x	x			x									x	
Smart Systems	6ENT1030			x					x		x					x					x			x
Data Security and Biometrics	6ENT1031	x		x			x					x	x			x	x	x						x
Distributed Systems & Network Managem't	6ELE0079			x	x		x			x	x	x		x		x							x	
Final Year Individual Project	6ENT1012						x	x	x		x					x	x	x	x	x	x		x	x
Careers Portfolio	6ENT1021				x														x		x		x	

Level 4 (E-Culture through Career Skills Development)
Level 5 (Interactive Software Design through Career Planning)
Level 6 (Visualisation & Animation Technology through Careers Portfolio)

Key to Programme Learning Outcomes

Knowledge and Understanding:

A1. Analytical concepts and algorithmic procedures relevant to Computer Technology & Networks .

A2. The fundamental science appropriate to Computer Technology & Networks.

A3. The technology underpinning current systems used in Computer Technology & Networks.

A4. The professional and ethical responsibilities of those working in a technical and business environment.

A5. The impact of technological solutions on society in a global context.

Practical Skills:

C1. Apply appropriate analytical and modelling techniques to technology-based problems.

C2. Perform experimental laboratory work and draw appropriate conclusions.

C3. Use appropriate software tools.

C4. Prepare technical documentation.

C5. Evaluate the technical performance of appropriate systems, components or processes.

C6. Recognise risks or safety aspects pertinent to the operation of technology-based systems.

C7. Plan and manage a project, taking into account commercial and industrial constraints.

Intellectual Skills:

B1. Analyse and solve engineering / computing problems using appropriate techniques.

B2. Model and analyse relevant digital systems and sub-systems appropriate to
 Computer Technology & Networks.

B3. Select commercial software packages for specific applications.

B4. Specify and appraise systems, components or processes appropriate to Computer Technology & Networks.

B5. Evaluate the effectiveness of appropriate technical systems, both in terms of the needs of content creators and / or potential users.

Transferable Skills:

D1. Communicate effectively, both orally and in writing.

D2. Use commonly available IT tools and facilities effectively.

D3. Manage time and resources effectively.

D4. Work effectively within a team.

D5. Retrieve, manipulate and present information effectively.

D6. Solve problems in a logical manner.

BSc with Honours in Multimedia Systems Technology

Table 5b: Development of 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 earning, personal and professional development as the programme progresses.

Module Title	Module Code	Knowledge & Understanding					Intellectual Skills					Practical Skills							Transferable Skills					
		A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	C1	C2	C3	C4	C5	C6	C7	D1	D2	D3	D4	D5	D6
E-Culture	4ELE0069				x	x											x		x				x	
Interactive Programming	4ENT1071	x	x	x			x						x	x	x									x
Smart Technology 1	4ENT1082			x											x									
Sound & Psychoacoustics	4ELE0054	x	x										x	x										
Media Regulatory Framework	4ENT1088				x	x										x			x				x	
Smart Technology 2	4ENT1086			x				x			x		x	x		x						x		
Software Applications	4ENT1081													x					x	x				
Vision & Image Perception	4ENT1084	x	x										x	x										
Career Skills Development	4AAD0028				x														x	x	x	x	x	x
Interactive Software Design	5ELE0068			x			x					x							x					x
Markup Languages and Metadata	5ELE0084	x							x		x			x		x				x		x		
E-Enterprise and Entrepreneurship	5ELE0086				x	x												x	x			x	x	
Webcasting	5ENT1045	x					x			x	x					x								
Networking	5ENT1047	x						x	x	x				x						x			x	
Audio and Video studio practice	5ELE0085	x		x					x	x	x			x		x				x	x	x		
Content & Asset Management	5ENT1043			x												x								
Mini Project MST	5ENT1050						x			x	x		x		x			x	x		x			x
Career Planning	5AAD0032				x														x				x	
Industrial Placement (Placement Year)	6AAD0015				x	x	x				x				x				x				x	
Year Abroad	6ENT0001				x	x	x				x				x				x				x	
Visualisation & Animation Technology	6ELE0076			x						x	x			x									x	
Smart Systems	6ENT1030			x					x		x				x					x				x
Data Security and Biometrics	6ENT1031	x		x			x					x	x		x	x	x							x
Multimedia Systems	6ENT1034			x	x		x			x	x	x		x		x								
Final Year Individual Project	6ENT1012				x	x	x	x	x		x				x		x	x	x	x	x		x	x
Careers Portfolio	6ENT1021			x															x		x		x	

Key to Programme Learning Outcomes

Knowledge and Understanding:

A1. Analytical concepts and algorithmic procedures relevant to Multimedia Systems Technology.

