



MSc Computing and Technology with Advanced Practice

London Campus

Level of study: Postgraduate

Mode of study:

Duration: 16 - 24 months

Response to Covid-19: Our focus is on providing a safe and welcoming learning environment and ensuring continued access to learning.

As a result of the coronavirus (Covid-19) pandemic and resulting social distancing requirements, we are intending to teach this course using a mix of on-campus and online learning activities. We continue to be guided by the Government to ensure our campus is Covid-secure. More information about our <u>response to Covid-19 and FAQs are available here.</u>

All information is accurate at the time of sharing. Courses starting in 2021 are offered as a mix of face to face and online learning. We continue to monitor government and local authority guidance in relation to Covid-19 and we are ready and able to flex accordingly to ensure the health and safety of our students and staff. Contact time is subject to increase or decrease in line with additional restrictions imposed by the government or the University in the interest of maintaining the health and safety and wellbeing of students, staff, and visitors, potentially to a full online offer, should further restrictions be deemed necessary in future. Our online activity will be delivered through Blackboard Ultra, enabling collaboration, connection and engagement with materials and people.

Overview

The MSc Computing and Technology with Advanced Practice programme is designed specifically to enable you to update, extend and deepen your knowledge in computing and IT and wider digital leadership and technology subjects, in order to enhance and accelerate your career opportunities.

This Masters programme has been designed in consultation with partners from the industry to ensure you learn up-todate computing knowledge required by employers across the industry. Graduates from the programme will be equipped to work in a variety of careers in the IT industry or to progress to academic or research-orientated careers.

The Advanced Practice option integrates an Internship, Group Consultancy Project or Research Project into the Masters programme, offering the opportunity to spend three months gaining all-important work experience and employability skills in a professional work setting.

Key facts

- Enhance your knowledge in the application of programming language, big data and software life cycle modelling
- Learn how to develop an innovation strategy whilst assessing associated risks and innovation capabilities in an organisation
- Develop your business intelligence and leadership capabilities
- The Advanced Practice includes an Internship, Group Consultancy Project or Research Project, enhancing your employability with all-important work experience
- Upon graduating, opt to further develop your skills and employability with Professional Pathways programmes through one of the UK's leading IT and project management training providers, QA

Course information

Level of study: Postgraduate

Fee (UK/Home): £11,400

Fee (International): £19,000

Entry requirements: Minimum 2:2 honours degree, or equivalent IELTS 6.5, with no single element below 5.5, or

equivalent.

English language requirements: IELTS 6.5, with no single element below 5.5 or equivalent

Mode of study:

Duration: 16 - 24 months

Assessment methods: Coursework **Scholarships or bursaries:** available

Student finance: available Payment plan: available

Starts: Jan, May, Sep,

About this course:

What will I study?

The central theme of the programme is to develop you as digital leader, and in support of this throughout the programme you will engage in a range of modules designed to develop your competences in areas such as Digital Leadership, Information Governance and Cyber Security, Innovation in Business & Technology, Software Engineering and Database Analytics.

This programme is also available as <u>MSc Computing and Technology</u> which lasts for one year. Alternatively, you can study the <u>MSc Computing and Technology Part-Time</u>.

As you progress through the programme you will develop as a well-rounded and outward looking professional capable of taking responsibility for, and effective leadership of, computing and technology projects and people, capable of making good decisions and improving the performance of yourself, your people, your areas of responsibility and your organisation.

The programme recognises that as a computing professional you are required to develop competences in a range of specific computing techniques alongside softer skills in areas such as leadership, communication, problem solving and commercial reasoning. By successfully completing your programme you will have not only have demonstrated mastery of these skills but alongside the development of your personal practice your ability to impact on personal and organisational performance. It is the combination of these factors that will advance your personal development and enhance your career opportunities.

The programme will cover the following languages:

- Web Technologies such as HTML, CSS and JavaScript
- Object Oriented Programming languages such as Java
- Database and Data Analytics- SQL, MySQL, and data analytics software (e.g. Tableau, etc.)

Advanced Practice stage

The Advanced Practice version of this course offers you a valuable opportunity to secure a 12-15 week internship, Group Consultancy Project or complete a Research Project, giving you experience of the workplace environment or live computing issues, and an excellent way to put your learning into practice.

