

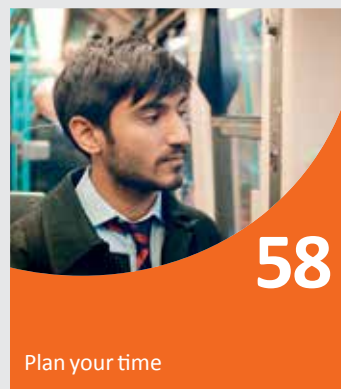
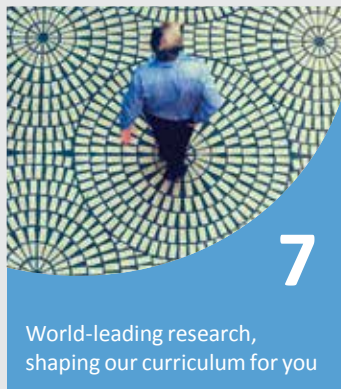
Computing and IT

Prospectus 2016/2017



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Welcome

The most important thing you'll learn is what you're capable of

Hello and welcome to The Open University (OU). Are you as excited about changing your life as we are about welcoming you as a student? We believe there's never been a better time to join us.

Every year, thousands of people just like you decide to start studying with us. Our whole philosophy is based around recognising the importance of flexible, part-time study, and finding ways to make that study more accessible to anyone who has the drive and desire to learn in an increasingly competitive world.

With the OU you're guaranteed outstanding value. Our qualifications are up to date and commercially focused, ensuring that new skills and knowledge gained as you work towards your goal are put into practice immediately.

We've established strong alliances with employers as a result of the flexible way we deliver our qualifications, and our learning methods are respected and appreciated by employers and students alike.

We've opened up the world of higher education for anyone who wants to improve their life. We take your goals seriously, and we are here to help you make the right choices. We're the market leader for people who need studies to fit around busy working lives and family commitments. That's why we're so confident the OU is the right choice for you.

"If you're in two minds as to whether or not the OU is for you, the only thing I can say is do it. You won't regret it!"



Lindsay Dow,
studied with the OU

Life-changing learning

that's built around you



Experience and expertise

Many of our tutors are not only academic experts, they're also still working in their relevant industry.

Every day, someone, somewhere, is picking up the qualification they need to help fill the growing skills shortage in the computing and IT sector. You can be that person.

We recognise people like you, who are determined to succeed.

Getting an OU qualification in computing and IT will give you a unique edge in the workplace and help you develop a very personal and individual outlook on the world.

Like thousands of other people looking to study with the OU, you've got something in common – you're eager to learn and improve yourself.



"I transferred my course materials to my iPad, Kindle and laptop – that way they were always with me when I had a moment free."

Karl Hamilton,
studied with the OU

We're confident we're the right choice for you. Here's why:

1. The support you need

We know you'll be giving it your all. So we'll give you the freedom and personal support you need to study your course, and get a qualification, your way.

2. The qualifications employers respect

Our qualifications have such an excellent reputation all over the world, you can be confident your life will change for the better thanks to studying with the OU.

3. The knowledge you want

Highly experienced tutors and quality resources that are second to none. You just can't get the same combination of expertise, materials and methods of learning anywhere else.

4. The technology that works

When it comes to finding new technologies that make your life and studying even easier, we never stand still. You can guarantee we'll stay ahead of the game on your behalf.

5. Life-changing learning

What we offer is a personalised learning experience, one that's been designed to fit in with careers and personal lives, and change your life forever.



“The OU is unlike most red-brick universities, it’s unique in a very precious way – it gives opportunity and flexibility to anyone who wants a higher education, no matter what their social and financial limitations.”

Fatema Islam, studied with the OU

You can do this – we know you can

We won’t pretend it’s easy, but you can be sure there’s no other university in the world that supports you the way we do. We’re pioneers in the method of distance learning, making The Open University truly unique.

We’re in the best possible position to give you all the help you’ll need to achieve your study goal, and make every moment of your studies worthwhile.

Simply choose your course, and change your life today

Whichever qualification you choose, you’ll be studying a curriculum that’s internationally relevant, which has been created and is taught by academics with industry insights and lifetimes of experience – people whose insights and research are out of this world.

We believe our courses are incomparable

We’ve forged unique partnerships with some of the world’s most influential thought leaders, the BBC being the most widely known. Our joint ventures educate the world, receive outstanding reviews, and give us access to people who

bring relevant, practical knowledge to guide our research and shape the course content you’ll be studying.

From the materials in our undergraduate degrees to OpenLearn courses that anyone can access free of charge – all you have to do is take the first step. It’s all here for you, and because we’re committed to delivering our materials using some of the most up-to-date digital technologies, it’s all unbelievably accessible.

World-class resources

The Open University has more online library resources than any other university in the UK.

Reassuring credentials

Global employers and skills councils help us create our courses, so you’ll learn what’s actually needed to enhance your career.

Groundbreaking innovation

We never stand still. We’re developing new ways of learning all the time, to make your studying easier wherever you may be.

Highest standards
Just under 90% of the FTSE 100 have sponsored staff on OU programmes.

Excellent support
Our students all have their own tutor for each subject module – each tutor supports about 20 students.

