



MSc Web and Mobile Development Technologies (Part-Time)

London Campus

Level of study: Postgraduate

Mode of study: Part-time

Duration: 2 years (16.5 weekends)

Overview

Technology is one of the greatest agents of change in the modern world and it represents a significant opportunity and risk for businesses of all sizes. Developers play a central role in how we interact with the online world and employment in the IT industry is expected to grow at nearly 5 times the UK average over the next decade (CIO, 2015).

The demands of our global, data-intensive, knowledge-based economy are creating a skills gap and making now the perfect time to gain the skills necessary to meet demand.

Northumbria University s part-time MSc Web and Mobile Development Technologies is taught by industry experts around leading-edge content and is designed to give you the knowledge and expertise to fill this gap.

Key facts

Part-time Masters degree based in Central London

- Continue working while you study with lectures delivered on 16.5 weekends throughout the 2-year course, with supporting online or face to face tutorials as required
- Build a firm grounding in strategic web development skills and mobile development
- Learn how to manage and utilise the opportunities emerging technologies create
- Undergraduate degree not essential for entry
- Also available full-time

Course information

Level of study: Postgraduate

Fee (UK/Home): £9,250

Entry requirements: minimum 2:2 undergraduate degree from a recognised university in a relevant field, ideally with

work experience . Mode of study: Part-time

Duration: 2 years (16.5 weekends) **Assessment methods:** Coursework Scholarships or bursaries: unavailable

Student finance: available Payment plan: available

About this course:

What will I study?

Our part-time MSc Web and Mobile Development Technologies provides a firm grounding in strategic web development skills, with a specific focus on mobile development. This programme also includes a module on the Internet of Things providing you with the required skills to help you join any industry investing in this multi-billion dollar sector.

Blending hands-on training with academic rigour, our programme will enable you to develop the lifelong skills needed to rise to the challenge and opportunity of emerging technologies and engage in the 'bleeding edge field. An area that is notoriously high risk and has an increased potential of unreliability.

Alongside the Internet of Things, you will study the core skills required to gain a deep understanding of contemporary web development, industry practice and analysis which forms the basis of next-generation technologies. This programme also focuses on mobile development and web development skills you need to engage and succeed in the cutting edge of technology.

During the programme, you will also develop independent research skills to manage risk and identify, recommend and deploy relevant technologies both now and in the future. Throughout the course, you will study with a diverse group of like-minded IT professionals, share ideas, and build upon your professional network.

How will I be taught and assessed?

- Fit your studies around your work and personal life, with a **blended delivery** pattern, where you will have 50% of teaching delivered in-person and 50% online
- Assessments include modular assignments and a final dissertation, with no exams.
- All taught lectures are delivered on 16.5 weekends spread throughout the 2 year period, with approximately 30 hours of taught content per module.
- You will also be expected to engage in self-directed learning and reading, around 170-182 hours per module.
- Extensive student support in and outside of the classroom. We have a dedicated delegate support team based in London to assist you throughout your programme and arrange one-to-one sessions with our experienced faculty.

Related reading

Meet your Programme Leader, Usman Butt.

Web and Mobile Development reading:

- MSc Web and Mobile Development Technologies New IoT Module
- The State of I.T Today
- The Most In Demand Jobs In Computing & I.T

Part-Time study:

- Q&A: What to Expect From Our Part-Time Masters Learning Advisor Service
- MSc Cyber Security Class Profile (Part-Time) 2016/17
- Your Step By Step Guide For Applying To Applying For a Part-Time Masters
- What Financing Options Are There Available For Part-Time Study?
- Investing In Employees: Corporate Sponsorship in Higher Education
- Infographic: Options For Financing Your Part-Time Masters

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Entry requirements

Academic entry requirements

- Minimum 2:2 undergraduate degree from a recognised university in a relevant field (IT/Computer Science/related field)
- Ideally some relevant IT/Developer experience

Non-standard entry requirements

• 3 years demonstrable IT, software or development experience and/or a professional qualification

International entry equivalencies

We accept a wide range of international qualifications. Please visit our <u>entry requirements</u> page for country-specific qualifications.

Please note that if your qualifications are not in English, we might need certified translations in order to proceed with your application.

Please note: we are not currently able to sponsor international students to study this programme. If you require sponsorship to study as an international student, this course will unfortunately be unavailable to you. For an alternative option, have a look at our full-time MSc Web and Mobile Development Technologies programme.