A2. The fundamental science appropriate to Multimedia Systems Technology.

A3. The technology underpinning current systems used in Multimedia Systems Technology.

A4. The professional and ethical responsibilities of those working in a technical and business environment.

A5. The impact of technological solutions on society in a global context.

Practical Skills:

C1. Apply appropriate analytical and modelling techniques to technology-based problems.

C2. Perform experimental laboratory work and draw appropriate conclusions.

C3. Use appropriate software tools.

C4. Prepare technical documentation.

C5. Evaluate the technical performance of appropriate systems, components or processes.

C6. Recognise risks or safety aspects pertinent to the operation of technology-based systems.

C7. Plan and manage a project, taking into account commercial and industrial constraints.

Intellectual Skills:

B1. Analyse and solve engineering / computing problems using appropriate techniques.

B2. Model and analyse relevant digital systems and sub-systems appropriate to Multimedia Systems Technology.

B3. Select commercial software packages for specific applications.

B4. Specify and appraise systems, components or processes appropriate to Multimedia Systems Technology.

B5. Evaluate the effectiveness of appropriate technical systems, both in terms of the needs of content creators and / or potential users.

Transferable Skills:

D1. Communicate effectively, both orally and in writing.

D2. Use commonly available IT tools and facilities effectively.

D3. Manage time and resources effectively.

D4. Work effectively within a team.

D5. Retrieve, manipulate and present information effectively.

D6. Solve problems in a logical manner.

Table 5c: Development of 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.

	Module Title	Module Code	Knowledge & Understanding					Intellectual Skills					Practical Skills							Transferable Skills					
			A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	C1	C2	C3	C4	C5	C6	C7	D1	D2	D3	D4	D5	D6
Level 4	E-Culture	4ELE0069				x	x											x		x				x	
	Interactive Programming	4ENT1071	x	x	x			x						x	x	x									x
	Smart Technology 1	4ENT1082			x											x									
	Sound & Psychoacoustics	4ELE0054	x	x										x	x										
	Media Regulatory Framework	4ENT1088				x	x											x		x				x	
	Smart Technology 2	4ENT1086		x					x			x		x	x		x						x		
	Software Applications	4ENT1081													x					x	x				
	Vision & Image Perception	4ENT1084	x	x										x	x										
	Career Skills Development	4AAD0028				x														x	x	x	x	x	x
Level 5	Interactive Software Design	5ELE0068		x				x					x							x					x
	Markup Languages and Metadata	5ELE0084	x							x		x			x		x				x		x		
	E-Enterprise and Entrepreneurship	5ELE0086				x	x												x	x		x	x		
	Webcasting	5ENT1045	x					x			x	x					x								
	Networking	5ENT1047	x						x	x	x				x						x			x	
	Audio and Video studio practice	5ELE0085	x		x					x	x	x			x		x				x	x	x		
	Content & Asset Management	5ENT1043			x												x								
	Mini Project BMT	5ENT1051						x			x	x	x		x			x	x	x		x			x
	Career Planning	5AAD0032				x														x				x	
	Industrial Placement (Placement Year)	6AAD0015				x	x	x				x				x				x				x	
	Year Abroad	6ENT0001				x	x	x				x				x				x				x	
Level 6	Visualisation & Animation Technology	6ELE0076			x						x	x			x									x	
	Smart Systems	6ENT1030			x					x		x					x					x			x
	Data Security and Biometrics	6ENT1031	x		x			x					x	x			x	x	x						x
	Digital Media Distribution & Delivery	6ENT1033			x			x			x	x	x	x	x		x								
	Final Year Individual Project	6ENT1012				x	x	x	x	x		x				x		x	x	x	x	x		x	x
	Careers Portfolio	6ENT1021				x														x		x		x	

Key to Programme Learning Outcomes

Knowledge and Understanding:

A1. Analytical concepts and algorithmic procedures relevant to Broadcast Media Technology.

A2. The fundamental science appropriate to Broadcast Media Technology.