Computing and IT

The future is digital, and it's all yours



Find out more about what an OU qualification in Computing and IT could mean for you. Go to www.openuniversity.co.uk/careers.



There's never been a better time to get into the digital industries, and to improve your qualifications in a bid to stay ahead of the technology game.

Undergraduates – making a difference today

This is an incredibly fast-paced sector. Organisations want employees just like you – people who'll show initiative, go the extra mile, and seek out far better levels of understanding in computing and IT.

Businesses are also far more demanding these days, so your qualifications really do have to be the best. Don't worry, you can trust us to make sure your studies will be relevant and up to date.

Postgraduates – staying ahead for tomorrow

If you're committing to gaining a postgraduate qualification with the OU, we know you'll be balancing your ambitions for tomorrow with your career and life today.

You can relax, gaining a postgraduate qualification in computing and IT with the OU means you'll be in an excellent position to play an influential role in shaping the industry, and your career.



A practical way to learn, from the best possible tutors

Whichever qualification you'd like to gain, you'll be supported by expert academics who are still very much engaged in active careers. Terms like 'groundbreaking', 'cutting edge' and 'world class' are accurate for education of this quality.

Our undergraduate and postgraduate qualifications involve an excellent combination of practice-based skills development, professional theory, and technical understanding. We've created our course materials with the help of outstanding leaders in the field, and it's a subject area that's rich in content and potential.

Whatever your aims are (a career in information technology, data science, or related fields perhaps), rest assured, you'll be exposed to influential disciplines and fields of expertise.

Achieving your goals – we're with you all the way

OU study stands out on a CV. It demonstrates that you have the initiative and determination to succeed, attributes employers are looking for. It's also ideally suited if you're just fascinated by a subject, and want to fit world-class studies into an already busy working life.

These are typical of the careers our students can pursue after gaining qualifications in computing and IT:

- API developer
- IT systems manager
- Database administrator
- IT networking consultant
- Video programmer
- Software engineer
- Systems analysts and designer.

The right qualifications

Our honours degrees in computing and IT are accredited by BCS, The Chartered Institute for IT. In whole or in part, they meet the educational requirement for Chartered IT Professional (CITP), and in some cases, they can count towards Chartered Engineer (CEng). To gain BCS accreditation, you have to complete your undergraduate degree in a six-year window.

In addition, some of our modules are developed alongside well-known industry partners, including Cisco. Our courses are not only enlightening – they're up to date and relevant too.

Many of our postgraduate qualifications are also recognised by professional bodies, which helps you gain entry to organisations such as:

- The Association for Project Management (APM)
- The Information Systems Examination Board (ISEB)
- The Chartered Quality Institute (CQI).

The flexibility to learn in your own way



Consistent quality

We're one of only 3 universities to consistently achieve over 90% for student satisfaction in the National Student Survey.



Exclusive access

As an OU student, you'll have access to world-class library resources, whenever you need them.

With the OU, you have the flexibility you need to make your studies fit in around life's other commitments. We call it 'Supported Open Learning'.

Our teaching method is unique

You'll have more one-to-one contact than you'd have with other types of distance education and more flexibility than campus-based learning.

Our academics are respected the world over and you'll have access to all the latest research through the OU library.

What's more, if there's a new type of technology around or a better way to do things, you can guarantee we're already testing it on your behalf.

Always independent, never alone

You'll have opportunities to take part in tutorials, and we'll make sure you've got everything you need – whether you're studying from home, at work, or on the move.

As soon as your course starts we'll also put you in touch with a Student Support Team who can help you with any concerns about your studies.

Whatever you decide to study, you'll find like-minded students connecting with each other in our online forums – pretty much 24 hours a day.

We have a vibrant student community

We're here to help you every step of the way. In fact, people are often surprised by how social we are as a community – and our forums are alive with people just like you, whenever you log on, whether it's a module discussion group or one of the many informal Facebook groups set up by students.

Students Association

All students gain automatic membership to our strong and active Students Association – run by students, for students. You'll have the chance to influence University decisions, meet fellow students and develop new skills. To find out more go to

www.openuniversity.co.uk/ousa.

You can also join the conversation at:

- Facebook.com/OUstudents
- Twitter.com/OUstudents
- Instagram.com/OUstudentslive

Need a little extra help?

Last year the OU supported over 22,000 students with disabilities or additional needs. So if you have any additional requirements, we'll do our best to make your studies accessible. We're only a phone call away, and we'll also be supporting you online and via email.

To find out if you qualify for extra financial help with study and travel costs, see page 64, call us on **+44 (0)300 303 5303** or go to **www.openuniversity.co.uk/disability**.

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[Twitter.com/openuniversity](https://twitter.com/openuniversity)

World-leading research

shaping our curriculum for you

Computing and IT studies underpin some of the most exciting and forward-thinking research we're involved in here at The Open University. We're excited at the idea you may be joining us, because we never know who's going to bring that unique spark and thirst for discovery to us next.

Case study: Digital dog days

As a Research Fellow in the OU's Computing Research Centre, Dr Clara Mancini set up our first university research programme into Animal-Computer Interaction – developing a suite of tools to support medical detection dogs in various tasks.

Among the tools Dr Mancini and her team developed was a dog-friendly switch that pets can use to operate lights or doors. The team also created a tool that lets a diabetes-alert dog call for help if a human partner becomes incapacitated following a hypoglycaemic attack.

