UNDERGRADUATE PROGRAMME SPECIFICATION

Programme Title:	Web Development
Awarding Body:	Staffordshire University
Teaching Institution:	Staffordshire University
Final Awards:	BSc(Hons) Web Development BSc(Hons) Web Development (top up)
Intermediate Awards:	CertHE/DipHE/BSc Web Development
Mode of Study:	Full / Part Time
UCAS Codes:	G523 - BSc(Hons) Web Development XXXX - BSc(Hons) Web Dev. (Top Up)
QAA Subject Benchmarks:	Computing
JACS Code:	G400 (all awards)
Professional/Statutory Body:	BCS – The Chartered Institute for IT
Date of Production:	June 2013
Date of Revision:	

If you require this document in a larger text or a different medium please contact us.

EDUCATIONAL AIMS OF THE PROGRAMME

Computing applications all increasingly rely on the use of web technologies. Studying Web Development you will have the opportunity to gain knowledge in subjects of both web design and web programming areas. This award is most suitable for students who on graduating would like to start up their own business or be employed within a small web company requiring several web based development skills.

We aim

- To produce graduates with an in depth knowledge of the latest areas of web development, and a historical perspective to see where the industry has its roots and where it could progress to in the future.
- To produce graduates who are fitted to undertake employment in industry, commerce or public service as web professionals, or, for those with suitable degree classification, to undertake programmes of further study or research.
- To produce graduates that understand and appreciate the latest web standards in both the design and programming domain
- To produce graduates who can apply web technologies to a variety of web based applications.
- To provide a course of study in web development that is up-to-date, appropriate, and facilitated by well-qualified staff.
- To produce graduates who have the theoretical and practical skills to develop web applications fit for the purpose they are intended, whether they be small scale or large enterprise applications
- To produce graduates who can respond to the challenge of real world problems.
- To provide an enriching experience for the student that supports and facilitates personal, academic and professional development throughout the programme, laying a foundation for life-long continuing development.
- To provide a sound general education in Computing that also enhances the student's general education, including transferable skills
- To enable each student to achieve the highest award within his or her overall ability.
- To give a practical emphasis with theoretical underpinning to each student's studies.
- On sandwich awards only, to enable each student, by means of a one-year period of supervised work in an industrial, commercial, public service or self-employed setting to gain relevant experience in the computing profession, and as far as possible gainfully to exploit that experience during Level 6 studies.
- To embed within the programme the inculcation and assessment of attributes and ethos of the Staffordshire Graduate, and to produce web development graduates who exemplify these qualities.

(see: http://www.staffs.ac.uk/courses_and_study/why_staffs/staffordshire_graduate)

What is distinctive about this programme?

This programme allows you to learn, implement and criticise the rules key to delivering useable, accessible and fit for purpose web applications.

We pride ourselves in the fact that the web development award teaches students about the latest web standards, and how to apply cutting edge design and programming techniques, but not ignore the users who will not have access to the latest browsers or viewing environments.

You will learn in a highly practical environment, facilitated by demos and technical skills. You will interact as students with subject specialists in industry, and work as a typical web team in a medium size commercial project as part of the Web Project module.

If you are studying on the two year top-up in web development, this allows students from other domains in computing to become highly skilled in Web Development. It is a conversion from any college with a HND/Foundation degree in Computing, and in certain circumstances students may also be able to utilise this route from a HNC in Computing or the first year of degree in other areas of Computing, as long as the coverage in Computing is sufficient.

The Staffordshire Graduate

The Staffordshire Graduate represents a set of qualities that the University passionately believes is necessary for success in the 21st century. The Staffordshire Graduate is a reflective and critical learner with a global perspective, prepared to contribute in the world of work.

When you graduate from Web Development, you are prepared as you progress through your course for the world of work through developing and applying skills of being both reflective and critical learners, with an overall global perspective.

