# Faculty of Engineering and Environment Department of Computer Science and Digital Technologies

# BSc (Hons) Web Design and Development

# Final Year Programme Handbook 2015 - 2016

# Contents

# 1   Welcome from the Programme Leader

Welcome to the BSc (Honours) Web Design and Development programme.  The programme aims to provide an education in the knowledge and skills necessary for a career in designing, developing and managing web solutions to business problems. Detail on the specifics of what you will study can be found in section 5.3. I hope you enjoy your time with us.

# 2   Department Introduction

The Department of Computer Science and Digital Technologies at Northumbria University encompasses all of our work in games, robotics, mobile applications, animation and digital visual effects, computer forensics and ethical hacking, network technology and website design. Our students, staff and researchers develop and refine cutting edge technologies that impact on the way we all live our lives. They work cross-discipline, exploring the way that technology can impact on health, travel, security intelligence, artificial intelligence and many other sectors.

# 3   About this handbook

This handbook is designed to provide a guide to your programme of study at Northumbria. It should be read alongside the University and Faculty Student Handbooks which contain more general information about being a student at Northumbria within the Department of Computer Science and Digital Technologies.

It does not provide all of the information that you will need although it attempts to tell you where to find most of that information.  The latest version of much of the further information that you need is to be found in a comprehensive and definitive form on the Northumbria website by clicking on Student Hub on the University home page (http://northumbria.ac.uk).

| Please keep this handbook somewhere safe – you may need to refer to it. |
| --- |

# 4    Who's Who and Communication?

## 4.1    Who to go to for help

You will meet a broad range of academic, administrative and technical staff throughout your studies. The majority of staff will be drawn from the various subject areas within the Faculty's departments. However, we also draw upon subject specialisms outside the Faculty and external consultants, industrialists and advisors.

Staff from the department and from the wider university (such as the University Library, IT Services and Student Support and Wellbeing) are here to help you get the most out of your Programme. In this section, we introduce you to some of the key people who will support you at Faculty and subject area level.

### Student Support Team

The Student Support Team is available to assist all students requiring information and/or advice. The team is located in B201 Ellison Building.
Opening times: Monday – Thursday 8.30 – 17.00 hours Friday 8.30 – 16.30 hours
Email: ee.studentsupport@northumbria.ac.uk

Telephone: 0191 227 4722

### Programme Leader

Name: Jill Bradnum
Office Location: Pandon Building Room  227 (second floor)
Email: jill.bradnum@northumbria.ac.uk
Telephone: 0191 243 7668

Your Programme Leader is the academic leader for your Programme and is responsible for managing the programme on a day to day basis, working with other Faculty and University staff – academic, administrative and technical – as needed. Your Programme Leader is committed to helping you get the most out of the programme and, where relevant, will liaise with your Module Tutors and other relevant staff to make sure that they are aware of your needs and of how you are doing.

### Programme Administrator

Your Programme Administrator holds all the key information regarding your programme. This is the person who manages such processes as enrolment, option choice, day to day correspondence, confirmation of attendance letters, marks entry, etc. They can be contacted via the Pandon Office.

### Module Tutors

For each module of study, you will have a designated Module Tutor. The Module Tutor is responsible for the organisation of the module and supporting your learning and assessment on that module.

## 4.2   Communication

### Contacting Your Programme Leader and other members of academic staff

The best way to contact the programme leader is via email although I do have an open door policy and will see you if I can. My email address is [jill.bradnum@northumbria.ac.uk](mailto:jill.bradnum@northumbria.ac.uk)

Academic staff may teach on many modules and programmes. In addition they may have other roles and responsibilities which take them from their office. Therefore it is advisable to make an appointment if you wish to see them. You can do this via email or you can try to see if they are in their office (however, it is generally better to use email where possible). Occasionally you may be able to have an immediate appointment, but don't be disappointed if you are asked to return at a mutually convenient time. Please contact staff to cancel if you are unable to make the arranged appointment.

### Email

Email is used extensively throughout the University and is a very effective method of communication between students and staff. You will be automatically allocated an email address by the University once you have enrolled. Do remember that the Northumbria email address is the one that should be used when contacting University and Faculty staff. It is also the one that is used by staff to make contact with you, so do make sure that you check it regularly, particularly if you also use a personal email account. Please be aware that staff may not reply to your email immediately due to their other duties and activities.

