University of Bedfordshire

This Course Information Form provides the definitive record of the designated course

General Course Information

Course Title	Information Technology Information Technology (with Professional Practice Year)
Qualification	BSc (Hons)
FHEQ Level	6
Intermediate Qualification(s)	None
Awarding Institution	University of Bedfordshire
Location of Delivery	AA – University Square Campus
Mode(s) of Study and Duration	Full-time over 3 years Full-time with Professional Practice Year over 4 years Part-time pathway typically over 6 years
Professional, Statutory or Regulatory Body (PSRB) accreditation or endorsement	None
UCAS Course Code	G600
External Benchmarking	QAA Subject Benchmark Statement Computing. QAA FHEQ level descriptors.
Entry Month(s)	September and February

Why study this course

This course is aimed at providing practical and hands-on experience of developing IT systems. This will focus on many areas of technology and how they can be deployed to provide systems that can held support organisations achieve their overall business objectives. As such, you will learn how to interact with non-IT specialists to deliver IT solutions tat support a wide-range of business functions. Specifically, you will develop the knowledge and skills to draw out user requirements from non-IT experts and transform these into system level designs that can then be implemented. You will learn how to lead IT project, as well as the skills needed to perform effectively within a multi-faceted scheme.

Educational Aims

This course is highly vocational with an emphasis on providing students with practical experience in the development of information technology solutions for a wide range if operational systems.

You will develop the key skills to be able to elicit requirements from non-IT experts and transform these into blueprints for a new organisational IT system.

You will also develop an understanding of the different components that make up IT-systems (networking architecture, software, data storage and warehousing, information security requirements) and to use this knowledge to design robust and trustworthy system.

You will also learn how to develop systems that have, as the heart, an excellent user experience design through an understanding of human-computer interaction and the needs/requirements of modern-day IT systems.

Finally, you will develop the business skills needed to perform effectively within a multi-disciplinary team.

Course Structure

The Units which make up the course (including the Professional Practice Year as applicable) are:

Unit Code	Level	Credits	Unit Name	Core or option
CIS018-1	4	30	Fundamentals of Computer Studies	Core
CIS017-1	4	30	Computer Systems Structure	Core

CIS016-1	4	30	Principles of Programming	Core
CIS020-1	4	30	Introduction to Software Development	Core
NEW001-2	5	30	Human Computer Interaction	Core
NEW002-2	5	30	Information Technology Industries Project	Core
CIS051-2	5	30	Web Technologies	Core
CIS020-2	5	30	Systems Development and Modern Database Practices	Core
CIS097-2	-	0	Professional Practice Year (Computer Science and Technology)	Option
CIS013-3	6	30	Research Methodologies and Emerging Technologies	Core
NEW03-3	6	30	Advanced Information Technology	Core
CIS015-3	6	30	Social and Professional Project Management	Core
CIS017-3	6	30	Undergraduate Project	Core

Course-Specific Regulations

None

Entry requirements

University of Bedfordshire standard entry requirements apply.

Additional Course Costs

None

Graduate Impact Statements

The course has been designed to develop graduates who are able to:

- ▪ Understand the requirements of non-IT experts and transform them into system-level designs

- Apply skills and knowledge of the entire system architecture, including but not limited to, networking, hardware, data storage, security and software to develop systems that are secure-by-design and meet business needs

- Undertake a systems analysis role, combined with in-depth technical knowledge and play a leading role in deploying large-scale enterprise systems

Course Learning Outcomes

LO1: Utilise a range of software development tools to provide solutions to a range of IT system problemsU

LO2: Identify and evaluate the root causes of problems within an IT system and use your in-depth knowledge to provide robust IT solutions;

LO3: Explore, within a range of scenarios, the constraints to deploying a particular operation system within an organisational context;

LO4: Work effetively as part of a multi-disciplinary team to develop robust and secure IT solutions;

LO5: Communicate ideas and solutions to both technical and non-technical audiences;

LO6: Define a series of IT system requirements given uncertain or incomplete user requirements;

LO7: Explore the latest research and development activities available for IT systems developmentResearch and evaluate information from a number of sources;

In order to qualify for the award of BSc (Hons) Information Technology (with Professional Practice year) students will need to meet all of the outcomes above and:

LO8: Demonstrate knowledge and analytical understanding of professional practice by successfully completing an approved period of approved work place practice.