A3. The technology underpinning current systems used in Broadcast Media Technology.

A4. The professional and ethical responsibilities of those working in a technical and business environment.

A5. The impact of technological solutions on society in a global context.

Practical Skills:

C1. Apply appropriate analytical and modelling techniques to technology-based problems.

C2. Perform experimental laboratory work and draw appropriate conclusions.

C3. Use appropriate software tools.

C4. Prepare technical documentation.

C5. Evaluate the technical performance of appropriate systems, components or processes.

C6. Recognise risks or safety aspects pertinent to the operation of technology-based systems.

C7. Plan and manage a project, taking into account commercial and industrial constraints.

Intellectual Skills:

B1. Analyse and solve engineering / computing problems using appropriate techniques.

B2. Model and analyse relevant digital systems and sub-systems appropriate to Broadcast Media Technology.

B3. Select commercial software packages for specific applications.

B4. Specify and appraise systems, components or processes appropriate to Broadcast Media Technology.

B5. Evaluate the effectiveness of appropriate technical systems, both in terms of the needs of content creators and / or potential users.

Transferable Skills:

D1. Communicate effectively, both orally and in writing.

D2. Use commonly available IT tools and facilities effectively.

D3. Manage time and resources effectively.

D4. Work effectively within a team.

D5. Retrieve, manipulate and present information effectively.

D6. Solve problems in a logical manner.

BSc with Honours in Mobile & Smart Systems
Table 5d: Development of 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.

Level	Module Title	Module Code	Knowledge & Understanding					Intellectual Skills					Practical Skills							Transferable Skills					
			A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	C1	C2	C3	C4	C5	C6	C7	D1	D2	D3	D4	D5	D6
Level 4	E-Culture	4ELE0069				x	x											x		x				x	
	Interactive Programming	4ENT1071	x	x	x			x						x	x	x									x
	Smart Technology 1	4ENT1082			x											x									
	Sound & Psychoacoustics	4ELE0054	x	x										x	x										
	Media Regulatory Framework	4ENT1088				x	x											x		x				x	
	Smart Technology 2	4ENT1086			x				x			x		x	x		x							x	
	Software Applications	4ENT1081													x					x	x				
	Vision & Image Perception	4ENT1084	x	x										x	x										
	Career Skills Development	4AAD0028				x														x	x	x	x	x	x
Level 5	Interactive Software Design	5ELE0068		x				x					x							x					x
	Markup Languages and Metadata	5ELE0084	x							x		x			x		x				x		x		
	E-Enterprise and Entrepreneurship	5ELE0086				x	x												x	x		x	x		
	Webcasting	5ENT1045	x					x			x	x					x								
	Networking	5ENT1047	x						x	x	x				x						x			x	
	Data-Driven Web Applications	5ENT1044						x				x													
	Mini Project MSS	5ENT1048		x				x			x	x		x		x			x	x		x			x
	Career Planning	5AAD0032			x															x				x	
Level 6	Industrial Placement (Placement Year)	6AAD0015			x	x		x				x				x				x				x	
	Year Abroad	6ENT0001			x	x		x				x				x				x				x	
Level 6	Visualisation & Animation Technology	6ELE0076		x							x	x			x									x	
	Smart Systems	6ENT1030		x						x		x					x				x				x
	Data Security and Biometrics	6ENT1031	x		x			x					x	x			x	x	x						x
	Smart Device Convergence & Application	6ENT1032		x	x			x		x	x		x				x								
	Final Year Individual Project	6ENT1012			x	x	x	x	x	x		x				x		x	x	x	x	x		x	x
	Careers Portfolio	6ENT1021			x															x		x		x	

Key to Programme Learning Outcomes

Knowledge and Understanding:

A1. Analytical concepts and algorithmic procedures relevant to Mobile & Smart Systems.

A2. The fundamental science appropriate to Mobile & Smart Systems.

A3. The technology underpinning current systems used in Mobile & Smart Systems.

A4. The professional and ethical responsibilities of those working in a technical and business environment.

A5. The impact of technological solutions on society in a global context.

Practical Skills:

C1. Apply appropriate analytical and modelling techniques to technology-based problems.

C2. Perform experimental laboratory work and draw appropriate conclusions.

C3. Use appropriate software tools.

C4. Prepare technical documentation.

C5. Evaluate the technical performance of appropriate systems, components or processes.