### eLearning Portal

The eLearning Portal (eLP) is a very important resource for students. You will find specific information related to the modules you are taking, such as copies of lecture and seminar handouts, assignment briefings, instructions, and announcements. Your Programme Leader may use the eLP to pass on information concerning programme matters. is therefore important that you check the eLP regularly – at least daily – for new announcements and new material.

### Plasma TV Screens

The faculty has a number of plasma screens in the Pandon and Ellison buildings. These are also used to display announcements, events and opportunities such as visits from potential placement providers.

PLEASE NOTE: *IT IS REALLY IMPORTANT THAT IF YOU HAVE AN ISSUE YOU CONTACT US AS SOON AS POSSIBLE – WE ARE HERE TO HELP*

## 5   Programme Information for BSc (Honours) Web Design and Development

Here you will find specific information on your programme of study. There is a national requirement that all university programmes of study have a publicly available Programme Specification and this section is based on that programme specification.  The full and definitive version of the programme specification can be found by searching at [http://www.northumbria.ac.uk/programmespecs/](http://www.northumbria.ac.uk/programmespecs/)

### 5.1   Programme Aims

The primary aim of this programme is to provide a programme of study with special emphasis in the area of web design and development. It would aim to produce highly skilled and professional graduates with

an education in designing and creating professional, feature rich interactive and highly usable web application systems for the resolution and management of web development problems, who were knowledgeable of current and emergent technologies, and with broad business awareness.

Additionally, the programme aims to develop students' critical abilities and general problem solving skills and lay a foundation for continuing education and self-improvement.

**Students graduating from this programme should be able to:**

- Identify the need for, elicit the requirements for, specify, design and implement web based computing systems in a range of environments and for a range of problems.
- Successfully exploit a range of methods and tools in developing workable solutions to complex (web based) computing system problems involving up-to-date technologies.
- Critically appraise the suitability of current and emerging web computing technologies to support a variety of domains.
- Plan, manage and undertake a substantial piece of individual project work.
- Act in a professional and ethical manner in the development and use of web based computing systems.
- Work with users in the development and operation of web based computing systems.
- Plan and manage the development of and use of web based computing systems.
- Use and evaluate a variety of commercial software, tools and techniques relevant to Web Based Computing Systems.
- Communicate effectively (in writing and orally) at the appropriate business and technical level with users, management, customers and technical specialists.
- Work in teams.

## 5.2 Programme Learning Outcomes

a) Knowledge and Understanding

On completing the programme we want students to know and understand:

A1: The commercial and economic need for web based applications, their nature and evolution, including those applications supporting e and m-commerce.
A2: Core web software technologies, including server-side software, middleware, client-side scripts and software, protocols and development tools and languages.
A3: Technical, professional and business issues surrounding the development, operation and maintenance of web based computing systems.
A4: Techniques and tools for the specification of requirements, analysis, design and implementation of highly usable web based systems.
A5: Techniques, tools and issues impacting upon web system security.
A6: Supporting and current techniques and technologies.
A7: The professional, ethical, social and legal issues involved in the development and operation of web based computing systems.

b) Intellectual Skills

The most important intellectual skills developed on the programme are to:

B1: Select, plan and manage individual and team-based development projects.
B2: Discuss and critically evaluate available development tools, methods, and technologies and associated user and professional issues.
B3: Identify a problem and select and apply effective methods and tools for its solution.
B4: Select the most appropriate methods and tools for the solution to a given problem.
B5: Analyse a simple problem domain, and build an effective solution to given problems in that domain.
B6: Integrate and evaluate information and data from a variety of sources.
B7: Demonstrate and exercise independence of mind and thought.
B8: Reflect on the professional and ethical issues surrounding web computing development and use.

c) Practical Skills

The most useful practical skills, techniques and capabilities developed are:

C1: Analyse, design, build and test solutions to increasingly complex and varied web based computing problem domains.
C2: Use a range of tools, techniques, knowledge and technologies in the development of web based computing applications.
C3: Design and build high quality web based computing applications with appropriate multimedia components and database support.
C4: Use appropriate techniques and tools to support effective management of the development and operation of web based software systems.
C5: Manage the development of a web based computing system and evaluate the effectiveness of the system and development process.

d) Transferable/Key Skills

The student will be able to:

> D1: communicate information, ideas, problems and their solution, in both written and oral form.
>
> D2: manage their time and resources efficiently.
>
> D3: work effectively both individually and as a member of a team.
>
> D4: exercise initiative and personal responsibility.
>
> D5: learn independently using a diverse range of resources.
>
> D6: evaluate and criticise their own learning experience.
>
> D7: apply appropriate mathematical skills to the design, building and testing of systems.