- All Web degree study levels and associated core modules develop specifically ***discipline expertise*****.** Our academic staff possess a wide range of related research, practical scholarship, and industrial experience which is employed to engage students and develop critical knowledge to a level the student is able to apply this to key and emerging issues in the world.

- We are committed to our Web graduates being able to show ***professionalism,*** and possessing ***enterprise*** and ***entrepreneurial*** skills and knowledge to show personal innovation within the world of work they are entering. To develop the required life and transferrable skills we use a variety of approaches in our curricula delivery: lectures, practical sessions, tutorials, seminars, case studies, optional work based placements, and dissertations. Through such approaches student's confidence is developed in the light of meeting employer's requirements and demands. A key focus is to produce graduates who can not only follow set paths to finding solutions, but can be innovative to the level of defining the path itself.

- Critical to your ability to make the most of the learning experience is the need to develop ***effective communication*** and ***team working*** attributes in order to be effective as both an individual and within a combined working environment. Teaching sessions and assessment opportunities throughout all study levels are used to incrementally develop your confidence in preparing and delivering ***presentations*** and reinforcing realistic ***team working*** scenarios mirroring the world of work***.***

- ***Problem-solving*** is a principle requirement of graduating students and we use a wide array of opportunities to help develop the related skills to do so ranging from tutorials, seminars, theme based assignments, through to detailed individual and group related research work, and dissertation writing. Such skills development leads to enhancing ***creative*** abilities combined with ***independence of thought*** to finding new and innovative solutions to problems. Throughout we encourage you to input proactively on this so that when you graduate you take ownership of problems and lead in finding appropriate solutions.

- These are essential attributes of the ***critical***, ***reflective*** and ***life-long learners*** that Staffordshire graduates are expected to become. Throughout your Web degree you are encouraged to develop your understanding through critical reflection; to question different views and perspectives and to use both your generic and specialist skills to recognize and resolve problems.

- Increasingly those problems are set in a global context and ***globalisation*** and ***global citizenship*** are central to the way that you look at the world. The majority of the core modules that structure these awards explore understandings of how global computing systems and business work together in combination; and how those systems impact upon individuals; and how graduates can work professionally to manage global issues.

Appendix 1 shows how awards are mapped to the criteria of the Staffordshire Graduate.

PROGRAMME OUTCOMES

What will this programme teach me to do? At the end of your studies you should be able to:

Knowledge & Understanding

- Demonstrate an understanding of the wider impact, both now and the in the future, of web standards and web development technologies
- Demonstrate a systematic understanding of computing concepts and principles.
- Show that you have acquired coherent and detailed knowledge about the principles and practices of Web Development, some of which is at, or informed by, the forefront of research and development in Web Development.
- Understand the issues, context and practices involved in working as a web professional.
- Understand the impact of enterprise and business in web development
- Demonstrate an understanding of users and their requirements in web applications
- Apply web technologies to a wider context including mobile application development or desktop application development

Learning

- Develop lines of argument and evaluate possible approaches, tools, techniques and solutions based on knowledge of underlying computing concepts and principles.
- Evaluate web pages based on the knowledge and understanding gained
- Understand the limits of their knowledge, and how this influences analyses and interpretations based on that knowledge.
- Understand the uncertainty, ambiguity and limitations of this knowledge

Enquiry

- Use recognised literature searching and requirements elicitation techniques to gather information about computer-based problems.
- Critically evaluate and manage the information collected.
- Analyse target audiences to evolve content for web applications
- Critically evaluate and test any web applications / designs / web content produced
- Use, evaluate and manage information from a range of sources, acknowledging the cultural, ethical, economic, legal, and social issues surrounding the use of information.
- Initiate and carry out projects within web development, taking into account current areas of research
- Ethically gather information pertaining to web development (or related technologies), suggest possible solutions, and the success of these solutions, from existing or potential users and/or organisations using valid techniques
- Find, critically evaluate, manage, apply, and understand information from a range of sources, acknowledging the cultural, global, ethical, economic, legal, and social issues surrounding the use of information.
- Extrapolate on current standards to form ideas of possible long term strategies in web standards and web development