Future plans for these tools are to link them with wireless appliances, and make the world of digital technology an even more welcome presence in many people's homes.



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Undergraduate study

Whether you simply have an enquiring mind, or want to learn more about this fast growing field in order to change career direction or improve your prospects, the OU offers a wide choice of qualifications to meet your needs.

How undergraduate study works

To achieve your chosen qualification, you need to build up a set number of credits.



You gain credits by completing a series of modules.
Credits vary by module.



You choose the modules you want to study, year by year.
Depending on your qualification, some modules may be compulsory while others may be selected from a set of options.

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Getting started with an Access module

Access modules are designed to improve your confidence and refresh your study skills. You could even study for **free**.

They're also a great way to explore a subject that interests you and for getting an overall feel of what it's like to learn with the OU.

Access modules give an excellent insight in to the way we offer Supported Open Learning: you'll have a personal tutor providing regular feedback through one-to-one telephone tutorials and further support throughout your study.

Each module offers a range of materials, online quizzes, and course assignments that you'll complete over a period of 30 weeks. It takes around nine hours of study each week to stay on track.

You'll always get detailed written feedback on your work. And when you get that OU Access Module Certificate at the end of the course, you'll be well prepared to continue your studies towards a qualification.

Access modules start in February and October, every year.

Should I start with an Access module?

If you'd like to brush up on your study skills, improve your confidence, and make a practical decision about whether or not Supported Open Learning is right for you – then yes, an Access module is the ideal starting point.

And if you have little or no experience of university-level studies, then an Access module is a perfect introduction to what's needed, what you'll have to do, and how you'll study via distance learning.

What do I need to begin my studies?

After registering you'll receive your study materials in the post.

As well as access to a phone and equipment that plays DVDs, you will need the use of a computer with internet access. You don't need to go out and buy one though, the use of one at a library or drop-in centre will be fine.

Which Access module should I study?

The following Access module is linked to one or more qualifications we offer in computing and IT.

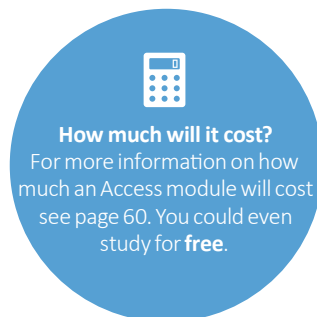
Science, technology and maths Access module (Y033)

This module introduces you to a technically oriented range of subjects, including science; engineering and design; environment; mathematics; and computing and IT. As the foundation for further studies in these fields, this is the ideal module to explore mathematical and scientific ideas and techniques.

We offer two other Access modules, which are more relevant to other subject areas:

Arts and languages
Access module (Y031)

People, work and society
Access module (Y032)



Undergraduate qualifications

Registration for the 2016/2017 academic year opens for all undergraduate qualifications on 11 February 2016. Qualification start dates are based on the start date of the first applicable module(s) you can study as part of your qualification.

The qualification descriptions in this prospectus list the modules that are currently available for study. However, as we review our curriculum on a regular basis, the exact selection may change over time.



BSc (Hons) Computing and IT

Computing and IT skills have become fundamental to the way we live, work, socialise and play. This degree opens up the world of technology and an array of exciting careers in a wide range of sectors – from finance, government, health, education and the ‘third sector’, to business, gaming, and commerce.

It will help you to become a confident user and manager of information technologies; to administer and manage network or database systems; and to develop new software solutions to meet specific market or organisational needs. A choice of routes through the degree will enable you to concentrate your studies on computer science, digital technologies, software development, web development, or networking.

Total credits: 360
Code: Q62

Start date:
Oct 2016
(registration closes 08 Sep 2016)

Feb 2017
(registration closes 05 Jan 2017)

Module availability is subject to change

Career relevance and employability

This degree will give you a sound grasp of the principles of hardware-based, software-based, or systems-based technologies – and the ability to apply your knowledge and skills in a broad range of industries and organisations. Depending on your choice of modules, you’ll gain the skills to prepare you for employment in software engineering, communications, networks, or web technologies. You’ll acquire highly valued transferable skills in communication, time management, numeracy, and analysing and solving problems. You’ll also experience working in a team to tackle an appropriate development task, and produce a project to demonstrate your ability to undertake a substantial piece of work.

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Connected for life

Our vibrant OU Alumni Association has over 360,000 members connecting and networking.



“It is hard, make no mistake, and you have to be prepared to work hard and to put in the hours, but I’ve been saying to people that the OU is a really good way to study when you’re working.”

Anita Dumbrell,
OU student

Stage 1

120 credits required

Stage 1 of the degree is common to all routes. It will give you an understanding of concepts, techniques, and issues encountered in computing and IT.

You’ll learn about topics such as programming, networking and operating systems, and develop key employability skills. You’ll also be studying some mathematics to provide a foundation for your later studies. The modules are: *My digital life* (TU100) – hands-on experience of programming, and the rapid technological and social changes associated with information technology; and either *Discovering mathematics* (MU123) or *Essential mathematics 1* (MST124) depending on your experience and confidence with mathematics (to help you decide which, go to mathschoices.open.ac.uk); and *Technologies in practice* (TM129) – sample some practical

information technologies – Linux, networking and robotics – and gather evidence of your developing skills in an ePortfolio.

