



# Programme Specification

## WTM-2018: Web Technologies and Digital Media

---

LU Foundation Degree in Science awarded by Lancaster University (FHEQ Level 5)

LU Bachelor of Science with Honours (Top-up) awarded by Lancaster University (FHEQ Level 6)

Programme Status: Approved | Version: 1

## Introduction

This programme specification provides a summary of the main features of the Web Technologies and Digital Media programme and the learning outcomes that you as a student might reasonably be expected to achieve and demonstrate on successful completion of the programme.

Further detailed information related to this programme and the College can be found in the following resources:

- Programme Handbook
- B&FC Student Handbook
- B&FC Admissions Policy
- Work based and placement learning handbook (for foundation degrees)
- Student guide to assessment and feedback

## Key Programme Information

<b>Programme Code</b>	WTM-2018
<b>Programme Title</b>	Web Technologies and Digital Media
<b>Teaching Institution</b>	Blackpool and The Fylde College
<b>Professional, Statutory and Regulatory Body (PSRB) Accreditation</b>	None
<b>UCAS Code</b>	
<b>Language of Study</b>	English
<b>Version</b>	1
<b>Approval Status</b>	Approved
<b>Approval Date</b>	01 December 2017
<b>JACS Code</b>	
<b>Programme Leader</b>	Christopher Willitts

## Programme Awards

<b>Award</b>	<b>Award Type</b>	<b>Level</b>	<b>Awarding Body</b>
LU Foundation Degree in Science	Foundation Degree (240 credits)	Level 5	Lancaster University
LU Bachelor of Science with Honours (Top-up)	Honours Top-up Degree (120 credits)	Level 6	Lancaster University

## Programme Overview

Web Technologies and Digital Media are pervasive in our increasingly connected lives, we share photos on Snapchat and Instagram, keep in touch via Facebook, spread sentiments on Twitter and watch videos on YouTube. Promotions for TV and Film include interactive audio / visual experiences, we can scan QR Codes to receive offers, with augmented reality we can see virtual creatures in our own world. These are the products of creative and talented people in the digital and creative industries and you could be part of this exciting and evolving sector. The digital and creative sectors are expected to need 1.2 million new UK jobs by 2022 with the UK Digital Strategy 2017 recognising that investment in this area is increasing, an area of key economic strategic importance. We are the first college in the UK to be accredited to Honours level by the British Computer Society and are continually updating our resources to remain at the cutting edge and industry focused, giving you the best opportunities to take advantage of continued growth in the digital and creative industries and increased demand for designer and

developer roles locally, nationally and internationally.

On this programme, you will create beautiful and efficient websites using cutting-edge techniques to display on a range of devices with many of the developments in areas of your own interest to further your creativity. This will include e-commerce sites and using a range of industry appropriate skills. You will capture and produce video projects applying digital post-production techniques and building interactive video experiences. You will create sophisticated web animations controlled by your own code, develop social network prototypes and browser-based applications. Alongside the significant practical content which will develop your portfolio, there is a focus on digital marketing, entrepreneurialism, market research, user experience design (UXD) and consideration of cyber security issues. Our cutting-edge curriculum, high quality resources, friendly and skilled staff and supportive environment will give you the best opportunities to excel in the digital and creative sectors. What could you create?

Key elements of the programme include:

- You will use industry standard languages and platforms for web design and development including: HTML5, CSS3, JavaScript / jQuery / Node.js, PHP, MySQL, C# / ASP.NET, SQL Server, XML, XSD, XSLT, WordPress
- You will examine and test websites and digital content in a range of different delivery platforms and technologies for example Android, iPhone, iPads, tablets and smart devices
- You will be encouraged to be creative and develop projects within areas of your own interest including interactive video experiences, web animations, graphical work, e-commerce platforms and social network prototypes
- You will explore evolving career opportunities in the digital and creative sectors including Social Media Manager, and User Experience Designer by analysing industry trends, marketing in the digital and creative sector and entrepreneurialism
- You will gain general software engineering skills including working with databases, sharing data between distributed components of applications, requirements gathering, producing technical designs and working to established development methodologies and developing and testing interfaces all of which increase the range of careers you can pursue both in and out of web technologies and digital media
- You will build a portfolio including websites, web applications, web animations and interactive video experiences, internet app techniques and social network prototypes, providing to employers and clients evidence of your abilities and aptitude for key development roles
- You will work in team projects and individually, building collaborative and problem solving skills which will enhance value to future employers and develop yourself both personally and professionally
- You will analyse organisational structures in the industry and development teams, and build entrepreneurial skills so if you wish to set yourself up as a freelance developer you will be well placed to do so and create your own opportunities

## Admission Criteria

Entry requirements for the FdSc. Web Technologies and Digital Media are as follows:

A minimum of 64 UCAS points in an appropriate discipline (this is the equivalent of 160 UCAS point on tariffs prior to 2017 entry).