Analysis

- Critically discuss current practices in web development
- Describe and comment upon current research in web development and associated technologies, and critically evaluate arguments, assumptions, abstract concepts and data (that may be incomplete) to draw conclusions

Problem Solving

- Select and apply appropriate theory, practices and tools to develop computing-based solutions to problems.
- Assess critically the appropriateness of different approaches to designing and developing web applications.
- Propose and develop web application solutions following analysis of problems and target audience criteria.
- Develop appropriate questions and web strategies to achieve a solution, based on web and associated technologies, (or identify a range of solutions) to a problem.
- Plan and carry out a large and complex web development project using current associated technologies

Communication

- Communicate information effectively to specialist audiences using appropriate documentation techniques, including, but not limited to: written academic reports; verbal presentations; documentation in support of the design and development of web applications
- Communicate designs and proposals for web content using appropriate techniques
- Communicate ideas, problems and solutions to both specialist and non-specialist audiences in a variety of forms

Application

- Apply, in previously unseen contexts, appropriate standards, concepts, principles and techniques to design, create and test web applications
- Apply knowledge of target audience, current standards and possible environments, including those at the forefront of web development and associated technologies, in the process of solving problems or producing improved solutions.

Reflection

- Demonstrate the ability to take responsibility for learning
- Demonstrate the ability to work both independently and as team member.
- Demonstrate an understanding of professional responsibility (including quality and safety issues); the ethical, legal and social context in which solutions based on web and associated technologies are developed and operate; the need for continuing professional development and lifelong learning; the role of computing-based solutions and systems within organisations; and the opportunities and skills needed for entrepreneurship.

PROGRAMME STRUCTURE, MODULES AND CREDITS

Web Development

Options

You can choose options as part of your award out of a list of modules suitable for the degree. All options are chosen by filling in a level module form. This takes place in Welcome Week for level 4 students, and in the middle of semester 2 of the preceding year (i.e. level 5 modules are chosen in semester 2 level 4).

LEVEL 4	Teaching Block 1 Teaching Block 2	CESCOM10073-4 Fundamentals of Computing And Mathematics (30 credits)*	CESCOM10081-4 Introduction to Programming (30 credits)	CESCOM10098-4 Web Concepts (30 credits)	CESCOM10093-4 Skills for Computing Professionals (30 credits)

(To progress to Level 5 at least 90 credits at Level 4 must be passed)

*This module explicitly focuses on significant elements required for the achievement of the STAFFORDSHIRE GRADUATE ATTRIBUTES.

LEVEL 5	Teaching Block 1 Teaching Block 2	CESCOM10143-5 Web Project (30 credits)*	Web Programming Option (30 credits or 2x15 credits)	Web Design Option (30 credits)	Award Option (30 credits)

(To progress to Level 6 at least 210 credits of must be passed including a minimum of 90 credits at Level 5)

*This module explicitly focuses on significant elements required for the achievement of the STAFFORDSHIRE GRADUATE ATTRIBUTES.

Web Programming Options

- CESCOM10136-5 Server Side Scripting (30 credits)
- CESCOM10133-5 Programming with HTML APIs (30 credits)
- CESCOM10126-5 Mobile Application Development with Web Technologies (15 credits) AND CESCOM10142-5 Web Applications and The Cloud (15 credits)

Web Design Option

- CESCOM10124-5 Methods and Tools for enhancing User Experience (30 credits)
- CESCOM10140-5 Visual Web Design (30 credits)

Award Option

Any module listed above or

- CESCOM10107-5 Digital Media and the Web (30 credits)
- CESCOM10128-5 Networking Fundamentals (30 credits)

LEVEL 6	Teaching Block 1 Teaching Block 2	CESCOM10157-6 Final Year Project (45 credits)*	Award Option (15 credits)	Award Option (30 credits)	Award Option (30 credits)

*This module explicitly focuses on significant elements required for the achievement of the STAFFORDSHIRE GRADUATE ATTRIBUTES.