This stage of the programme will take place between your second and final semester, and is a semester long (15 weeks) in duration.

The full duration of your programme will depend on your start date:

- **September start dates:** your programme will last up to 21 months. You will have a summer break after Semester 2, and commence your Advanced Practice stage in September.
- January start dates: your programme will run for 24 months. You will commence your Advanced Practice stage in the following January. Please note there are two summer breaks included in this programme for those starting in January.

• May start dates: your programme will run for 16-18 months. There is no summer break included in this programme for those starting in May. Your Advanced Practice stage will commence in January.

The programmes are structured as below:

	Sept-Jan	Jan-May	May-Sept	Sept-Jan	Jan-May	May-Sept	Sept-Jan
September	Semester 1	Semester 2	Summer	Advanced	Final semester		
starts			break	Practice stage			
January starts		Semester 1	Summer	Semester 2	Advanced	Summer	Final
			break		Practice stage	break	semester
May starts			Semester 1	Semester 2	Advanced	Final	
					Practice stage	semester	

How will I be taught and assessed?

- Teaching is delivered through mix of lectures, workshops, labs, seminars and tutorials 10-12 hours per week
- You re expected to engage in independent study, aroun&0-32 hours per week
- Assessment includes coursework, critical report writing, practical exercises, individual, group and research project work.
- Taught by **experienced lecturers and academics** who use their industry experience to demonstrate how theories translate into real-life situations.
- **Technology-enhanced** learning is embedded throughout the course to guide your preparation for seminars and independent research
- Benefit from weekly academic support sessions designed to build your ability and confidence as an academic learner
- You will be assigned a guidance tutor at induction who you will meet with regularly during your studies

Careers and further study

This Masters programme has been designed to ensure that graduates from the programme will be equipped to work in a variety of careers in the IT industry or to progress to academic or research-orientated careers. Indeed, the qualification is designed to accelerate your skills and competence in a range of job roles, including roles in leadership and management in IT, Software Engineer, Database Developer, Data Analyst, Information Security professional, Business Analyst, to name but a few.

Upon successfully completing your course, you may undertake further professional development and training through Professional Pathways programmes. These are offered to our graduates for free, from our partner, QA. <u>Find out more information on Professional Pathways and your eligibility</u>.

Related reading

Meet your Programme Leader, Hassan Baajour.

Computing and Technology reading:

- Innovations in Technology 2019
- The State of I.T Today
- The Most In Demand Jobs In Computing & I.T
- Infographic: MSc Computing and IT Intake Snapshot
- 5 Steps to Your New Career in Computing and IT

Advanced Practice:

- Master Your Future: MSc with Advanced Practice
- What is a 'Masters with Advanced Practice ?
- Infographic: The Stages of a Masters with Advanced Practice
- Studying a Masters with Advanced Practice

Enquire now

Entry requirements

Academic requirements

• Minimum 2:2 (second class) honours degree from a UK university or equivalent, in any subject

If you don t meet the academic requirements

Applicants who do not meet the academic requirements but who do have substantial experience of working in a business organisation and/or possess a relevant professional qualification will also be considered. If you are unsure if you meet the entry criteria, please contact us and our team will be able to advise you.

Alternatively, you may also be eligible for our <u>Pre-Masters courses</u>. These are pathway programmes designed specifically for students who are looking to progress on to a Masters degree.

Please visit our entry requirements page for country-specific qualifications.

English language requirements

Students require IELTS 6.5 (or above) with no single element below 5.5 or equivalent.

If you have IELTS 5.5 – 6.0, you may be eligible to join our <u>Pre-Sessional English</u> before starting this programme.

Enquire now

Modules

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

Information Governance and Cyber Security

In this module, you will learn about the information governance and cyber security principles that underpin the management of an organisation s information assets. You will critically analyse the key concepts, theories, standards and frameworks of information governance and security, including risk management.

It will enable you to evaluate an organisation s current approach to information governance and cyber security. You will have the expertise to advise on the design and implementation of an appropriate strategy for managing an organisation s information (ensuring all assets meet legal, regulatory, organisational and/or societal needs for information governance and

Leadership in a Digital Age

In this module, you will develop new knowledge and skills in leadership in a digital context. You will conduct a self-analysis of your own leadership and team management competencies and identify strengthens and areas of improvement.