Applicants who are able to demonstrate relevant work/life skills or knowledge will also be considered on an individual basis.

Those applicants who do not hold GCSE Maths / English at C, or equivalent qualifications, we will strongly encourage and support those students to pursue a Maths / English qualification alongside the main programme.

## Career Options and Progression Opportunities

Career opportunities that graduates of this programme could successfully pursue include:

- Web Designer
- Web Developer
- Interface / UX Designer
- Mobile Application Developer
- Digital Media Developer
- Social Media Manager
- Graphic Designer
- Cross-Platform Developer

There are also opportunities for becoming freelance or creating a start-up and these are explored throughout the programme, most prominently in 'Entrepreneurial Management and Project Control'.

## Programme Aims

Aims FdSc:

- To provide students with a range of web development and digital media cognitive abilities and skills including analysis of systems, software and code.
- To develop skills in web application development; including design, implementation and testing; enabling students to formulate decisions and develop web applications and apps.
- To foster creativity in digital media production, preparing students for working in interdisciplinary teams and producing innovative content.
- To support collaborative teamwork and leadership skills through team-based development projects working to industry-standard practices.
- To support students in building a commitment to lifelong learning and career development through industry-focused scenarios, work placements, career focussed tutorials, and personal and professional development planning.
- To build students' communication, information and digital literacy skills using a range of assessment approaches in web development and digital media.

Aims BSc (Hons):

- To develop knowledge and skills to enable students to formulate managerial and strategic decisions in the development web applications and digital media.
- To provide the opportunity to accurately deploy established techniques of critical analysis and enquiry in web development and digital media.
- To develop conceptual understanding that enables students to devise, develop and sustain arguments, using ideas and techniques from research and the wider subject discipline.
- To enable students to manage their own learning and to make use of scholarly reviews and primary sources.
- To build students' ethical, social and professional understanding in web development and digital media within a global context.

## Programme Learning Outcomes

### Level 5

Upon successful completion of this level, students will be able to:

1. Investigate and discuss industry relevant technologies and theories utilised in the design, development and testing of digital media products.
2. Analyse the social, legal and ethical aspects of the design, development, testing and evaluation of digital media products and implications of their use in contemporary society.
3. Calculate and apply geometry, vector-based, trigonometric, and other techniques in 2D spaces in a range of digital media applications.
4. Produce appropriate documentation which analyses the design, development and testing of digital media products, which considers particularly the relationship between these stages and their impact on the final product.
5. Communicate information in a variety of formats to a range of audiences using a range of media that evidences both academic and digital literacy skills.
6. Work effectively as an individual and as a member of a team undertaking critical self-appraisal to support continued professional development, employability, lifelong learning and transferrable digital and academic skills.
7. Analyse, design, develop and test digital media products, applying industry-relevant concepts, principles and practices to solve appropriate problems.

### Level 6

Upon successful completion of this level, students will be able to:

8. Propose solutions, ideas, concepts or arguments both collaboratively and independently continually applying critical judgement while exercising relevant techniques and transferrable skills throughout the production of digital media products.
9. Utilise convergent and divergent thinking to produce effective solutions to relevant, contemporary industry-related problems through observation, investigation, speculative enquiry and visualisation.
10. Critically appraise the impact of professional, economic, social, environmental, moral and ethical issues involved when designing, developing, testing and evaluating digital media products, applying professional, ethical and legal practices.
11. Undertake critical self-appraisal and manage own learning and development identifying the need for continuing professional development and lifelong learning.
12. Produce work including problem identification, analysis, design, development, testing and critical evaluation of an intricate digital media product, demonstrating the reasoning behind the proposed solution and the relationship between the different stages of the development life cycle.