Module summary CREDITS CODE

Compulsory modules – 90 credits

<i>My digital life</i>	60	TU100
<i>Technologies in practice</i>	30	TM129

Optional module – 30 credits Select one from:

<i>Discovering mathematics</i>	30	MU123
<i>Essential mathematics 1</i>	30	MST124



Greater choice

At Stage 2, you begin focusing your degree on areas that suit your needs and interests.



Stage 2

120 credits required

At Stage 2, you begin focusing your degree on areas that suit your needs and interests.

You choose from one of the following available routes:

Computer science, Digital technologies, Networking, Software development, and Web development.

Computer science

This route provides a grounding in programming and algorithm design. If you're uncertain at the outset about exact areas you want to study, there are plenty of flexible options as you progress.

You'll begin with *Object-oriented Java programming* (M250) and *Algorithms, data structures and computability* (M269). You'll learn how to specify and design small computer programs using the Java and Python programming languages and how to take a problem, and state it precisely, in order that it can be solved with a computer.

Module summary CREDITS CODE

Compulsory modules – 60 credits

<i>Object-oriented Java programming</i>	30	M250
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<i>Algorithms, data structures and computability</i>	30	M269
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You'll then choose 60 credits from a list of optional modules, see page 14

Digital technologies

You'll begin with *Communication and information technologies* (T215) – learning about the core principles upon which new technologies are built. You'll gain an understanding of the ways in which data is stored, manipulated and transmitted; and discover how

new processes and services are transforming our lives. You'll also be introduced to the key concepts, issues, and technologies associated with online communication and collaboration.

Module summary CREDITS CODE

Compulsory module – 60 credits

<i>Communication and information technologies</i>	60	T215
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You'll then choose 60 credits from a list of optional modules, see page 14

Networking

This route provides a good basic introduction to networks, along with the opportunity to work towards industry-standard certifications.

You'll begin with *Cisco networking (CCNA)* (T216). This will give you the knowledge, understanding, and skills needed to configure a LAN/WAN using Cisco equipment (which should also leave you well prepared for the industry-standard CCNA certification examination). You'll also gain hands-on practical experience of configuring networks at four compulsory day schools.

Module summary CREDITS CODE

Compulsory module – 60 credits

<i>Cisco networking (CCNA)</i>	60	T216
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You'll then choose 60 credits from a list of optional modules, see page 14

Continued on page 14.

Stage 2

120 credits required

Software development

This route provides a detailed introduction to program design and programming (highly relevant to software analysis and design roles).

You'll begin with two modules; *Object-oriented Java programming* (M250) and *Software development with Java* (M256). You'll learn how to specify and design computer programs, and develop your programming skills using the object-oriented programming language Java. You'll use industry standard software tools such as an integrated development environment and the Unified Modelling Language (UML); and you'll also learn about the analytical techniques and processes essential for designing, specifying and implementing a software system, including a graphical user interface.

Module summary	CREDITS	CODE
Compulsory modules – 60 credits		
<i>Object-oriented Java programming</i>	30	M250
<i>Software development with Java</i>	30	M256

You'll then choose 60 credits from a list of optional modules, see right

Web development

This route provides a detailed introduction to web technologies (highly relevant to web design and support work).

You'll begin with *Object-oriented Java programming* (M250), concentrating on aspects of Java that best demonstrate object-oriented principles and good practice. Next, you'll learn how to analyse requirements, plan, design, implement, and test a range of web applications in *Web technologies* (TT284).

Module summary	CREDITS	CODE
Compulsory modules – 60 credits		
<i>Object-oriented Java programming</i>	30	M250
<i>Web technologies</i>	30	TT284

You'll then choose 60 credits from a list of optional modules, see right

Optional modules for all routes

Module summary	CREDITS	CODE
Optional module(s) – 60 credits		
Select from:		
<i>Algorithms, data structures and computability</i>	30	M269
<i>Change, strategy and projects at work</i>	30	T227
<i>Cisco networking (CCNA)</i>	60	T216
<i>Communication and information technologies</i>	60	T215
<i>IT project and service management</i>	30	M258
<i>Object-oriented Java programming</i>	30	M250
<i>Software development with Java</i>	30	M256
<i>Web technologies</i>	30	TT284

Stage 3

120 credits required

Stage 3 is common to all routes. For the final stage of your degree, you'll choose three options from the following list (bearing in mind that Stage 3 studies build on the knowledge, skills, and understanding of the subjects you studied at Stage 2):

- *Communications technology* (TM355) – looks at the underlying technologies of modern electronic communications, such as mobile data and telephony, broadband, Wi-Fi, and optical fibre.
- *Data management and analysis* (TM351) – an overview of the concepts, techniques, and tools of modern data management and analysis.
- *Interaction design and the user experience* (TM356) – in this module you will learn the importance of user-centred design, and acquire practical skills for designing the interactive products for everyday life.
- *IT systems: planning for success* (TM353) – IT systems are a critical part of our world, yet they frequently fail, often spectacularly. This module teaches skills to enable you to contribute towards successful IT systems.
- *Software engineering* (TM354) – the intellectual tools needed to design, build, and test software systems.
- *Web, mobile and cloud technologies* (TM352) – explores the technology and business aspects of cloud computing, from the underlying web infra-structure to flexible resource provisioning and leveraging cloud for mobile applications.