C6. Recognise risks or safety aspects pertinent to the operation of technology-based systems.

C7. Plan and manage a project, taking into account commercial and industrial constraints.

Intellectual Skills:

B1. Analyse and solve engineering / computing problems using appropriate techniques.

B2. Model and analyse relevant digital systems and sub-systems appropriate to Mobile & Smart Systems .

B3. Select commercial software packages for specific applications.

B4. Specify and appraise systems, components or processes appropriate to Mobile & Smart Systems.

B5. Evaluate the effectiveness of appropriate technical systems, both in terms of the needs of content creators and / or potential users.

Transferable Skills:

D1. Communicate effectively, both orally and in writing.

D2. Use commonly available IT tools and facilities effectively.

D3. Manage time and resources effectively.

D4. Work effectively within a team.

D5. Retrieve, manipulate and present information effectively.

D6. Solve problems in a logical manner.

BSc with Honours in Computer Technology & Networks (pre-2013 registration)

Table 5e: Development of 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.

Module Title	Module Code	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	C1	C2	C3	C4	C5	C6	C7	D1	D2	D3	D4	D5	D6
		Knowledge & Understanding					Intellectual Skills					Practical Skills							Transferable Skills					
Level 4																								
E-Culture	4ELE0069				x	x												x	x			x		
Interactive Programming	4ENT1071	x	x	x			x						x	x	x									x
Computer Organisation	4ENT1076			x											x									
Smart Technology	4ENT1072			x											x									
Software Systems	4ENT1078			x				x			x		x	x		x							x	
Sound & Psychoacoustics	4ELE0054		x									x	x											
Multimedia Regulatory Framework	4ELE0068				x	x													x					
Software Application Practice	4ELE0067									x	x	x	x	x	x					x		x		
Career Skills Development	4AAD0028				x														x	x	x	x	x	x
Level 5																								
Networking & Webcasting	5ELE0067	x						x	x	x				x						x			x	
Interactive Software Design	5ELE0068			x			x					x							x					x
Markup Languages and Metadata	5ELE0084	x							x		x			x		x						x		
E-Enterprise and Entrepreneurship	5ELE0086				x	x												x	x			x	x	
Hardware Platforms & Interface Technology	5ELE0070	x					x			x	x					x								
Mini Projects CTN	5ELE0072						x			x	x		x		x			x	x		x	x		x
Career Planning	5AAD0032				x														x				x	
Level 6																								
Placement Year	6AAD0015				x	x	x				x				x				x				x	
Year Abroad	6ENT0001				x	x	x				x				x				x				x	
Visualisation & Animation Technology	6ELE0076			x							x			x										
Operating Systems	6ELE0078			x					x		x				x						x			x
Biometrics & Security	6ELE0077	x		x											x	x								x
Distributed Systems & Network Management	6ELE0079			x	x					x	x	x			x								x	
Final Year Individual Project	6ENT1012				x	x	x	x	x		x				x		x	x	x	x	x		x	x
Careers Portfolio	6ENT1021			x															x		x		x	

Key to Programme Learning Outcomes

Knowledge and Understanding:

A1. Analytical concepts and algorithmic procedures relevant to computer technology and networks (A1 (b) in section C);

A2. The fundamental science appropriate to computer technology and networks (A2 (b) in section C);

A3. The technology underpinning current computer and network systems (A3 (b) in section C);

A4. The professional and ethical responsibilities of those working in a technical and business environment;

A5. The impact of technological solutions on society in a global context.

Intellectual Skills:

B1. Analyse and solve engineering / computing problems using appropriate techniques;

B2. Model and analyse relevant computer and network systems and sub-systems (B2 (b) in section C);

B3. Select commercial software packages for specific applications;

B4. Specify and appraise appropriate digitally-based network systems, components or processes (B4 (b) in section C);

B5. Evaluate the effectiveness of appropriate technical systems, both in terms of the needs of content creators and / or potential users.

Practical Skills:

C1. Apply appropriate analytical and modelling techniques to technology-based problems;

C2. Perform experimental laboratory work and draw appropriate conclusions;

C3. Use appropriate software tools;

C4. Prepare technical documentation;

C5. Evaluate the technical performance of appropriate systems, components or processes;

C6. Recognise risks or safety aspects pertinent to the operation of technology-based systems;

C7. Plan and manage a project, taking into account commercial and industrial constraints.