## Programme Structure

Module	Level	Credits	%	Category	Description	Length/Word Count	Grading Method
<b>Stage 1</b>							
B4SCWTM: Introduction to Academic Study (Mandatory)	4	20	60%	Coursework: Other	Written piece and reflection	2000	Letter Grade
			40%	Practical: Other	Case study, analysis, interpretation (1500 words) and poster presentation (15 minutes)	15	Letter Grade
WTM401: Markup Languages and Styling (Mandatory)	4	20	40%	Coursework: Other	Requirements Gathering and Front-End Web Design and Justification	1500	Letter Grade
			60%	Coursework: Other	Web Development, Testing and Emerging Front-End Technologies Report	2500	Letter Grade
WTM402: Database Concepts and Communication (Mandatory)	4	20	30%	Coursework: Other	Relational Database design	1500	Letter Grade
			40%	Coursework: Other	Relational Database implementation and reflective report	2000	Letter Grade
			30%	Coursework: Other	XML implementation and reflective report	1500	Letter Grade
WTM403: Video Production Fundamentals (Mandatory)	4	20	30%	Coursework: Other	Scripting and storyboarding video content with justifications.	1500	Letter Grade
			70%	Coursework: Other	Developing video content using industry standard procedures, and reflective practice.	3000	Letter Grade
WTM404: Scripting Fundamentals (Mandatory)	4	20	40%	Coursework: Other	Interface designs, functionality planning and application of contemporary practices	1500	Letter Grade

WTM404: Scripting Fundamentals (Mandatory)	4	20	60%	Coursework: Other	Construction of website prototype implementing a range of scripted features and reflective report.	2500	Letter Grade
WTM405: Front End Graphic Design (Mandatory)	4	20	30%	Coursework: Other	Theoretical concepts of digital graphics	1000	Letter Grade
			70%	Coursework: Other	Creation of graphical assets to specification	3000	Letter Grade
<b>Stage 2</b>							
B5WTM-32: Work Based Learning (Mandatory)	5	20	70%	Coursework: Report	Project	3000	Letter Grade
			30%	Practical: Presentation	Poster - Critical Reflection & Target Setting	2000	Letter Grade
WTM501: Developing Video Experiences (Mandatory)	5	20	40%	Coursework: Project	Project planning and design documentation for an interactive video product.	1250	Letter Grade
			60%	Coursework: Other	Creating, testing and evaluating an interactive video experience collaboratively using industry methodologies.	2750	Letter Grade
			-	Practical: Other	Demonstrating completed demo - Pass/Fail	30	Pass/Fail
WTM502: Content Management Systems and Plugins (Mandatory)	5	20	60%	Coursework: Other	Design, development and testing of e-commerce prototype using CMS and plugins.	2750	Letter Grade
			40%	Coursework: Report	CMS Technologies Evaluation Report.	1500	Letter Grade
WTM503: Developing Front End Experiences (Mandatory)	5	20	20%	Coursework: Other	Academic research	750	Letter Grade
			60%	Coursework: Other	Design and prototype development	2250	Letter Grade
			20%	Coursework: Other	Reflective development log	1000	Letter Grade
WTM504: Dynamic Website Development (Object Oriented) (Mandatory)	5	20	30%	Coursework: Other	Design a dynamic, database driven website with justifications.	1000	Letter Grade
			40%	Coursework: Other	Develop and test a dynamic, database driven website.	2000	Letter Grade

WTM504: Dynamic Website Development (Object Oriented) (Mandatory)	5	20	30%	Coursework: Other	Comparison, contrast and evaluation of dynamic website development paradigms.	1500	Letter Grade
WTM505: Digital Media Marketing (Mandatory)	5	20	20%	Coursework: Other	Investigate existing marketing strategies in live contexts.	1500	Letter Grade
			40%	Coursework: Other	Develop a Marketing Strategy.	2500	Letter Grade
			40%	Written Exam: Formal Written Examination	Digital Marketing: Case Study.	90	Percentage Grade
<b>Stage 3</b>							
CMP601: Dissertation (Mandatory)	6	40	100%	Coursework: Dissertation	n/a	8000	Letter Grade
CMP602: Human Computer Interaction (Mandatory)	6	20	60%	Coursework: Other	Iterative interface designs applying core HCI concepts to given scenarios	3500	Letter Grade
			40%	Written Exam: Formal Written Examination	Evaluation and application of HCI concepts to given scenarios	120	Letter Grade
CMP603: Developing Rich Internet Applications (Mandatory)	6	20	60%	Coursework: Other	Team RIA Development	2800	Letter Grade
			40%	Coursework: Other	Reflection and Research	1200	Letter Grade
CMP604: Entrepreneurial Management and Project Control (Mandatory)	6	20	20%	Coursework: Other	Investigation into entrepreneurial traits and managerial theories	1000	Letter Grade
			40%	Coursework: Other	Development of business plan	3000	Letter Grade
			40%	Written Exam: Formal Written Examination	Case study analysis and critical evaluation	90	Percentage Grade
WTM601: Social Network Developments (Mandatory)	6	20	50%	Coursework: Report	Cyber-psychology, social engineering and privacy concerns - case study and report.	2250	Letter Grade
			50%	Coursework: Article	Design and development of social media prototype, reflection and critical evaluation.	2250	Letter Grade

## Study Workload

Timetabling for our programmes in Computing is done to ensure that other commitments can be met, with most of our full-time HE programmes requiring one day and one evening of attendance. Where there are multiple groups, priority choice will be given to those with outside commitments, for example employment and childcare. There are many opportunities to work on assessments provided within our timetabled sessions however there will be formative and summative assessments set where you will be expected to complete work by a set deadline. Spending regular time on these activities will make this more manageable hence 'little and often' is an approach we take.