Award Options
CESCOM10178-6 Ubiquitous Computing * (15 credits)
CESCOM10150-6 Design For Mobile Devices (30 credits)
CESCOM10174-6 Real World Web Design * (30 credits)
CESCOM10169-6 Mobile Application Development (30 credits)
CESCOM10151-6 Distributed Web Applications * (30 credits)
CESCOM10156-6 Enterprise Web Applications * (15 credits)

Transfer between Web Development, Web Design and Web Programming

A student can transfer between any of the web awards up until the beginning of level 5.

Web Development (Top Up)

- A 2 year 'conversion' from **any** HND/Foundation degree/1st year of degree in a Computing related topic (possible from HNC on a case by case basis)
- If the student does not have a base knowledge in HTML and CSS, they must take an extra 2 blocks intensive catch up sessions in Welcome Week (6 hours taught (2 3hr blocks – afternoon and evening), with assessment time the next day to point out extra skills the students should brush up on.

LEVEL 5	Teaching Block 1 Teaching Block 2	CESCOM10143-5 Web Project (30 credits)*	Web Programming Option (30 credits or 2x15 credits)	Web Design Option (30 credits)	CESCOM10103-5 Building Web Applications (30 credits)

(To progress to Level 6 at least 90 credits at Level 5 must be passed)

*This module explicitly focuses on significant elements required for the achievement of the STAFFORDSHIRE GRADUATE ATTRIBUTES.

Web Programming Options

- CESCOM10136-5 Server Side Scripting
- CESCOM10133-5 Programming with HTML APIs
- CESCOM10126-5 Mobile Application Development with Web Technologies AND CESCOM10142-5 Web Applications and The Cloud

Web Design Option

- CESCOM10124-5 Methods and Tools for enhancing User Experience
- CESCOM10140-5 Visual Web Design

Award Option

Any module listed above or

- CESCOM10107-5 Digital Media and the Web
- CESCOM10128-5 Networking Fundamentals

L E V E L 6	Teaching Block 1 Teaching Block 2	CESCOM10157-6 Final Year Project (45 credits)*	~~Award Option~~ CESENG63007-6 Applying Mathematics to Computing (15 credits)	Award Option (30 credits)	Award Option (30 credits)

*This module explicitly focuses on significant elements required for the achievement of the STAFFORDSHIRE GRADUATE ATTRIBUTES.

Award Options

CESCOM10178-6 Ubiquitous Computing * (15 credits)
CESCOM10150-6 Design For Mobile Devices (30 credits)
CESCOM10174-6 Real World Web Design * (30 credits)
CESCOM10169-6 Mobile Application Development (30 credits)
CESCOM10151-6 Distributed Web Applications * (30 credits)
CESCOM10156-6 Enterprise Web Applications * (15 credits)

HOW WILL I BE TAUGHT AND ASSESSED?

Teaching and Learning

There is a necessity to ensure graduates have the core skills of computing professionals.

Each module is designed to ensure subject content; teaching delivery and assessment contribute to meet overall outcomes of an award. In choosing teaching, learning and assessment methods we ensure that the specific mechanism of delivery, the provided learning opportunity, and approach to assessment of the student's achievement form a combined equation that supports and enhances the entire education process. Modules on these awards are highly practical, mirroring industry practices, often using lectures to provide underpinning for tutorial sessions, mostly based in computer lab environments. The subject matters of these awards rely on the fact that you will be able to apply theoretical knowledge.

Teaching methods used include lectures, problem-based tutorials, practical laboratory sessions and group-based activities. Learning approaches are chosen to be compatible to the method of delivery and can include: case studies, investigations, seminars, resource based learning and independent reading. Equally the method of assessment is chosen to meet the academic content and outcomes the module is to assess and include: individual coursework assignments, group-work assignments, presentations, demonstrations, written reports, end-of-module examinations, and oral viva. A wide range of teaching, learning and assessment approaches are used and are seen as beneficial in exposing the student to diverse approaches.