PSRB details

None

Learning and Teaching

The course structure across levels is implemented as follows:

The first year will cover the fundamentals of the broader subject area (Computer Science) by encompassing the topics of Programming, Modelling, Information Technology, Databases, Networking and Hardware. In addition the professional development of the students is fostered within Term 1 of the unit CIS018-1 Fundamentals of Computing.

The second year is comprised of four specialist units that deepen the knowledge, understanding and application of the first year. The main topics covered there are Systems Development and Databases, Web Technologies and Human Computer Interfaces. The unit "Information Technology Industries Project" gives you the opportunity to develop a portfolio of your work that improves your employability.

The final year – as with any honours degree – devotes 60 credits to the honours project as part of the two units CIS013-3 Research Methodologies and Emerging Technologies and CIS017-3 Undergraduate Project. While the undergraduate project relates to the student working as an individual the unit CIS015-3 Social and Professional Project Management addresses student interaction within a professional environment. You will work in a group and make decisions within professionally arranged project meetings.

In addition, the unit Advanced Information Technology provides a capstone to the subject focussed experience from the second year by critically investigating and questioning the role of Information Technology in current software applications.

Assessment

You are assessed in a variety of ways. The majority of units are assessed through coursework, group and individual projects, portfolios, essays, presentations or exams. You will also produce software artefacts in the area of your specialism. Constant feedback and advice from a supervisory or unit team will be provided to support you in your work.

At level 4 you are assessed on your understanding of the fundamental concepts of Computer Science and its application. You are required to comprehend the basic range of intellectual concepts which form the foundations of the subject and application area, and will be assessed on your ability to articulate such concepts in a coherent manner, in a variety of written assessments/written briefs. For example, there will be time constraint programming assignments as well as multiple choice tests.

At level 5 you are assessed on your ability to apply the basic concepts of the disciplines introduced in level 4 to existing controversies and issues on which there is already a body of research and critical opinion. You also should be able to demonstrate the inter-relationships between critical theory and practice. For example, the units 'Human Computer Interaction' and 'Web Technologies' will further your understanding of key aspects of IT systems.

At level 6 you will be required to demonstrate independent thinking and initiative. This may be in the form of analysing and criticising current approaches and theory within Information Technology in general and software use and development in particular. In all cases, you will be expected to show an awareness of the major theories and practices of the discipline. You will progress from well-defined briefs to more open-ended and challenging assessments, which culminate in the honours project – where you will be given freedom to choose your area of work within the constraints of the subject discipline.

Assessment Map – BSc (Hons) Information Technology

Unit Code	C/O	\<Semester 1\> 4	5	6	7	8	9	10	11	12	13	14	15	\<Semester 2\> 4	5	6	7	8	9	10	11	12	13	14	15
CIS018-1	C								CW-Port			Ex-CB													
CIS020-1	C			CW-ePort									WR-GR												
CIS016-1	C														Ex-CB							PJ-Art			
CIS017-1	C															PR-Lab						Ex-CB			
NEW001-2	C		PR-Oral										CW-ePort												
NEW002-2	C		PR-Oral										PJ-Art												
CIS051-2	C														PR-OT										PJ-Art
CIS020-2	C																					CW-ePort			PJ-Art
CIS097-2	O	Post completion of work experience																							
CIS013-3	C	CW-RW										WR-I													

Unit Code	C/O	Semester 1												Semester 2											
		4	5	6	7	8	9	10	11	12	13	14	15	4	5	6	7	8	9	10	11	12	13	14	15
CIS018-1	C								CW-Port			Ex-CB													
CIS020-1	C			CW-ePort									WR-GR												
CIS016-1	C														Ex-CB							PJ-Art			
NEW003-3	C		WR-I									PR-Oral													
CIS015-3	C																				PR-Oral	WR-I			
CIS017-3	C																	WR-I					PR-viva		

Developing your employability

Employability is understood widely as encompassing knowledge, skills and a professional attitude which your tutors expect you to display in all your units. All University of Bedfordshire courses aim to help you to be prepared for the world of work. The Careers Service is there to support you throughout the three years of your study. Our curriculum gives you skills that are valuable for a career within Computer Science but it is also relevant for a much wider range of applications.