Transferable Skills:

D1. Communicate effectively, both orally and in writing;

D2. Use commonly available IT tools and facilities effectively;

D3. Manage time and resources effectively;

D4. Work effectively within a team;

D5. Retrieve, manipulate and present information effectively;

D6. Solve problems in a logical manner.

BSc with Honours in Multimedia Technology

Table 5f: Development of 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.

Module Title	Module Code	Knowledge & Understanding					Intellectual Skills					Practical Skills							Transferable Skills					
		A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	C1	C2	C3	C4	C5	C6	C7	D1	D2	D3	D4	D5	D6
E-Culture	4ELE0069				x	x												x	x			x		
Interactive Programming	4ENT1071	x	x	x			x						x	x	x									x
Computer Organisation	4ENT1076			x											x									
Smart Technology	4ENT1072			x											x									
Software Systems	4ENT1078			x				x			x		x	x		x							x	
Sound & Psychoacoustics	4ELE0054		x									x	x											
Multimedia Regulatory Framework	4ELE0068				x	x													x					
Software Application Practice	4ELE0067									x	x	x	x	x	x					x		x		
Career Skills Development	4AAD0028				x														x	x	x	x	x	x
Networking & Webcasting	5ELE0067	x							x	x	x			x						x			x	
Interactive Software Design	5ELE0068			x			x					x							x					x
Markup Languages and Metadata	5ELE0084	x							x		x			x		x				x				x
E-Enterprise and Entrepreneurship	5ELE0086			x	x													x	x		x	x		
Web Services	5ELE0071	x					x			x	x					x								x
Mini Projects MMT	5ELE0075						x			x	x		x		x		x		x		x			
Career Planning	5AAD0032			x															x				x	
Placement Year	6AAD0015			x	x		x				x				x				x				x	
Year Abroad	6ENT0001			x	x		x				x				x				x				x	
Visualisation & Animation Technology	6ELE0076		x								x			x									x	
Operating Systems	6ELE0078		x						x		x					x				x				x
Biometrics & Security	6ELE0077	x	x												x	x								x
Content Retrieval, Management & Governance	6ELE0082		x	x						x	x	x				x							x	
Final Year Individual Project	6ENT1012			x	x	x	x	x	x		x					x	x	x	x	x	x		x	x
Careers Portfolio	6ENT1021			x															x		x		x	

Level 4 / Level 5 / Level 6

Key: Learning Outcome which is assessed as part of the module

Key to Programme Learning Outcomes

Knowledge and Understanding:

A1. Analytical concepts and algorithmic procedures relevant to multimedia technology (A1 (c) in section C);

A2. The fundamental science appropriate to multimedia technology (A2 (c) in section C);

A3. The technology underpinning current multimedia systems (A3 (c) in section C);

A4. The professional and ethical responsibilities of those working in a technical and business environment;

A5. The impact of technological solutions on society in a global context.

Intellectual Skills:

B1. Analyse and solve engineering / computing problems using appropriate techniques;

B2. Model and analyse relevant multimedia systems and sub-systems (B2 (c) in section C);

B3. Select commercial software packages for specific applications;

B4. Specify and appraise appropriate digitally-based multimedia systems, components or processes (B4 (c) in section C);

B5. Evaluate the effectiveness of appropriate technical systems, both in terms of the needs of content creators and / or potential users.

Practical Skills:

C1. Apply appropriate analytical and modelling techniques to technology-based problems;

C2. Perform experimental laboratory work and draw appropriate conclusions;

C3. Use appropriate software tools;

C4. Prepare technical documentation;

C5. Evaluate the technical performance of appropriate systems, components or processes;

C6. Recognise risks or safety aspects pertinent to the operation of technology-based systems;

C7. Plan and manage a project, taking into account commercial and industrial constraints.

Transferable Skills:

D1. Communicate effectively, both orally and in writing;

D2. Use commonly available IT tools and facilities effectively;

D3. Manage time and resources effectively;

D4. Work effectively within a team;

D5. Retrieve, manipulate and present information effectively;

D6. Solve problems in a logical manner.

![University of Hertfordshire UH]

BSC with Honours in Digital Film and TV Technology

Table 5g: Development of 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.