But, under no circumstance is a method used just for the sake of it, instead a reductionist approach is used that fits teaching, learning, and assessment methods to the academic content to be delivered.

There is a module at level 5 called 'Web Project'. This module is normally a group based project used to mirror real world practices. You will normally work as groups on this module – each group having a mix of designers and programmers. You will be given a real life case study to research, design and program a web application solution for, with each type of student fulfilling their specialised role – i.e. designers doing design, programmers doing the back-end. You will be mainly be assessed on their own part, and the end result will be presented as a group piece showing reflection. No student will be disadvantaged as part of this process. The lecturer will act as a facilitator, to what will be mainly a research based module. This should help you both with your further study and also help you with employment (both placement and on graduation) as you will be able to show how they would work in a real world scenario.

Blackboard VLE is used as a resource for course materials and the description of module content and module assignment(s).

Within the specialist modules on the web awards, students are taught the importance of the user, from design, through an implementation of an artefact and the testing of the artefact, looking at this not only from a functional, but also a user perspective. This mirrors good practice in industry.

As you progress from level 4 to 5 and then to 6, the amount of independent study increases, as you will often research areas and discuss your findings within tutorial slots, with the lecturers acting more as facilitators rather than instructors. The final year project is a prime example of this method.

Assessment

The practical nature of the awards results in a similar assessment strategy. Many modules are assessed, at least in part, through the production of practical solutions to a variety of problems. Many of these modules are assessed through demonstration / presentation making it possible to ensure student understanding and help prevent academic dishonesty.

You will often complete part of your assessments, as part of a group. This mirrors current practise in industry where group co-ordination and co-operation are skills required in the work place. No student however will suffer as part of this group assessment includes peer review of the components each group member undertook.

All modules adopt the use of both formative and summative assessment. Formative assessment is seen as a vital review point or milestone that can be used to review how you are progressing, enabling positive encouragement to be given, or equally the opportunity to realign and redirect the student. Summative approaches are used to determine your final level of achievement and may also offer formative feedback.

Although it is intended that you should be exposed to a range of assessment methods throughout their study within the award, this is always tempered by the need to use that form of assessment which is most appropriate to the assessment of the learning outcomes. There are relatively few exams in the assessments on this award, due to the nature of the award being highly practical and reflective of what is created. This suits demonstrations, presentations and reports.

Feedback is paramount and occurs throughout module delivery. You are actively encouraged to interact with staff and seek guidance and feedback. Equally when you are assessed you receive substantial feedback related to the good and weak points of your assessment so that quality of skill or knowledge is improved. You are also encouraged to provide your own feedback on the modules you complete, so that good practice can be continued, and improvements can be made if necessary.

ADDITIONAL INFORMATION

Entry Requirements (including IELTS score)

What qualifications would I need to join this programme?

The entry requirements for the award are normally: 260 UCAS Tariff Points.

You will also normally require a Maths and English GCSE at grade C (or an equivalent qualification)

For students whose first language is not English, we require an IELTS score of at least 6.0

For more details about undergraduate study please see
http://www.staffs.ac.uk/courses_and_study/undergraduate_courses/

For more information on Staffordshire University's Undergraduate entry requirements please consult
http://www.staffs.ac.uk/courses_and_study/undergraduate_courses/entry_requirements/

Disability Statement
Staffordshire University operates a policy of inclusive teaching and learning to ensure that all students have an equal opportunity to fulfil their educational potential. Details about how to apply to have your needs assessed can be found at:
http://www.staffs.ac.uk/courses_and_study/disabled_students/index.jsp

AWARD SPECIFIC INFORMATION

The following award specific regulations apply.