The final year unit 'Social and Professional Project Management' in particular requires you to work in a team so as to apply a current project management methodology that embraces all of these knowledge areas in an integrated way while going through the stages of planning, execution and project control; you will work as part of a team, take responsibility and make autonomous decisions that impact on the project team performance.

In addition and somewhat complementary the honours project fosters independent and autonomous study: you learn to take up the responsibility of conducting your project, typically derived from your own ideas, in collaboration with a dedicated member of the teaching staff as project supervisor.

Students who register for the degree with professional practice year will additionally attend a series of workshops and activities related to securing a suitable placement and compulsory briefings at the end of year 2 to ensure that all legal requirements for health and safety, safeguarding etc. training have been met. This will be explained more fully in your professional practice handbook once you have registered with the Careers and Employability Service's Student Development and Awards Team in your first year. If you will be working with children and/or vulnerable people you will be required to have a DBS check and undertake Safeguarding and Prevent training.

After Graduation

Career:

General IT graduate trainees leading to long-term and more specialized positions ranging from IT consultants, systems development to customers services and IT management

Further study:

MSc in a Computer Science related topic; MPhil / PhD.

Additional Information

Several units allow students to use work and feedback from the first assessment to perform best in the second.

All units benefit from weekly practical sessions or supervisor meetings that provide a constant learner-teacher interaction process which also serves to reflect on learning styles.

The honours project includes a 'contextual report' (Assignment 2 of CIS013-3) which is formative in nature and provides an opportunity of structured feedback on the approach taken by the students for their honours project.

Student Support during the course

At institutional level, the university has in place a range of easily accessible support structures for new and existing students.

The Student Information Desk (SiD, http://beds.ac.uk/sid) offers confidential advice on all aspects of academic study. It provides information about other areas of university-wide student support such as extenuating circumstances, housing, health, counselling, study support, special needs and disability advice, and careers service. The Study Hub provides workshops and one to one support for academic skills.

The university chaplaincy runs regular meetings, social events and trips. The Student Union provides additional support and activities.

Course specific support is also in place. First year students receive a comprehensive induction in the week prior to the commencement of the academic year. In addition to this, course co-ordinators will meet with their student groups to explain the course structure and other issues relating to the student experience. These introductions will give you outlines of your course and units, a description of the ways you will be encouraged to develop your knowledge and skills, and signpost resources and materials to assist the process of your learning and success. An important part of this induction is the training to use BREO (Bedfordshire Resources for Education Online). BREO is your personalized virtual learning environment that contains lecture notes, links for online assignment submissions, staff contact details, links to central student services and much more. We expect that you use BREO regularly, and that you use your university email where we send you updates about all aspects of your course which need your attention.

All students will be allocated a personal tutor when they join the course. This academic will be responsible of monitoring your academic progress throughout your first year and beyond, and will help you with any academic or personal issues that might come up. The personal tutor is your consistent point of contact for support and guidance, but will on occasion refer you to other university staff for specific issues.

Further support is provided by lecturers who have office hours and by the course administration team.

Students may be required, at the discretion of the course coordinator, to undergo diagnostic testing for academic English language abilities, and may further be required, at the course coordinator's discretion, to participate in academic English support workshops or classes laid on by the University.

Our PAL (Peer Assisted Learning) scheme will provide additional support to new students from students at levels 5 and 6.