You'll conclude your degree with *The computing and IT project* (TM470), an individual project on a topic of your choice which you'll research, develop and write up – presenting your findings in a substantial portfolio report that you can show employers.

Module summary CREDITS CODE

Optional modules – 90 credits

Select from:

<i>Communications technology</i>	30	TM355
<i>Data management and analysis</i>	30	TM351
<i>Interaction design and the user experience</i>	30	TM356
<i>IT systems: planning for success</i>	30	TM353
<i>Software engineering</i>	30	TM354
<i>Web, mobile and cloud technologies</i>	30	TM352

Compulsory module – 30 credits

<i>The computing and IT project</i>	30	TM470
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Diploma of Higher Education in Computing and IT (W36) and Certificate of Higher Education in Computing and IT (T12)

We also offer a diploma of higher education which follows the same curriculum as Stages 1 and 2 of the BSc (Hons) Computing and IT (Q62) and a certificate of higher education which follows the same curriculum as Stage 1 of the degree.

MORE
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www.openuniversity.co.uk/q62



BSc (Hons) Computing & IT and a second subject

Computing and IT skills are hugely valued in the modern workplace; studied together with a second complementary subject, they can open up careers in a wide range of sectors, from government to gaming.

This joint honours degree offers you the opportunity to focus your studies on an area of computing and IT and combine it with either applied psychology, business, design, mathematics, or statistics – dividing your time equally between subjects. The name of your degree will reflect your chosen second subject. Organisations are critically dependent on computing technologies, and people who can apply specialist IT knowledge within the context of another discipline are in particular demand. This degree will help you establish or develop a varied and fulfilling career, and meet the needs of today's employers.

Total credits: 360
Code: Q67

Start date:
Oct 2016
(registration closes 08 Sep 2016)

Feb 2017
(registration closes 05 Jan 2017)

Module availability is subject to change

Career relevance and employability
Organisations increasingly value IT teams with wider business skills in addition to technical ability. This joint honours degree opens the way for careers in information technology, computing, communication technology, gaming, and related fields – and with a sound grounding in a second subject, you'll be well placed for roles in a wide range of sectors from government, health, education and the 'Third Sector', to business, finance, and commerce.

You'll also gain a range of valuable transferable skills in communication, time management, analysis and problem solving.

Stage 1

120 credits required

Computing & IT (all routes)

Your computing & IT studies will begin with *My digital life* (TU100), which gives you hands-on experience of designing, building and programming computers, and explores the profound technological, economic, political and ethical changes brought about by information technology.

Module summary CREDITS CODE

Compulsory module – 60 credits

My digital life 60 TU100

Stage 1 modules in your chosen second subject:

Choose from one of the following subjects: **Applied psychology, Business, Design, Mathematics or Statistics.**

Applied psychology

In *Investigating psychology 1* (DE100) you'll explore a range of fascinating psychological studies demonstrating how psychologists investigate how we think and behave – and how academic research can be applied in real-life settings.

Module summary CREDITS CODE

Compulsory module – 60 credits

Investigating psychology 1 60 DE100

Business

An introduction to business and management (B100) will introduce you to the fascinating and challenging world of contemporary business and management.

Module summary CREDITS CODE

Compulsory module – 60 credits

An introduction to business and management 60 B100

Design

Design thinking: creativity for the 21st century (U101) will teach you the essentials of the design process, and encourage you to think creatively and productively in producing design prototypes.

Module summary CREDITS CODE

Compulsory module – 60 credits

Design thinking: creativity for the 21st century 60 U101

Mathematics

Essential mathematics 1 (MST124) covers a range of techniques including calculus, vectors, matrices and complex numbers; and solving problems using specialist mathematical software. *Essential mathematics 2* (MST125) builds on the concepts and techniques in MST124.

Module summary CREDITS CODE

Compulsory modules – 60 credits

Essential mathematics 1 30 MST124

Essential mathematics 2 30 MST125

Statistics

Essential mathematics 1 (MST124) investigates recurrence relations, matrices, vectors and calculus; solving practical problems using specialist mathematical software; and how to define and communicate results. Then in *Introducing statistics* (M140) you'll learn how to use basic statistical tools and quantitative methods.

Module summary CREDITS CODE

Compulsory modules – 60 credits

Essential mathematics 1 30 MST124

Introducing statistics 30 M140

Continued on page 18.

Stage 2

120 credits required

Computing & IT (all routes)

For your computing and IT studies, you'll focus on one of five areas:

- Computer science: *Object-oriented Java programming* (M250) and *Algorithms, data structures and computability* (M269) – designing small computer programs using Java and Python programming languages; stating problems so they can be solved by computer.
- Digital technologies: *Communication and information technologies* (T215) – principles underpinning new technologies including online communication and collaboration; storing, manipulating and transmitting data.
- Networking: *Cisco networking (CCNA)* (T216) configuring a LAN/WAN using Cisco equipment (ideal preparation for industry-standard CCNA exams); configuring networks.
- Software development: *Object-oriented Java programming* (M250) and *Software development with Java* (M256) – designing computer programs; Java programming skills; using software tools, e.g. IDE and UML; designing and implementing software systems, e.g. graphical user interface.
- Web development: *Object-oriented Java programming* (M250) and *Web technologies* (TT284) – programming skills; application development processes underpinning the World Wide Web; plan, design, implement and test web applications.