Most summative deadlines are set for Sunday night to enable weekends to be spent on finishing work. The expected volume of independent study is on average 152 hours per module, which equates to 9.5 hours per week. Often students find that this is a high expectation, however through engagement with our formative assessments and direction, building up work over time and improving skills, students find the workload manageable and succeed from a diverse range of backgrounds.

Time allocated for your career development will provide you with an opportunity to focus on applying your learning and experiences to the development of graduate attributes, your professional practice and career intentions. A range of self-paced digital resources to support work based and independent learning will also be made available to you on your VLE.

## Programme Delivery: Learning and Teaching

We have various approaches to ensuring that course content is delivered in the most effective way including: a wealth of multimedia resources so you can work at your own pace; supported workshops to aid you in coding, debugging, problem solving, and enhancing work; lectures, class discussions and analysis of case studies to introduce students to new concepts, theories and techniques, and to help in building your understanding of theoretical content; team projects worked to established development methodologies (Agile / Scrum) to build your collaborative working skills and increase your value to employers; clear building of academic skills, employability and graduate skills, with a focus on reflective practice to enhance your personal and professional development; and approachable and friendly staff with an open door policy and individualised support so that students and employers can feel welcome and comfortable in asking questions, gaining feedback and making progress

The content is regularly updated to ensure that you are working with current software tools, coding practices and deploying to current platforms. There are specialist rooms containing high-spec machines and dual monitors to help you develop web applications and digital media in an industry relevant environment. We also have equipment and workspaces for video production including a green screen.

In addition, we review and adjust our teaching practices to best suit particular group dynamics and feedback that is received during module delivery to ensure that you have the best experience.

## Programme Delivery: Assessment

We provide regular formative assessment opportunities giving you the chance to submit drafts and practice tasks to gain feedback to improve. We employ digital submission and feedback so that you can refer back to previous assessments to reflect upon progress and build confidence for future assessments. Assessments include a mix of written reports, design documentation, maths quizzes, created assets, source code / web application demos, reflective writing and other methods will be employed in coursework so you have a wide range of skills both academic and practical. Graded assessment submissions are balanced throughout the academic year so that you can manage their workload effectively. Written exams will include application of theories to given scenarios and analysis of case studies; targeted revision and mock exams will aid you in preparing for these.

The assessments will include development of work which you can use to build a portfolio; this will include a responsive web app in HTML / CSS / JavaScript; development of a rich internet application; an interactive video experience; interactive web animation; and a social network prototype. The Dissertation will include a development in an area of your own choice which could take advantage of a number of evolving digital media technologies.

Design and development assessments will include open-ended elements so that you can creatively pursue areas of interest.

We are also in liaison with multiple industry figures and this provides opportunities for live briefs, supported projects, checking of real-world scenarios for assessments and improving our curriculum

## Programme Delivery: Work Based and Placement Learning

At level 5 there is an emphasis on the nature of contemporary work based learning opportunities that can occur in different contexts in terms of where you are in your professional career or learning journey. The practice of work based learning relates to your academic and professional development to prepare you for graduate employment and career development.

We recognise that for some students, work-based learning will be linked directly to their employment or a structured work placement, for others, it may relate to a specific live-brief or scenario which has been co-created with an employer. Your work-based learning experience may fall in to one of the following categories or it could be a combination of all three.

**Learning through work:** structured work placements or internships undertaken for a minimum of 30 hours (equivalent to a 5-day industry placement) as part of the module to provide you with an experience of an employment situation where the work you undertake will provide a key source for your learning, including remote working and work undertaken in non-employed settings i.e. volunteering

**Learning at work:** if you are employed in an appropriate setting and your subject discipline is embedded in the workplace.

**Learning for work:** live work-based project which involves employers in the commissioning of industry briefs, projects or research. Similar to learning through work, it provides you with a work-based experience of your industry, where the work you undertake will provide an opportunity to connect theory and practice to work-based learning.