Industrial placement

The industrial placement normally requires the completion of 48 weeks in relevant supervised work experience taken between level 5 and level 6. However, exceptionally for placements in School environments (where the nature of the employment precludes the completion of 48 weeks), the completion of 36 weeks is acceptable.

Normally if you are enrolled on a sandwich award, you must pass the sandwich year to progress to level 6. However, in exceptional circumstances the completion of the industrial placement may be deferred until after the completion of level 6. Where this occurs you will still be required to pass an industrial placement before you can be awarded a sandwich degree.

If you fail the industrial placement period, you will only be allowed one further attempt. The referral attempt must normally occur within 18 months. Failure at the referral attempt will mean that you cannot further progress on a sandwich award. You would have to transfer onto an appropriate non-sandwich full-time award in order to continue.

The placement period is not compensatable. To be eligible for the award of an Honours degree with a sandwich, you must pass the industrial placement period.

Transfer between a sandwich award and a non-sandwich award

You may opt to transfer from a non-sandwich award to an appropriate sandwich award at any time.

You may transfer from a sandwich version of your award to a non-sandwich version, at any time up until the end of week 2 of the first teaching block of level 5. However, after week 2 of the first teaching block of level 5, the transfer is only permitted if one or more of the following criteria are met:

1. You are unable, for valid reasons e.g. extenuating circumstances, to undertake or complete an industrial placement;
2. Having attempted the industrial placement, you have failed it;
3. You have BOTH been unable to secure a placement 12 months after the start of level 5, AND have a portfolio of evidence that shows that you have made a bona fide attempt to obtain a placement. The decision as to whether the portfolio of evidence shows that you have made a bona fide attempt is at the discretion of the Academic Placements tutor.

Further information about the award can be found in the relevant Student Handbook and on the University Website. This includes information about optional modules, learning outcomes at levels below honours, student support, and academic regulations.

APPENDIX 1 - THE STAFFORDSHIRE GRADUATE

The Staffordshire Graduate represents a set of qualities that the University passionately believes is necessary for success in the 21st century. The Staffordshire Graduate is a reflective and critical learner with a global perspective, prepared to contribute in the world of work.

The table below indicates where, within your award, these characteristics are addressed:

AWARD TITLE:	**BSc (Hons) Web Development**	
Characteristic	**Award Module(s) including level and number of credits**	**Method of Assessment**
1. Work-ready and employable	The subject discipline of this award focuses on the development of knowledge and skills that are directly relevant to employment within the computing industry. Thus most subject specific modules across the award contribute to the development of subject discipline specific knowledge and skills that support employability. The modules identified below are those modules that focus on the development of generic and transferable knowledge and skills that prepare you for employment and a future career.	
	L4 Skills for Computing Professionals (30 credits)	Assessment consisting of presentations, and portfolio. Develops skills such as being interviewed and CV creation.
	L5 Web Project (30 credits)	Group coursework based on business analysis and needs. Gives students the ability to analyse how companies work and the roles involved.
	L6 Final Year Project (45 credits)	The entire project is used by the student to solve a business / commercial problem. The assessment is 100% written dissertation, with a mid-point interview and final presentation / demonstration.
	Other core and option modules	To some form will contribute.
2. Understanding of enterprise and entrepreneurship	L4 Skills for Computing Professionals (30 credits)	Assessment consisting of presentations, and portfolio. Will develop the students thinking related to opportunities and their development.