## 5.3    Programme Structure

| Year 1 | | | | | |
|---|---|---|---|---|---|
| S1 | EN0407 Web Technologies | CM0435 Interface Design and User Experience | CM0427 Introduction to Multimedia Programming | CM0429 Relational Databases | CM0439 Computer Graphics and Visual Communication |
| S2 | | CM0438 Introduction to Content Management Systems | | | |

| Year 2 | | | | | |
|---|---|---|---|---|---|
| S1 | CM0513 Dynamic Internet Technologies | CM0581 Application Development for Mobile Devices | CM0571 Professional Software Engineering Practice | CM0576 User Experience Design | LI0524 New Media Marketing | Option |
| S2 | | | | | | |

| Year 3 |
|---|
| PROFESSIONAL PLACEMENT (Engineering and Environment) EE0500 |

| Year 4 | | | | |
|---|---|---|---|---|
| S1 | CM0645 Individual Project | EN0610 Professionalism and  Web Case Project | CM0665 Web Application Integration | CM0673 Experimental Design for Interactive Applications |
| S2 | | | | CM0677 Cloud and Web APIs |

## 5.4    Module Information

A full and detailed breakdown of the modules on the programme can be found at
https://www.northumbria.ac.uk/study-at-northumbria/courses/web-design-development-ft-uuswdd1/#modules

## 5.5    Learning Teaching and Assessment Strategy

The programme aims to provide students with a wide range of learning opportunities in an exciting, challenging, stimulating and dynamic quality learning environment.  The programme learning outcomes are aligned with module learning outcomes and the learning methods applied to address the module learning outcomes are specified in module descriptors. Students have a variety of learning opportunities, e.g.  including lectures, seminars, tutorials, practicals, research, case studies, online using the eLP, guest / expert input and task based learning in guided and independent study modes. The variety includes methods for individual as well as group learning. Students are encouraged to develop independent learning skills and techniques in Level 4 and these will be used increasingly in levels 5 and 6. Students will be supported in their skills development in each module. At levels 5 and 6 students are increasingly expected to incorporate critical analysis and critical evaluation into their learning. Students will be

supported in developing these skills throughout the programme. The development of transferable skills permeates the whole of the programme, particularly with regard to communication and presentation of the results of investigations in a web design and development environment.

The subject matter is continuously developing, evolving and changing and as a result students will be expected to keep up to date with developments through independent research. The input from guest speakers (practitioners and industry experts) will contribute to the currency of the subject material.

The assessment methods used in the programme aim to reflect the wide range of teaching and learning practices, and diversity of subject matter across the discipline of Computing and the subject domain of web design and development. Assessments are designed to align with the module learning outcomes and assess the learning outcomes of each module in the most appropriate way whilst ensuring a full-range of assessment methods across the programme.

Whilst learning and the measurement of learning will be linked closely to assessment, it is hoped that the learning environment and learning opportunities presented to students will encourage students to be motivated to learn for educational reasons, and not simply to pass summative assessments. The aim is to avoid surface learning and focus on the need for learning opportunities that elicit a deeper more reflective learning response from students.

## 5.6  Feedback

Formative assessment (this is not marked but rather is designed to help you improve your work) and feedback is incorporated into modules wherever appropriate and students are encouraged to participate in formative activities through linking those activities to PDPs and using the formative activities to develop the skills, techniques and expectations of summative assessments. Summative assessment methods include assignments, exams, technical reports, case study analyses, presentations, portfolio and project work.

## 5.7  Student Feedback

Student Representatives are elected in Induction Week.  Being a Student Representative is a responsible task and one that is important, not only to help the University operate effectively, but also to make sure that you and your fellow students are getting the best experience possible whilst at Northumbria.  The students in your Year Group elect the Student Representatives for the coming academic year.  The Reps' commitment will be to gather 'issues and ideas' from fellow students and feed these back each semester at Staff Student Liaison Committee (SSLC) meetings with the Year Tutors and Programme Leader and at Programme Committee Meetings with the Programme Management Team.  The results of such discussion between the Reps and programme team may then be auctioned as appropriate, and results fed back via published minutes and through the Reps.