Course Equality Impact Assessment

Question	Y/N	Anticipatory adjustments/actions
Is the promotion of the course open and inclusive in terms of language, images and location?	Y	
Are there any aspects of the curriculum that might present difficulties for disabled students? For example, skills and practical tests, use of equipment, use of e-learning, placements, field trips etc.	Y	This course makes intensive use of computing equipment (desktop or laptop computers) and so if you have difficulty accessing these you should discuss this with the Disability Advice Team in conjunction with the course team at the outset to ensure that appropriate support is in place.
Are there any elements of the content of the course that might have an adverse impact on any of the other groups with protected characteristics?	N	
If the admission process involves interviews, performances or portfolios how have you demonstrated fairness and avoid practices that could lead to unlawful discrimination?	n/a	No interviews are part of the admission process.
Have you framed the course learning outcomes and Graduate Impact Statements in a non-discriminatory way?	Y	
Does the course handbook make appropriate reference to the support of disabled students?	Y	

Administrative Information – Faculty completion	
Faculty	Creative Arts, Technologies and Science
Portfolio	Undergraduate Computing and Engineering
Department/School	Computer Science and Technology
Course Coordinator	Haiming Liu
Semester pattern of operation	Semester 1 and Semester 2
PSRB renewal date (where recognised)	**n/a**
Version number	1/18
Approved by (c.f. Quality Handbook ch.2)	University Validation Panel
Date of approval (dd/mm/yyyy)	13/03/2018
Implementation start-date of this version (plus any identified end-date)	10/2018
Study model type if not on-campus	On-campus

	Name	Date
Form completed by	Haiming Liu and Marc Conrad	04/02/2018
Signature of Chair of Faculty TQSC		

Course Updates – ensure that the revised CIF is given a new version number each time a change is made		
Date	**Nature of Update**	**FTQSC Minute Ref:**

Administrative Information – Academic Registry completion	
Route code (post approval)	BSINTAAF / BSINPAAF
JACS / HECoS code (KIS)	
SLC code (post approval)	
Qualification aim (based on HESA coding framework)	

Annexes to the Course Information Form

*These annexes will be used as part of the approval and review process and **peer academics** are the target audience.*

General course information

Course Title	Information Technology
Qualification	Information Technology (with Professional Practice Year)
Route Code (SITS)	BSINPAAF and BSINTAAF
Faculty	*CATS*
Depart-ment/School/Division	*Computer Science and Technolgy*
Version Number	*2018/1*

Annex A: Course mapping of unit learning outcomes to course learning outcomes

Unit code	CIS 020 -1	CIS 016 -1	CIS 017 -1	CIS 018 -1	NE W0 01-2	NE W0 02-1	CIS 051 -2	CIS 020 -2	CIS 013 -3	NE W0 03-3	CIS 015 -3	CIS 017 -3	CIS 097 -2			
Level	4	4	4	4	5	5	5	5	6	6	6	6	5			
Credits	30	30	30	30	30	30	30	30	30	30	30	30	0			
Core or op-tion	C	C	C	C	C	C	C	C	C	C	C	C	O			
Course Learn-ing Out-come *(number)*	*Insert LO1 and/or LO2 for each unit into cell corresponding to the course learning out-come*															
1	1,2	1,2	1,2	1,2		1,2	1,2	1,2	1,2		2	1,2				
2			1,2	1,2			1,2	1,2				1,2				
3							1,2	1,2	1,2		1,2	1,2				
4							1,2		1,2		1,2	1,2				
5	1,2	1,2	1,2	1,2				1,2	1,2		1,2	1,2				
6	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2				
7	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2				
8	2	2	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2				
9	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2				
10												1,2				

Annex B: Named exit or target intermediate qualifications

This annex should be used when Schools wish to offer intermediate qualifications which sit under the main course qualification as named exit or target awards, rather than unnamed exit/default awards.