Module Title	Module Code	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	C1	C2	C3	C4	C5	C6	C7	D1	D2	D3	D4	D5	D6
		Knowledge & Understanding					Intellectual Skills					Practical Skills							Transferable Skills					
Level 4																								
E-Culture	4ELE0069				x	x												x	x			x		
Interactive Programming	4ENT1071	x	x	x			x						x	x	x									x
Computer Organisation	4ENT1076			x											x									
Smart Technology	4ENT1072			x											x									
Software Systems	4ENT1078			x				x			x		x	x		x							x	
Sound & Psychoacoustics	4ELE0054		x									x	x											
Multimedia Regulatory Framework	4ELE0068				x	x													x					
Software Application Practice	4ELE0067								x	x		x	x	x	x					x		x		
Career Skills Development	4AAD0028				x														x	x	x	x	x	x
Level 5																								
Networking & Webcasting	5ELE0067	x							x	x	x			x					x				x	
Interactive Software Design	5ELE0068			x			x					x							x					x
Markup Languages and Metadata	5ELE0084	x						x		x			x		x				x					
E-Enterprise and Entrepreneurship	5ELE0086				x	x											x	x		x	x			
Audio and Video studio practice	5ELE0085	x		x					x	x	x		x		x				x	x	x			
Mini Projects DFTV	5ELE0083						x			x	x		x		x			x	x					x
Career Planning	5AAD0032				x														x				x	
Placement Year	6AAD0015				x	x	x				x				x				x				x	
Year Abroad	6ENT0001				x	x	x				x				x				x				x	
Level 6																								
Visualisation & Animation Technology	6ELE0076			x							x			x								x		
Operating Systems	6ELE0078			x					x		x					x				x				x
Biometrics & Security	6ELE0077	x		x												x	x							x
Film & TV Production Systems	6ELE0086			x						x	x					x							x	
Final Year Individual Project	6ENT1012				x	x	x	x	x		x					x		x	x	x	x		x	x
Careers Portfolio	6ENT1021				x														x		x		x	

Key: Learning Outcome which is assessed as part of the module ⊠⊠

Key to Programme Learning Outcomes

Knowledge and Understanding:

A1. Analytical concepts and algorithmic procedures relevant to digital film and TV technology (A1 (e) in section C);

A2. The fundamental science appropriate to digital film and TV technology (A2 (e) in section C);

A3. The technology underpinning current digital film and TV systems (A3 (e) in section C);

A4. The professional and ethical responsibilities of those working in a technical and business environment;

A5. The impact of technological solutions on society in a global context.

Intellectual Skills:

B1. Analyse and solve engineering / computing problems using appropriate techniques;

B2. Model and analyse relevant digital film and TV systems and sub-systems (B2 (e) in section C);

B3. Select commercial software packages for specific applications;

B4. Specify and appraise appropriate digitally-based film and TV systems, components or processes (B4 (e) in section C);

B5. Evaluate the effectiveness of appropriate technical systems, both in terms of the needs of content creators and / or potential users.

Practical Skills:

C1. Apply appropriate analytical and modelling techniques to technology-based problems;

C2. Perform experimental laboratory work and draw appropriate conclusions;

C3. Use appropriate software tools;

C4. Prepare technical documentation;

C5. Evaluate the technical performance of appropriate systems, components or processes;

C6. Recognise risks or safety aspects pertinent to the operation of technology-based systems;

C7. Plan and manage a project, taking into account commercial and industrial constraints.

Transferable Skills:

D1. Communicate effectively, both orally and in writing;

D2. Use commonly available IT tools and facilities effectively;

D3. Manage time and resources effectively;

D4. Work effectively within a team;

D5. Retrieve, manipulate and present information effectively;

D6. Solve problems in a logical manner.

BSc with Honours Film and TV Production

Table 5h: Development of 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.