Leadership and team management capabilities are essential for your career development. They enable you to become competent at the visioning, development and deployment of technological strategies and responses to challenges and opportunities in complex operating environments.

Principles of Software Engineering

In this module, you will develop new knowledge and skills in Software Engineering, apply them, and critically analyse the implementation and recommend potential future improvements. Such knowledge and skills are particularly beneficial for a career in roles where you are required to architect, develop and deliver complex software systems from agreed specifications by employing industry-standard conventions and tools.

Database and Analytics Principles

In this module, you will develop new knowledge and skills in data analytics, apply them in your own context, critically analyse the implementation and recommend potential future improvements. Such knowledge and skills are particularly beneficial for a career in areas such as business analytics, business intelligence, data analytics and data science.

Innovations in Business and Technology (20 credits)

In this module, you will develop new knowledge and skills in Managing Technology Innovation, apply them and critically analyse how innovation in its various forms affect business competitiveness and recommend potential future improvements. This module prepares technologists and specialists to be innovators within their own organisation, enabling them to contribute or lead future internal transformation or entrepreneurial initiatives.

Research Methods for Professional Practice

This module is designed to ensure you have the skills and knowledge to complete a postgraduate research project which is relevant to Computing and Technology and career or future aspirations. As such, in the early part of your studies, you will work closely with careers and professional development specialists to consider your career or future learning opportunities post completion of your degree. You will subsequently develop a career plan and reflective log considering how your learning from the programme can accelerate the achievement of this plan.

Academic Language Skills for Computer and Information Sciences (0 credits)

The aim of this module is to support your study, language and communication skills for academic purposes in the study in your chosen discipline. The module is designed to enable you to become an independent learner. The module is supported by a teaching and learning plan which outlines the formal sessions, together with the tutor-directed study and independent reading. Interactive seminars will be tailored to address some of the specific issues that you meet within your discipline. Directed learning will require a range of activities including pre-reading, preparation for interactive activities and use of the e-learning platform. You will be expected to identify those skills which you need within your programme, and to develop these independently through a range of learning activities that might include extended reading and reflection.

Engineering and Environment Advanced Practice (60 credits)

The Advanced Practice module is designed to deepen your knowledge and enhance employability in your specialist field. The module provides you with the option to either undertake a work placement, complete a group consultancy project or join a research group for one semester as part of your programme.

This experience gives you the opportunity to apply skills and knowledge acquired during the taught part of your programme and to acquire new skills and knowledge in an alternative learning environment. Specific learning will be defined in a personal learning contract.

You will have the option to complete one of the following:

- A Group Consultancy Project
- An Internship
- Research project

MSc Computing and Digital Technologies Project (60 credits)

The aim of this module is to enable you to undertake a substantial academic research project at 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.

Enquire now

Fees and finance

Tuition fee 2021/22

• UK/Home students: £11,400

• International students: £19,000

Tuition fee 2022/23

• UK/Home students: £12,075

• International students: £19,500

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.

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 <u>Student Support</u> page
- Access to online resources, including 24/7 Library with over 400,000 e-books and 50,000 electronic journals.

Scholarships and bursaries for international students

Depending on the country you are from, you may be eligible for a country bursary and/or scholarship when studying this Masters programme.

All of our scholarships and bursaries are automatically applied when we process your application and one of our team will be able to confirm your eligibility.

Scholarships and bursaries

Payment plans for self-funded students

If you need support to spread the cost of your tuition, you may be eligible for our payment plan.

Payment plans

Government Loan for Masters study

If you are a UK or 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.

Postgraduate Loan

How to apply or find out more

How to find out more

Enquire now to find 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 MSc Computing and Technology with Advanced Practice. This method allows you to upload your supporting documents at the time of application and automatically receive your student application number.

Apply online

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 <u>Dates and Fees</u> page.

If you re unable to apply online, then you cardownload a PDF application form and send it to london.admissions@northumbria.ac.uk.

Supporting documents

For us to assess your application in a timely manner, it is important that you provide us with the following documents:

- Fully completed application form
- Personal email address must be included on the application form
- Transcripts and/or certificates (including a certified translation if not in English)
- Passport copy of personal details page
- Proof of financial sponsorship if applicable
- Details of two referees
- Confirmation of immigration history including copies of previous and current visas if applicable
- An attached CV is desirable

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