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Modules

All modules on this course are core and 20 credits unless otherwise stated.

Web Engineering

This module enables you to understand, learn and develop with emerging web engineering techniques and standards. By the end of the module you will be able to:

- demonstrate an understanding of specific technologies, methods, skills and concepts in developing and deploying systems relating to web design and authoring
- identify user requirements in multi-platform, multi-device web development;
- analyse the requirements, compare and formulate solutions to address them in design and test implemented solutions against test scenarios.
- Demonstrate knowledge of web standards, system frameworks and protocols.
- Specify and critically evaluate their practice and implement reliable, optimised, and future-proof web applications using industrial-strength platforms.
- Critically evaluate and apply ethical, accessibility and usability issues relating to data-driven web authoring.

UX/UI Theory, Experience and Development

Learn how to succeed in front-end engineering through the application of User Experience. By the end of the module you will be able to:

- demonstrate knowledge of UX/UI theories
- design principles and technologies and have a deep appreciation of the benefits and problems associated with UX/UI and the development of interactive systems.
- demonstrate knowledge of legislation and standards relevant to UX/UI, and recognise and be able to apply UX/UI
 standards and guidelines to the development of responsive/interactive systems.
- explain usability criteria and how it can be effectively measured.
- use UX/UI design principles to design/model a solution to a problem.

- apply knowledge of cognitive and socio-psychological theories to the design, implementation and evaluation of UX/UI.
- select and apply appropriate UX/UI evaluation techniques.

Mobile App Development

This module will enable you to model, design and implement native mobile applications. The module learning outcomes that are addressed by the assignments are:

- demonstrate knowledge and understanding of fundamentals and theories of mobile communication technologies.
- ability to make correct choices for the key tools, platforms and techniques enabling the development of mobile apps for specific business requirements. For example, use Eclipse IDE with the Android emulator as a productive development environment to write and run Android applications – and show understanding of Android features and able to exploit the Android developer s SDK.
- exploit hardware features available on a variety of devices to support mobile application development and deployment.
- effectively evaluate and use external services and resources to support mobile application development and
- Demonstrate understanding of quality assurance procedures and techniques in the context of mobile application development and deployment.

Please note there is an additional cost to this module of \$25* to host an application on Google Play as part of an assignment.

*subject to change

Cloud Computing

This module will provide you with in-depth coverage and understanding of fundamental concepts, principles and technologies in Cloud Computing through the use of industry-leading technologies together with an appropriate distributed processing environment. The module will cover a number of topics including distributed computing, hardware infrastructures, software infrastructures, data centre facilities and virtualization. The module will also enable you to critically analyse the emerging cloud computing techniques and their ability to meet the rapidly developing demands of cloud infrastructure. The concepts introduced in lectures will be reinforced with the help of extensive handson use of commercial cloud provider technologies e.g. Amazon (AWS), Microsoft (Azure), Google.

Web & Mobile Application Security

The aim of this module is to provide you with the understanding and skills needed to identify security risks in web applications and mitigate those risks by writing secure code. The module will enable you to develop understanding and analytical skills for the most critical/up-to-date web application security risks using professional security techniques e.g. OWASP.

You will also learn the practical skills and mitigation strategies to secure the risks. Define and discuss common website/mobile security risks. Be able to remotely identify vulnerabilities in web applications. Demonstrate and employ practical skills/practices to secure discrete units of code and explain native web browsers security defences. Apply the principles of information security in a practical setting. Undertake appropriate automated scanning and detection of risks. Design and model security models and be able to systematically evaluate the implications in a specific context.

Internet of Things

This module will give you the opportunity to understand the technologies behind the Internet of Things, e.g. embedded systems, distributed computing, operating systems, network protocols, programming frameworks and cloud computing. The module covers technologies and modern business trends of the IoT utilizing Amazon cloud, typical IoT applications, architectures, network protocols, application programming and data analytics. A key point of the course is an understanding of IoT through hands-on activities including practical demonstrations and lab sessions. Students will also have the opportunity to design and implement applications for the Internet of Things applications using Raspberry Pi on the Amazon Web Services IoT platform.

Please note: An additional cost of £50-100 for IoT Kits may also apply for this module.