Section 1: General course information

Intermediate Qualification(s) and titles	*Not applicable*
Mode(s) of Study and Duration	
Type of Intermediate Qualification(s)	
Route Code(s) (SITS) of Intermediate Qualification(s)	

Section 2: Qualification unit diet

One table to be used for each intermediate qualification

Confirmation of unit diet for:	*Not applicable*	
The units to achieve the credits required may be taken from any on the overall diet for the main course qualification		
A combination of units from a restricted list must be taken to achieve the credits required (specify the list below)		
A specific set of units must be taken to achieve the credits required (specify units below)		

List of units (if applicable):-

Section 3: Course structure and learning outcomes

One table to be used for each intermediate qualification

Intermediate qualification and title	*Not applicable*													
The Units which make up this course are:					**Contributing towards the learning outcomes** *Insert LO1 and/or LO2 for each unit into cell corresponding to the course learning outcome*									
Unit Code	**Level**	**Credits**	**Unit Name**		**Core or option**	1	2	3	4	5	6	7	8	9	10

Annex C: Course mapping to FHEQ level descriptor, subject benchmark(s) and professional body or other external reference points

One set of mapping tables to be produced for the course and each named intermediate qualification

Course (or intermediate) qualification and title	BSc (Hons) Information Technology

FHEQ Descriptor for a higher educa-tion qualification	QAA FHEQ level descriptors; October 2014	Course Learning Outcome(s)								
		1	2	3	4	5	6	7	8	9
A systematic understanding of key aspects of their field of study, including acquisition of co-herent and detailed knowledge, at least some of which is at, or informed by, the forefront of defined aspects of a discipline.		X								
An ability to deploy accurately established techniques of analysis and enquiry within a discipline						X				X
Conceptual understanding that enables the student: ▪ to devise and sustain arguments, and/or to solve problems, using ideas and tech-niques, some of which are at the forefront of a discipline to describe and comment upon particular aspects of current research, or equivalent advanced scholarship, in the discipline			X							X
An appreciation of the uncertainty, ambiguity and limits of knowledge				X	X					
The ability to manage their own learning, and to make use of scholarly reviews and primary sources (for example, refereed research articles and/or original materials appropriate to the discipline).								X	X	

Typically, holders of the qualification will be able to apply the methods and techniques that they have learned to review, consolidate, extend and apply their knowledge and understanding, and to initiate and carry out projects				X					
Typically, holders of the qualification will be able to critically evaluate arguments, assumptions, abstract concepts and data (that may be incomplete), to make judgements, and to frame appropriate questions to achieve a solution - or identify a range of solutions - to a problem				X					
Typically, holders of the qualification will be able to communicate information, ideas, problems and solutions to both specialist and non-specialist audiences.						X			
And holders will have the qualities and transferable skills necessary for employment requiring the exercise of initiative and personal responsibility; decision-making in complex and unpredictable contexts; the learning ability needed to undertake appropriate further training of a professional or equivalent nature.					X	X			

Subject Benchmark Statement(s)	Subject Benchmark Statement Computing, February 2016	Evidence and/or Course Learning Outcome(s) How the course takes account of relevant subject benchmark statements
i) demonstrate a requisite understanding of the main body of knowledge for their programme of study		LO1
ii) understand and apply essential concepts, principles and practices of the subject in the context of well-defined scenarios, showing judgement in the selection and application of tools and techniques		LO2, LO8

iii) produce work involving problem identification, the analysis, design and development of a system with accompanying documentation, recognising the important relationships between these stages and showing problem solving and evaluation skills drawing on supporting evidence	LO5, LO9
iv) produce small well-constructed programmes to solve well-specified problems	LO5, LO9
v) Demonstrate generic skills, an ability to work under guidance and as a team member.	LO4, LO6, LO9
vi) identify appropriate practices within a professional, legal and ethical framework and understand the need for continuing professional development.	LO3, LO7

The format of the following mapping tables may be adjusted.