Module summary CREDITS CODE

Optional module(s) – 60 credits
Select one of five options:

Computer science

<i>Object-oriented Java programming</i>	30	M250
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<i>Algorithms, data structures and computability</i>	30	M269
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Digital technologies

<i>Communication and information technologies</i>	60	T215
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Networking

<i>Cisco networking (CCNA)</i>	60	T216
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Software development

<i>Object-oriented Java programming</i>	30	M250
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<i>Software development with Java</i>	30	M256
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Web development

<i>Object-oriented Java programming</i>	30	M250
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<i>Web technologies</i>	30	TT284
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Stage 2 modules in your chosen second subject:

Applied psychology

Living psychology: from the everyday to the extraordinary (DD210) covers a broad range of psychological theories and research that relate to real-world issues. These include: love, sexuality, artificial intelligence, superstition, psychic phenomena, conspiracy theories, and psychopathy.

Module summary CREDITS CODE

Compulsory module – 60 credits

<i>Living psychology: from the everyday to the extraordinary</i>	60	DD210
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Business

You'll choose one of two modules: *Business organisations and their environments* (B201), which examines your interactions with businesses (whether as an employee, customer, or stakeholder), or, *Business functions in context* (B203), which explores the essential organisational functions of human resources; marketing; operations management; and accounting and finance.

Module summary CREDITS CODE

Optional module – 60 credits
Select one from:

<i>Business organisations and their environments</i>	60	B201
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<i>Business functions in context</i>	60	B203
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Meeting your needs
Our qualifications will help you develop a varied and fulfilling career, whilst meeting the needs of employers.

Design

Design essentials (T217) will develop skills and tools needed to research, plan and develop a design project. You'll also learn how to translate your design ideas into well-specified products.

Module summary CREDITS CODE

Compulsory module – 60 credits

<i>Design essentials</i>	60	T217
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Mathematics

You can focus on either pure or applied mathematics. *Pure mathematics* (M208) investigates group theory; linear algebra; 2- and 3-dimensional space; systems using linear equations; and analysis. Alternatively, the applied mathematics module *Mathematical methods, models and modelling* (MST210) explores how to tackle real problems by finding out how they're transformed into mathematical models and learning the methods of solution.

Module summary CREDITS CODE

Optional module – 60 credits

Select one from:

<i>Pure mathematics</i>	60	M208
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<i>Mathematical methods, models and modelling</i>	60	MST210
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Statistics

Analysing data (M248) will show you how to use specialist computer software and exploratory methods; and study models for data, estimation, confidence intervals, hypothesis testing, regression and two-variable problems. Then in *Practical modern statistics* (M249) you'll explore medical statistics, time series, multivariate analysis, and Bayesian statistics.

Module summary CREDITS CODE

Compulsory modules – 60 credits

<i>Analysing data</i>	30	M248
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<i>Practical modern statistics</i>	30	M249
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Continued on page 20.

Stage 3

120 credits required

Computing & IT (all routes)

In Computing & IT, depending upon your choice of modules at Stage 2, you can delve deeper into one of a number of topics that include mobile and cloud technologies, software engineering, human-computer interactions and data management and analysis.

In addition, all routes conclude with *The computing and IT project* (TM470). You'll research, develop and write up a project on a topic of your choice – presenting your findings in a substantial portfolio report that you can show to employers.

Module summary CREDITS CODE

Optional module – 30 credits

Select one from:

<i>Communications technology</i>	30	TM355
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<i>Data management and analysis</i>	30	TM351
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<i>Interaction design and the user experience</i>	30	TM356
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<i>IT systems: planning for success</i>	30	TM353
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<i>Software engineering</i>	30	TM354
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<i>Web, mobile and cloud technologies</i>	30	TM352
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Stage 3 modules in your chosen second subject:

Applied psychology

Counselling and forensic psychology (DD310), planned for October 2017, develops skills and knowledge in both of these professional areas, while allowing for a degree of specialisation in one. It takes an applied approach and tackles issues such as counselling vulnerable clients and working with offenders.

Module summary CREDITS CODE

Compulsory module – 60 credits

<i>Counselling and forensic psychology</i> (planned for October 2017)	60	DD310
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Final project Compulsory module – 30 credits

<i>The computing and IT project</i>	30	TM470
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On successful completion of Stage 3, you will be awarded the BSc (Honours) Computing & IT and Applied Psychology.

Business

The final business module, *Making sense of strategy* (B301), explores the origins and development of strategy as a subject, how strategy is conceived and carried out in today's organisations, and the controversies that dominate contemporary strategic debate.

Module summary CREDITS CODE

Compulsory module – 60 credits

<i>Making sense of strategy</i>	60	B301
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Final project Compulsory module – 30 credits

<i>The computing and IT project</i>	30	TM470
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On successful completion of Stage 3, you will be awarded the BSc (Honours) Computing & IT and Business.

Design

Innovation: designing for change (T317) explores how innovation comes about, how it develops, and how it is received. In particular, you'll investigate how we define and disseminate innovation, create new markets, and consume products and services.