Module Title	Module Code	A1	A2	A3	A4	A5	A6	B1	B2	B3	B4	B5	B6	C1	C2	C3	C4	C5	C6	C7	C8	D1	D2	D3	D4	D5	D6
Computer Organisation & Digital Technology	4ELE0053	x	x	x					x						x							x	x		x		
Sound & Psychoacoustics	4ELE0054		x											x	x												
Entertainment Systems	4ELE0066			x							x							x							x	x	
Film & TV Post Prod - Non-Linear Editing	4MMF0016		x	x	x	x			x	x	x	x				x	x			x	x	x	x	x		x	x
Film & TV Prod - Camera, Sound & TV Studio	4MMF0017		x	x	x	x			x	x	x	x				x	x			x	x	x	x	x		x	x
Career Skills Development	4AAD0028			x																		x	x	x	x	x	x
Networking & Webcasting	5ELE0067	x							x	x	x				x								x			x	
Audio and Video Studio Practice	5ELE0085	x		x					x	x	x				x		x						x	x	x		
Mini Projects FTVP	5ENT1008							x			x	x			x		x		x			x		x			x
Film & TV Post Production - Sound & Vision	5MMF0030			x	x		x		x	x	x	x			x		x			x	x	x	x	x	x	x	x
Film & TV Media Industries - Prof Development	5MMF0033				x	x							x							x		x	x	x	x	x	
Film & TV Histories & Cultures	5CTA1012				x	x	x						x									x	x	x	x	x	
Career Planning	5AAD0032				x																	x			x		
Placement Year	6AAD0015				x	x		x				x					x					x				x	
Year Abroad	6ENT0001				x	x		x				x					x					x				x	
Film & TV Media Industries - Prof Development	6MMF0053				x	x							x							x		x	x	x	x	x	
Film & TV Pre-Production	6CTA1012			x	x	x	x			x			x			x	x	x		x	x	x	x	x	x	x	x
Group Project	6CTA1003			x	x	x	x		x	x	x	x				x	x	x		x	x	x	x	x	x	x	x
Film & TV Production Systems	6ELE0086		x								x	x						x							x		
Final Year Individual Project	6ENT1012				x	x	x	x	x	x		x					x		x	x	x	x	x	x		x	x
Careers Portfolio	6ENT1021				x																	x		x		x	

Programme Learning Outcomes (as identified in section 1 and the following page)

A1–A6: Knowledge & Understanding | B1–B6: Intellectual Skills | C1–C8: Practical Skills | D1–D6: Transferable Skills

Level 4: 4ELE0053 – 4AAD0028 | Level 5: 5ELE0067 – 5AAD0032 | Level 6: 6AAD0015 – 6ENT1021

Key: Learning Outcome which is assessed as part of the module ☒☒

Key to Programme Learning Outcomes

Knowledge and Understanding:

A1. Analytical concepts and algorithmic procedures relevant to film and TV production (A1 (h) in section C);

A2. The fundamental science appropriate to film and TV production (A2 (h) in section C);

A3. The technology underpinning current film and TV production systems (A3 (h) in section C);

A4. The professional and ethical responsibilities of those working in a technical and business environment;

A5. The impact of technological solutions on society in a global context.

A6 The creative processes of film and television production, and their relationship with the historical development of audiences, particular genres, aesthetic traditions and forms, including contemporary work at the forefront of the discipline and a range of emergent technologies

Practical Skills:

C1. Apply appropriate analytical and modelling techniques to technology-based problems;

C2. Perform experimental laboratory work and draw appropriate conclusions;

C3. Use appropriate software tools;

C4. Prepare technical documentation;

C5. Evaluate the technical performance of appropriate systems, components or processes;

C6. Recognise risks or safety aspects pertinent to the operation of technology-based systems;

C7. Plan and manage a project, taking into account commercial and industrial constraints;

C8. Demonstrate the effective use of film and television production processes informed by an understanding of media forms, audiences, conventions and specific communication registers.

Intellectual Skills:

B1. Analyse and solve engineering / computing problems using appropriate techniques;

B2. Model and analyse relevant film and TV production systems and sub-systems (B2 (h) in section C);

B3. Select commercial software packages for specific applications;

B4. Specify and appraise appropriate digitally-based film and TV production systems, components or processes (B4 (h) in section C);

B5. Evaluate the effectiveness of appropriate technical systems, both in terms of the needs of content creators and / or potential users;

B6. Consider and evaluate film and television production artefacts in a reflexive manner with reference to their audiences, genres, form and aesthetic traditions, conventions and current debates.

Transferable Skills:

D1. Communicate effectively, both orally and in writing;

D2. Use commonly available IT tools and facilities effectively;

D3. Manage time and resources effectively;

D4. Work effectively within a team;

D5. Retrieve, manipulate and present information effectively;

D6. Solve problems in a logical manner.