The main role of the Student Rep is to represent the students in the Faculty on programme related matters at the programme committees, however their role need not be limited to participation in programme committees, nor need they wait for the committee to meet to act on any issues affecting the student body.  They can represent students at various meetings in the Students Union, including the Student Council as well as the annual General Meeting.

## 6  Examiner Information

The university has a rigorous process of internal and external moderation of modules which acts to ensure procedures are followed and assessments are appropriate and marked fairly and accurately.

An internal moderator is appointed for each module whose role is to ensure that the assessments and procedures are followed, this is then followed up by an external examiner who is a subject specialist from another university who further ensures that the modules are correct and appropriate for each level with regards to the assessment and the students' work.  This helps to ensure the modules you study are current and at the correct level.

The external examiners for this programme are

- Mrs Sukhvinder Hara, Middlesex University
- Professor Peter Smith, University of Sunderland

# 7    Placement Opportunities

You will have the opportunity to undertake a year-long paid placement in their third year of your study. A dedicated Placement team based in the Faculty is there to offer support in all stages of the placements process. Both the placement team and the University Careers Service can help with CV preparation and checking as well as interview techniques.

# 8 Programme and Assessment Schedule

## 8.1 Course Dates 2015/2016

| Semester One | | |
|---|---|---|
| Welcome/Induction Week | Monday 14 September to Friday 18 September 2015 | 1 week |
| Teaching Weeks | Monday 21 September to Friday 11 December 2015 | 12 weeks |
| December Congregation for courses completing after June Examination Boards | Monday 7 & Tuesday 8 December 2015 | 2 days |
| **Winter Break** (student self-directed time) | Monday 14 December 2015 to Friday 1 January 2016 | 3 weeks |
| Assessment Weeks | Monday 4 January to Friday 15 January 2016 | 2 weeks |
| Semester Two | | |
| Teaching Weeks | Monday 18 January to Friday 18 March 2016 | 10 weeks |
| **Spring Break** | Monday 21 March to Friday 8 April 2016 | 3 weeks |
| Teaching Weeks | Monday 11 April to Friday 28 April 2016 | 2 weeks |
| Assessment | Tuesday 3 May to Friday 20 May 2016 | 3 weeks |
| Final year results published | Friday 24 June 2016 | 1 day |
| Summer Award Congregations *(provisional)* | Wednesday 7 July to Tuesday 13 July 2016 | 1 week |
| Reassessment Period | Monday 22 August to Friday 26 August 2016 | 1 week |

Students must note the above dates and ensure their availability to fulfil all academic requirements for their programme of study.

Source: Course Dates 2015/2016 -
https://www.northumbria.ac.uk/sd/central/ar/spa/dates/dates1415/

## 8.2 Assessment Schedule

**The 2015-16 Level 6 (final year) Assessment Schedule for this programme can be found with this handbook.** This should include when assessments will be given out and submission dates. *Please note that this schedule is provisional and subject to potential changes.*

To help your study during the academic year it is **essential** that you make a note of **all** assessment submissions dates to help you plan your workload.

# 9 Absence Monitoring

Attendance is monitored via use of swipe cards in scheduled teaching sessions (e.g. in workshops). These allow registers to be created per class which are used to monitor attendance. If students are found not to be attending they will be contacted to determine the reason. If there is a problem causing poor attendance it may be that the University can help. Experience shows that that good attendance helps students to pass and do well.

Please note that continued non-attendance can result in the student being asked to leave their programme of study.

# 10 Resources and Laboratories

Specialist software for use on the BSc Web Design & Development programme includes:

- Adobe Creative Suite 5 including Adobe Photoshop, Adobe Dreamweaver, Adobe Illustrator, Adobe Fireworks, Adobe Flash Professional, and Adobe FlashBuilder amongst other components.
- Apache webserver and PHP 5 installation
- Code editors such as PHPEdit and Scite

The software used on this programme is available in several labs on the ground floor and second floor of Pandon building as well as in parts of the Pandon Basement Open Access Area.

# 11 Professional Bodies

The programme has Chartered Institute Professional (CITP) accreditation from the British Computer Society (BCS).

# 12 Other Programme Specific Information

Programme Information:

https://www.northumbria.ac.uk/study-at-northumbria/courses/web-design-development-ft-uuswdd1/

Northumbria Students' Union (NSU) is here to make sure you have the best experience possible. NSU is one of the largest and most exciting Unions in the country and that's all because of YOU. We represent you, the student, on all levels, on the issues students are concerned about; receiving a great academic experience, being very employable when you graduate, being safe on campus and in the city and having a fantastic time while a student.