	L 5 Web Project (30 credits)	Group coursework focusing specifically on designing for business needs. Coursework includes external company contact that should help to instil skills related to enterprise and entrepreneurship.
	L6 Ubiquitous Computing (30 credits)	Assessed by group presentation, video, and written report in detailing future based ubiquitous computing solutions.
	L6 Final Year Project (45 credits)	The entire project is used by the student to solve a business / commercial problem. The assessment is 100% written dissertation, with a mid-point interview and final presentation / demonstration.
3. Understanding of global issues and their place in the global economy	L4 Skills for Computing Professionals (30 credits)	Assessed by coursework. The module has a particular focus on global business issues.
	L5 Web Project (30 credits)	Group coursework focusing specifically on designing for business needs. Being web based this will address global issues.
	L6 Real World Web Design (30 credits)	The assignment involves students investigating and producing solutions to real world web based problems and is assessed via research and a presentation.
	L6 Ubiquitous Computing (30 credits)	Assessed by group presentation, video, and written report in detailing future based ubiquitous computing solutions.
	Web specific core and option modules	To some extent by the nature of being a global computing technology will address global issues.
4. Communication skills	L4 Fundamentals of Computing and Maths (30 credits)	Both written and presentation skills are developed through the assessment.
	L4 Skills for Computing Professionals (30 credits)	Assessment that uses a portfolio for communication skills development focusing specifically on written and presentation skills.
	L6 Real World Web Design (30 credits)	The assignment involves students investigating and producing solutions to real world web based problems and

		is assessed via research and a presentation.
	L6 Ubiquitous Computing (30 credits)	Assessed by group presentation, video, and written report in detailing future based ubiquitous computing solutions.
	L6 Enterprise Web Applications (30 credits)	This module has a demonstration component supported by a report as the mechanism of presenting a full design, implementation, and testing of a web based application.
	L6 Distributed Web Applications (30 credits)	This module uses both practical work combined with demonstrations and a report to communicate students end achievements.
	L5 Web Project (30 credits)	Group coursework developing group working and liaison with companies. This module enables theory and learning to be put directly in the workplace.
5. Presentation skills	L6 Final Year Project (45 credits)	Part of the 100% coursework assessment of the project module involves a mid-point interview and a final viva. Both aspects of assessment involve the creation of slides and a presentation.
	L4 Fundamentals of Computing and Maths (30 credits)	To initiate student's development at level 4 this module gets students to create artefacts based on several aspects of computing and present and demonstrate these.
	L5 Web Project (30 credits)	On this 100% coursework module students will regularly informally discuss and formally present their ideas to external businesses for feedback.
	L6 Real World Web Design (30 credits)	The assignment involves students investigating and producing solutions to real world web based problems and is assessed via research and a presentation.
	L6 Ubiquitous Computing (30 credits)	Assessed by group presentation, video, and written report in detailing future based ubiquitous computing solutions.
	Most option and core modules	Most options and core modules will involve creating an artefact and this will be presented to staff for assessment.

6. The ability to interact confidently with colleagues	L4 Skills for Computing Professionals (30 credits)	This attribute will be simulated in classes and the assessment to develop such skills before students go out on the placement year.
	L6 Final Year Project (45 credits)	The coursework consisting of a dissertation and final viva / presentation. The interaction will be related to a supervisor, test subjects, and business people and the public at the end of year Gradex exhibition.
7. Independence of thought	L6 Final Year Project (45 credits)	The final year project will provide ample opportunity for the student to put together all their learning and show independence of thought in solving a large problem.
	L5 Web Project (30 credits)	This module will enable a lot of independent though to take place as students are required to develop requirements and produce an end solution to a problem.
	L6 Real World Web Design (30 credits)	The assignment involves students investigating and producing solutions to real world web based problems and is assessed via research and a presentation.
	L6 Design for Mobile Devices (30 credits)	Assessed via mobile application and critical rationale as to design decisions taken.
	L6 Distributed Web Applications (30 credits)	This module uses both practical work combined with demonstrations and a report to communicate students end achievements.
	L6 Enterprise Web Applications (30 credits)	This module has a demonstration component supported by a report as the mechanism of presenting a full design, implementation, and testing of a web based application.
	L6 Ubiquitous Computing (30 credits)	Assessed by group presentation, video, and written report in detailing future based ubiquitous computing solutions.
	Core and option modules	All modules will enable the student to show some level of independence of thought as they will need for all to show skills and knowledge of planning, time management, design, and solution realisation