Research Methods and Final Project Preparation (0 credits)

The aim of this unit is to provide learners with the experience of undertaking a substantial piece of research related to the modules studied. It will require you to develop, consolidate and apply your independent research, academic study and research project management skills to the investigation of a topic of your own choice that is relevant to your programme of study, your workplace or your future career aspirations.

MSc Computer Science and Digital Technologies Project (60 credits)

The aim of this module is to enable you to undertake a substantial academic research project at the Masters level and present the results from this work in both written and oral forms. Your project itself will be a major piece of independent and original research centred at the forefront of your programme discipline within the wider sphere of the computer science and digital technologies field.

You will experience the full life cycle of a research project from initial conception and development of a research proposal, through a critical review of the literature, planning, design, implementation and analysis of your main research project, to final evaluation, reflection and dissemination. You will be expected to consider and address the professional, ethical, legal and social issues related to this academic research project. You will also be expected to apply your expertise, project management and practical skills within your particular domain of computer science and digital technologies and demonstrate critical and innovative thinking and problem-solving within a research environment.

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The course information displayed on this page is correct for the academic year 2023/24. We aim to run the course as advertised however, changes may be necessary due to updates to the curriculum (due to academic or industry developments), student demand or UK compliance reasons.

Fees and finance

Tuition fees 2024/25:

• £9,250

Please note that your tuition fees do not include the cost of course books that you may choose to purchase, stationery, printing and photocopying, accommodation, living expenses, travel or any other extracurricular activities. As a Northumbria University London Campus student, you will have full access to our online digital library with over 400,000 e-books and 50,000 electronic journals.

The modules you will study do not require you to purchase additional textbooks although we recommend you allow an additional £200-250 for the duration of your studies should you choose to purchase any additional reading materials.

Please note there is an additional cost to host an application on the Google Play store of \$25 (subject to change) as part of the compulsory Module 3: Mobile App Development.

An additional cost of £50-100 for IoT Kits may also apply for the "Internet of Things" module. What's included in your tuition fees?

Your tuition fees cover far more than your time in class with our expert academics, it covers the cost of providing you with excellent services and student experience.

- Contact time in class typically in lectures, seminars and tutorials
- Access to facilities, including computers, on-campus Wi-Fi, printers, vending machines, quiet study spaces
- The support of our Careers & Employment Service who help you to become more employable, secure placements and run workshops
- Academic support our ACE Team run multiple sessions on academic writing, presenting, exam techniques throughout the semester, as well as 1-2-1 appointments and drop-in sessions
- Student support services such as our Ask4Help Service. Find out more about the services available to you on our Student Support page
- Access to online resources, including 24/7 Library with over 400,000 e-books and 50,000 electronic journals.

Payment plans

We offer an interest free monthly payment plan available to all self-funded students after payment of your deposit.

Please note that self-funded students are required to pay a deposit of £2,450.

Scholarships

For more information on scholarship opportunities, please contact us today.

Government Loan for Masters study

If you are a UK/Home student, you may be eligible for a postgraduate loan of up to £10,000+ from the UK Government. Click here to find out more about the loan and whether you are eligible to receive it.

Payment plans and PGL

Early Application Discounts

Our Early Application Discount is awarded to you when you submit your application and holding deposit, before the deadlines specified on our **dates and fees page**. The discount is applied to your remaining fees after you pay your full deposit. This discount cannot be used in conjunction with any other offer – please contact us for more details on eligibility.

Enquire now

How to apply or find out more

How to find out more

Enquire now to find out out more information about the course, studying with us, the application process, and to ask any other questions you may have.

Enquire now

How to apply

Once you re ready to apply, you can apply online to study the part-time MSc Web and Mobile Development Technologies. This method allows you to upload your supporting documents at the time of application and automatically receive your student application number.

We strongly recommend that you submit your application as early as possible to allow you to complete all of the preparations needed to study your programme. Please refer to the **Dates and Fees** page.

You can check more information on how to apply here, including guidelines for the application forms.

Information For Disabled Applicants

At Northumbria University London we welcome applications from disabled students and are committed to ensuring an equal and accessible application journey. Your application will be considered on an equal basis to all other applications. Please contact us if you require any assistance. This website is continually optimised to adhere to accessibility best practice guidelines; tools to assist users with specific accessibility requirements have also been provided. More information is available in our accessibility statement.