NSU is run by students for students. You can have your say in what NSU does and how it is run, by contacting your Sabbatical Officers or by coming along to Student Council

**MEMBERSHIP:** As a student of Northumbria University you are automatically a member of the Students' Union. We also sell NUS Extra Card from the Students' Union at both Coach Lane and City Campus giving you discounts in shops and online, but you don't need one to use any of our services.

**DIVERSE:** Your Students' Union is a place which brings together students from all walks of life, all parts of the country and the world and many different cultures. NSU provides lots of opportunities for you to Get Involved, make lasting friendships, increase employability and have FUN!

**INDEPENDENT:** NSU is independent of the University, with its own staff, services and decision-making structure. Run by students for students, providing the best services and opportunities for students we push for change from the University to deliver for students. Find our more at our You Said, SU Did page. If you need advice about academic appeals or other issues, we can help. Check out the Advice Page.

**VALUE:** Your NSU offers the best value for money, and everything you spend goes straight back into the Students' Union to fund all the activities that we run for you.

If you would like more information check out the website www.mynsu.co.uk or come and see us at our offices in City, Coach Lane and London.

∗∗∗

The libraries at City Campus and Coach Lane provide access to a wide range of print and electronic resources including over half a million print books, over 700,000 eBooks and more than 50,000 electronic journals. More details can be found on the University Library website: http://library.northumbria.ac.uk/home

 **City Campus Library** (number 14 on City Campus map) is housed near the Student Union building (number 30 on City Campus map).
**Coach Lane Library** is situated on the East Side of the Campus, in F Block (number 16 on Coach Lane Campus map).

City Campus library is open 24/7 during term time and from 9am to midnight during vacation times. Coach Lane library is open 7am until midnight (Monday to Friday), 9am until midnight (Saturday and Sunday). Opening hours are prominently displayed in the foyers of the library buildings, any changes are advertised on the Library website and on social media. Opening hours vary during bank holidays and are subject to change, so please check before you travel.

You will need to keep your smartcard with you to gain access to and leave the libraries. Your Smartcard is a universal card which not only gives access to the Libraries and other University buildings, but it also allows you to print, copy, scan, borrow books and make cashless payments.

The Library Catalogue can be accessed on and off-campus through the University Library website and the dedicated catalogue computers on each floor of both Libraries. The catalogue can be used to search for books and eBooks located in the University Library. It is quick and easy to use and will give you the information you need to locate the material on the shelves or read online. eBooks can be read on and off-campus, anytime, anywhere. NORA can be used to search for, and retrieve, up-to-date scholarly materials including articles, reports and statistics that are relevant to your studies. You can browse through all the online resources relating to your subject in one place including databases, journals and websites.

Students are entitled to borrow up to 15 items at any one time. Items can be issued using the self-issue machines on the ground floor of City and Coach Lane Libraries. You can renew your library books online through the MyLibrary section of MyNorthumbria or via the Library Catalogue.

Northumbria students can use other libraries such as the Robinson Library at Newcastle University and Newcastle City Library using the SCONUL access scheme. For more information see the Library SCONUL information page: http://library.northumbria.ac.uk/sconul-holiday

The Northumbria Skills Programme is a comprehensive skills programme designed to develop the key skills you need to succeed at university and beyond provided by the Library. It runs throughout the year and provides classroom style skills sessions on many topics including academic writing skills, giving accomplished presentations, and referencing your work correctly, as well as regular drop in surgeries. Some sessions are bookable; simply consult the timetable on the Northumbria Skills Programme website: http://library.northumbria.ac.uk/skillsdev-nsp

Skills Plus is the Library's collection of online learning materials, with a focus on digital literacy and study skills that can be accessed on and off-campus. Using these resources is an excellent way to develop your skills through a range of online tutorials with quizzes, video demonstrations and printable help guides. http://nuweb2.northumbria.ac.uk/library/skillsplus/topics.html?l3-0

If you need help or advice, on or off campus, you can contact Ask4Help. The Ask4Help service provides you with help and support to access a range of University services including Library, Disability Support, Student Finance and Careers. The quickest way to find answers to some of the most popular questions asked by students is to look at Ask4help online. You can also contact us by phone and speak to a member of our dedicated enquiry team or email us your questions.

www.northumbria.ac.uk/ask4help
ask4help@northumbria.ac.uk
0191 227 4646