8. Skills of teamworking	L4 Fundamentals of Computing and Maths (30 credits)	This coursework component will enable the students to allocate individual business / computing roles in order to solve a problem that requires co-ordinated teamwork.
	L6 Ubiquitous Computing (30 credits)	Assessed by group presentation, video, and written report in detailing future based ubiquitous computing solutions.
	L5 Web Project (30 credits)	This coursework Level 5 module enables the students to work in teams and lead the assignments development in solving a large web based application task
	Core and option modules	Several other modules will involve to some extent the skills of teamworking.
9. Ability to carry out inquiry-based learning and critical analysis	L6 Final Year Project (45 credits)	The dissertation aspect of the final year project requires extensive critical analysis at its end as it is the culmination of a 45 credit project.
	L6 Real World Web Design (30 credits)	The assignment involves students investigating and producing solutions to real world web based problems and is assessed via research and a presentation.
	L6 Design for Mobile Devices (30 credits)	Assessed via mobile application and critical rationale as to design decisions taken.
	L6 Ubiquitous Computing (30 credits)	Assessed by group presentation, video, and written report in detailing future based ubiquitous computing solutions.
	L6 Distributed Web Applications (30 credits)	This module uses both practical work combined with demonstrations and a report to communicate students end achievements.
	L6 Enterprise Web Applications (30 credits)	This module has a demonstration component supported by a report as the mechanism of presenting a full design, implementation, and testing of a web based application.
	Core and option modules	Most award modules will involve directly including aspects of inquiry-based learning and critical analysis.

10.	**Skills of problem solving and creation of opportunities**	L5 Web Project (30 credits)	Due to external input to this module and its nature of setting a key web based application problem, many opportunities are developed through studying it.
		L4 Fundamentals of Computing and Maths (30 credits)	This module gets students to think specifically about technical opportunities.
		L6 Real World Web Design (30 credits)	The assignment involves students investigating and producing solutions to real world web based problems and is assessed via research and a presentation.
		L6 Design for Mobile Devices (30 credits)	Assessed via mobile application and critical rationale as to design decisions taken.
		L6 Distributed Web Applications (30 credits)	This module uses both practical work combined with demonstrations and a report to communicate students end achievements.
		L6 Enterprise Web Applications (30 credits)	This module has a demonstration component supported by a report as the mechanism of presenting a full design, implementation, and testing of a web based application.
		L6 Ubiquitous Computing (30 credits)	Assessed by group presentation, video, and written report in detailing future based ubiquitous computing solutions.
		Several core and option modules	Most modules will address this criteria to some extent.
11.	**Technologically, digitally and information literate**	The subject discipline of this award focuses on the development of knowledge and skills that are directly relevant to employment within the computing industry. Thus most subject specific modules across the award contribute to the development of subject discipline specific knowledge and skills that support employability. The modules identified below are those modules that focus on the development of generic and transferable knowledge and skills that prepare you for employment and a future career.	
		L6 Real World Web Design (30 credits)	The assignment involves students investigating and producing solutions to real world web based problems and is assessed via research and a presentation.
		L6 Distributed Web Applications (30 credits)	This module uses both practical work combined with demonstrations and a report to communicate students end achievements.

	L6 Enterprise Web Applications (30 credits)	This module has a demonstration component supported by a report as the mechanism of presenting a full design, implementation, and testing of a web based application.
	L6 Design for Mobile Devices (30 credits)	Assessed via mobile application and critical rationale as to design decisions taken.
12. Able to apply Staffordshire Graduate attributes to a range of life experiences to facilitate life-long learning	Part-time jobs	Non-assessed
	L5 Web Project (30 credits)	Due to external input to this module and its nature of setting a key web based application problem, many opportunities are developed through studying it.
	Extra-curricular roles such being a student ambassador	Non-assessed, but feedback can be given from the university
	Industrial Placement (0 credits)	100% assessed opportunity which can give guidance and advice as to the student's future development.