Module summary CREDITS CODE

Compulsory module – 60 credits

<i>Innovation: designing for change</i>	60	T317
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Final project Compulsory module – 30 credits

<i>The computing and IT project</i>	30	TM470
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On successful completion of Stage 3, you will be awarded the BSc (Honours) Computing & IT and Design.



Mathematics

Your final mathematics modules will depend on whether you're focusing on pure or applied mathematics. You'll choose one or two modules from a range of options.

Module summary CREDITS CODE

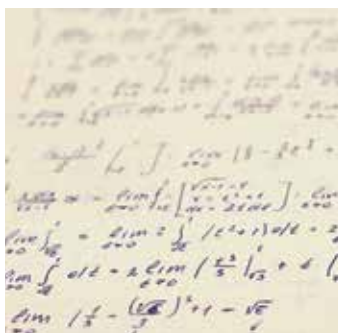
Optional module(s) – 60 credits Select from:

<i>Deterministic and stochastic dynamics</i>	30	MS327
<i>Further pure mathematics</i>	60	M303
<i>Complex analysis</i>	30	M337
<i>Graphs, networks and design</i>	30	MT365
<i>Mathematical methods and fluid mechanics</i>	30	MST326
<i>Optimization</i>	30	M373

Final project Compulsory module – 30 credits

<i>The computing and IT project</i>	30	TM470
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On successful completion of Stage 3, you will be awarded the BSc (Honours) Computing & IT and Mathematics.



Statistics

Applications of probability (M343) shows how models behind probability theory can describe occurrences of events – from an earthquake to the spread of an epidemic. Then *Linear statistical modelling* (M346) investigates situations where a response variable depends on explanatory variables – from how patients respond to a treatment, to growing strains of wheat in various conditions.

Module summary CREDITS CODE

Compulsory modules – 60 credits

<i>Applications of probability</i>	30	M343
<i>Linear statistical modelling</i>	30	M346

Final project Compulsory module – 30 credits

<i>The computing and IT project</i>	30	TM470
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On successful completion of Stage 3, you will be awarded the BSc (Honours) Computing & IT and Statistics.

Diploma of Higher Education in Computing & IT and a second subject (W42) and Certificate of Higher Education in Computing & IT and a second subject (T13)

We also offer a diploma of higher education which follows the same curriculum as Stages 1 and 2 of the BSc (Hons) Computing & IT and a second subject (Q67) and a certificate of higher education which follows the same curriculum as Stage 1 of the degree.

MORE
ONLINE



www.openuniversity.co.uk/q67

Qualifications

Computing and IT practice

Foundation Degree in Computing and IT Practice

This qualification is also available as a Diploma of Higher Education in Computing and IT Practice (W15).

The modern world depends on computers and IT systems to function. Gain the skills to work with them, and you'll open up a huge variety of careers and other opportunities – from controlling processes to interfacing with customers and suppliers.

This work-based qualification will build on the skills you already have to provide you with a broad-based foundation in computing and IT. There's a study route that will suit you, whether you want to be a confident user and manager of information technologies, to grasp the opportunities that such technologies offer, or to develop software solutions. This qualification is about acquiring skills and learning to deploy them at work, so you'll need to be in work (paid or voluntary) to complete the work-based modules. It's this vocational focus that distinguishes this qualification from our Diploma of Higher Education in Computing and IT.

Total credits: 240

Code: X15

Start date:

Oct 2016

(registration closes 08 Sep 2016)

Feb 2017

(registration closes 05 Jan 2017)

Module availability is subject to change

Career relevance and employability

This qualification will give you a sound grasp of the principles of hardware-based, software-based, or systems-based technologies – and the ability to apply them. You'll also gain valuable experience of working in a team to tackle a small development task, and acquire essential transferable skills in communication, the use of IT facilities, retrieval of information, numeracy, time management, and analysing and solving problems. You'll also be well prepared for further study should you decide to top-up to a full honours degree.

Stage 1

120 credits required

Stage 1 of the degree is common to all routes.

You'll begin your studies with *My digital life* (TU100), gaining hands-on experience of programming, and exploring the rapid technological and social changes associated with information technology.

Next, in *Career development and employability* (T122) you'll study in the context of your workplace to improve your practice.

You'll complete this stage with an optional module. Depending on your choice, you'll get a sound grounding in the fundamentals of computer networks and servers, and sample some key technologies; or develop mathematical knowledge and skills to underpin further study and enhance your employability.

Module summary CREDITS CODE

Compulsory modules – 90 credits

My digital life 60 TU100

Career development and employability 30 T122

Optional module – 30 credits Select one from:

*Discovering mathematics*¹ 30 MU123

Technologies in practice 30 TM129

*Essential mathematics*¹ 30 MST124

¹We recommend one of these modules if you study *Algorithms, data structures and computability* (M269) at Stage 2.

Stage 2

120 credits required

At Stage 2, you can choose to focus on **Computer science, Digital technologies, Networking, Software development or Web development**, with options to study complementary modules.

Computer science

You'll study the two 30-credit modules *Object-oriented Java programming* (M250) and *Algorithms, data structures and computability* (M269), learning how to specify and design small computer programs using the Java and Python programming languages; and how to take a problem and state it precisely, in order that it can be solved with a computer.