### Work-based learning activities

There are a variety of work-based learning activities which you can engage, including (where required) work placements. In order for you to learn from your experiences it is recommended that you should engage in a minimum of 30 hours of work based learning activities. These activities can include:

- Researching a company or organisation a student may wish to join as an employee
- Attending a careers interview, job application and interview skills
- Understanding the job market, skills and attributes sought by employers.
- Developing a graduate employability profile e.g. LinkedIn
- Career planning, professional development and target setting
- Evaluating role and responsibilities in the workplace
- Incorporating formative and summative feedback in to professional and academic targets

You can discuss the range of activities available to you and these can be incorporated to your learning experience with your Work-based Learning Module Tutor and Progress Tutor.

## Programme Delivery: Graduate Skill Development

These are the skills that you will develop as a graduate to prepare you for your career and how this programme helps you develop these:

- **A commitment to lifelong learning and career development**
  - Personal and professional development planning throughout the programme so that you can plan for career and skills development including post-graduate study or career opportunities
- **Collaborative teamwork and leadership skills**
  - Team based projects working to established methodologies (Agile / Scrum) will aid you in communicating with team members, assuming leadership roles where appropriate, managing group dynamics and working collaboratively towards common goals
- **Personal and intellectual autonomy**
  - We support your development of independence in academic and practical skills through the levels of the programme, culminating in the self-managed Dissertation project where you will be responsible for managing your own extended project
- **Ethical, social and professional understanding**
  - Mapping of course content to British Computer Society criteria for Chartered IT Professionals ensures you have industry recognition from the UKs computing professional body
- **Communication, information and digital literacies**
  - You will develop your use of digital resources such as searching, blogging, messaging, use of wikis and collaborative environments and cloud storage which are valuable in all industries
- **Global citizenship**
  - Localisation concerns for interfaces will be covered so you can build an awareness of how to operate effectively in a global industry
- **Research, scholarship and enquiry skills**
  - The Dissertation will be led and managed by you in an area of your own choosing including significant research and development with limited supervision; this will enable you to independently research unfamiliar concepts effectively
- **Enterprise and entrepreneurial awareness and capabilities**
  - The Entrepreneurial Management and Project Control module will analyse in detail entrepreneurial traits and case studies and you will be applying business planning skills so that if you wanted to become a freelance developer or create your own digital media start-up then you will be well placed to do so and create your own opportunities

## Study Costs: Equipment Requirements

There is no requirement for students to purchase equipment, as there are several resources on campus however it would be advantageous for you to purchase a computer as some of the software is demanding and you will be able to spend more time on work outside of campus hours.

Students looking to purchase hardware should consider that as a minimum it should be able to support the recommended specifications of the latest Adobe Creative Cloud version. Most mid-high range desktops / laptops are in the region of £400 - £1,000. However, it pays to shop around and speaking to some of our staff could help you in getting best value. Many students prefer to bring their own laptops into college and accessing the network through Wi-Fi to save them from transferring files and we encourage this, however this is a personal choice. Software is available to students from the College and there are many discounted subscriptions available, including student pricing for Adobe Creative Cloud.

It is advantageous throughout this programme to invest in web hosting with which to work on website projects and build an e-portfolio which you could show to potential employers and clients. The college provide limited hosting available for development work internally however we encourage you to seek out a suitable external hosting package to further your career development.

When planning Dissertation projects, consideration must be given to what is available in Computing to assess feasibility. It might be the case that you wish to pursue emerging technologies that we do not have and so you may wish to undertake personal investment.

## Study Costs: Additional Costs

There may be opportunities for field trips to conferences, exhibitions or for other interests. This is done so through negotiation as new venues / locations / trips must be Risk Assessed and approved. There is often room in the budget to subsidise costs so discounted contributions can be made yet this will depend on many factors, including entry fees / travel.

## Related Courses

Other programmes offered by Computing include the Software Engineering (App Development) which shares many modules with this programme but focuses instead on software engineering practices and more 'under the hood' disciplines including native iOS and Android development. The Software Engineering (Game Development) variant includes the production of 2D and D games using industry standard APIs with custom code and also with licensed engines such as Unreal. The Network Engineering programme includes specialist streams in Systems Administration and Cyber Security which embeds Cisco CCNA content.

We also have a range of specialist degree apprenticeship routes through our Tech Partnership accredited Digital Technology Solutions programme with Network Engineer, Software Engineer and Cyber Security Analyst pathways. These programmes require employment in a related sector / job role due to the integrated work-based nature of the programmes.

This programme provides opportunities for postgraduate study at other institutions; areas include Digital Media, Web Development, Mobile Application Development, E-Business and Communications as well as broader digital and creative disciplines. Our partners Lancaster University are very well respected in Computing and innovative technologies particular in the area of distributed systems and cyber security.