Qualification Characteristic	*Not applicable*	**Evidence** *How the course takes account of relevant qualification characteristics documents*

Professional body or other external reference points	*Not applicable*	**Evidence** *How the course takes account of Professional body or other external reference points*

Annex D: Diet Template

Course Title:	BSc (Hons) Information Technology		
Route Code:	BS	Mode: e.g. Full Time	
Length of course:	3 years / 4 years with PPY / 6 years Part-Time	Full-Time and Part-Time	

Location of delivery (please tick):

Luton AA	XXX
~~Bedford AB~~	
~~Milton Keynes AD~~	
~~Other (please state)~~	

Delivery pattern - please highlight all applicable start months, if other please state):

Semesterised	OCT	FEB	~~JUN~~	~~Exception~~……………………		
~~PG Block delivery (intake months ONLY)~~	~~BLK1 OCT~~	~~BLK2 NOV~~	~~BLK3 FEB~~	~~BLK4 APR~~	~~BLK5 JUN~~	~~BLK6 AUG~~
~~Yearlong delivery~~	~~OCT (TY)~~	~~FEB (FY)~~				
~~Other (outside of agreed patterns)~~						

October Start

Units for Year 1

Unit Code	Unit Name	Unit Location	Core/Option*	Period of study	Credits
CIS020-1	Introduction to Software Development	AA	Core	Oct-Jan	30
CIS018-1	Fundamentals of Computer Studies	AA	Core	Oct-Jan	30
CIS016-1	Principles of Programming	AA	Core	Feb-Jun	30
CIS017-1	Computer Systems Structure	AA	Core	Feb-Jun	30

Units for Year 2

Unit Code	Unit Name	Unit Location	Core/Option*	Period of study	Credits
NEW001-2	Human Computer Interaction	AA	Core	Oct-Jan	30
NEW002-2	Information Technology Industries Project	AA	Core	Oct-Jan	30
CIS051-2	Web Technologies	AA	Core	Feb-Jun	30
CIS020-2	Systems Development and Modern Database Practices	AA	Core	Feb-Jun	30

Units for Year 3 - Professional Practice Year (if applicable)

Unit Code	Unit Name	Unit Location	Core/Option*	Period of study	Credits
CIS097-2	Professional Practice Year (Computer Science and Technology)	Off Campus	Option	Oct-Jun	0

Units for Year 4 (with Professional Practice Year) or Year 3 (without Professional Practice Year)

Unit Code	Unit Name	Unit Location	Core/Option*	Period of study	Credits
NEW03-3	Advanced Information Technology	AA	Core	Oct-Jan	30
CIS013-3	Research Methodologies and Emerging Technologies	AA	Core	Oct-Jan	30
CIS015-3	Social and Professional Project Management	AA	Core	Feb-Jun	30
CIS017-3	Undergraduate Project	AA	Core	Feb-Jun	30

February Start

Units for Year 1

Unit Code	Unit Name	Unit Location	Core/ Option*	Period of study	Credits
CIS020-1	Introduction to Software Development	AA	Core	Oct-Jan	30
CIS018-1	Fundamentals of Computer Studies	AA	Core	Oct-Jan	30
CIS016-1	Principles of Programming	AA	Core	Feb-Jun	30
CIS017-1	Computer Systems Structure	AA	Core	Feb-Jun	30

Units for Year 2

Unit Code	Unit Name	Unit Location	Core/ Option*	Period of study	Credits
NEW001-2	Human Computer Interaction	AA	Core	Oct-Jan	30
NEW002-2	Information Technology Industries Project	AA	Core	Oct-Jan	30
CIS051-2	Web Technologies	AA	Core	Feb-Jun	30
CIS020-2	Systems Development and Modern Database Practices	AA	Core	Feb-Jun	30

Units for Year 3 - Professional Practice Year (if applicable)

Unit Code	Unit Name	Unit Location	Core/ Option*	Period of study	Credits
CIS097-2	Professional Practice Year (Computer Science and Technology)	Off Campus	Option	Feb-Jan	0

Units for Year 4 (with Professional Practice Year) or Year 3 (without Professional Practice Year)

Unit Code	Unit Name	Unit Location	Core/ Option*	Period of study	Credits
NEW03-3	Advanced Information Technology	AA	Core	Oct-Jan	30
CIS013-3	Research Methodologies and Emerging Technologies	AA	Core	Feb-Jun	30
CIS015-3	Social and Professional Project Management	AA	Core	Feb-Jun	30
CIS017-3	Undergraduate Project	AA	Core	Oct-Jan	30

Part-time: One unit each semester.