Your next module, *Change, strategy and projects at work* (T227), uses the context of your workplace to develop your understanding of the factors that drive organisational change, and the resulting consequences.

You'll also be able to study a complementary option exploring solutions development or project and service management – or you may be able to gain further credits for practice-based qualifications you've gained through your work.

Module summary CREDITS CODE

Compulsory modules – 90 credits

Object-oriented Java programming 30 M250

Algorithms, data structures and computability 30 M269

Change, strategy and projects at work 30 T227

Optional module – 30 credits Select one from:

IT project and service management 30 M258

Web technologies 30 TT284

Continued on page 24.



Stage 2

120 credits required

Digital technologies

In *Communication and information technologies* (T215) you'll learn about the core principles upon which new technologies are built. You'll be introduced to the key concepts, issues, and technologies associated with online communication and collaboration. You'll also gain an understanding of the ways in which data is stored, manipulated and transmitted, and discover how new processes and services are transforming our lives.

Your next module, *Change, strategy and projects at work* (T227), uses the context of your workplace to develop your understanding of the factors that drive organisational change, and the resulting consequences.

You'll also be able to study a complementary option exploring solutions development or project and service management – or you may be able to gain further credits for practice-based qualifications you've gained through your work.

Module summary CREDITS CODE

Compulsory modules – 90 credits

<i>Communication and information technologies</i>	60	T215
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<i>Change, strategy and projects at work</i>	30	T227
--	----	------

Optional module – 30 credits

Select one from:

<i>Algorithms, data structures and computability</i>	30	M269
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<i>IT project and service management</i>	30	M258
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<i>Object-oriented Java programming</i>	30	M250
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<i>Web technologies</i>	30	TT284
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Networking

In *Cisco networking (CCNA)* (T216) you will gain the knowledge, understanding, and skills needed to configure a LAN/WAN using Cisco equipment (which should also leave you well prepared for the industry standard CCNA examination).

You'll gain hands-on practical experience of configuring networks at four compulsory day schools.

Your next module, *Change, strategy and projects at work* (T227), uses the context of your workplace to develop your understanding of the factors that drive organisational change, and the resulting consequences.

You'll also be able to study a complementary option exploring solutions development or project and service management – or you may be able to gain further credits for practice-based qualifications you've gained through your work.

Module summary CREDITS CODE

Compulsory modules – 90 credits

<i>Cisco networking (CCNA)</i>	60	T216
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<i>Change, strategy and projects at work</i>	30	T227
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Optional module – 30 credits

Select one from:

<i>Algorithms, data structures and computability</i>	30	M269
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<i>IT project and service management</i>	30	M258
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<i>Object-oriented Java programming</i>	30	M250
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<i>Web technologies</i>	30	TT284
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Software development

In *Object-oriented Java programming* (M250) and *Software development with Java* (M256), you'll learn how to specify and design computer programs; develop your Java programming skills; and use industry standard software tools such as an integrated development environment and the Unified Modelling Language (UML). You'll also learn about the analytical techniques and processes essential for designing, specifying and implementing a software system – including a graphical user interface.

Your next module, *Change, strategy and projects at work* (T227), uses the context of your workplace to develop your understanding of the factors that drive organisational change, and the resulting consequences.

You'll also be able to study a complementary option exploring solutions development or project and service management – or you may be able to gain further credits for practice-based qualifications you've gained through your work.

Module summary	CREDITS	CODE
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Compulsory modules – 90 credits		
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<i>Object-oriented Java programming</i>	30	M250
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<i>Software development with Java</i>	30	M256
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<i>Change, strategy and projects at work</i>	30	T227
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Optional module – 30 credits Select one from:		
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<i>Algorithms, data structures and computability</i>	30	M269
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<i>IT project and service management</i>	30	M258
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<i>Web technologies</i>	30	TT284
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Web development

Web technologies (TT284) will give you an understanding of the application development processes that underpin the World Wide Web and how to analyse requirements, plan, design, implement and test a range of web applications. You'll also learn about *Object-oriented Java programming* (M250).

Your next module, *Change, strategy and projects at work* (T227), uses the context of your workplace to develop your understanding of the factors that drive organisational change, and the resulting consequences.

You'll also be able to study a complementary option exploring solutions development or project and service management – or you may be able to gain further credits for practice-based qualifications you've gained through your work.

Module summary	CREDITS	CODE
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Compulsory modules – 90 credits		
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<i>Object-oriented Java programming</i>	30	M250
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<i>Web technologies</i>	30	TT284
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<i>Change, strategy and projects at work</i>	30	T227
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Optional module – 30 credits Select one from:		
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<i>Algorithms, data structures and computability</i>	30	M269
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<i>IT project and service management</i>	30	M258
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Top-up BSc (Hons) Computing and IT Practice

If you work in computing and IT and have already completed our foundation degree or an equivalent approved by the University, this degree tops up your knowledge and skills to honours degree level, putting you in a strong position to develop a fulfilling career in information technology and related fields.

It will also enable you to engage professionally with challenges such as the specification, design, deployment, and management of computing and IT systems. You can choose from a variety of modules depending on your career goals, and complete your studies with a project on a topic of your choice – giving you practical experience of independent learning and reflective practice.

Total credits: 120

Code: Q68

Start date:

Oct 2016

(registration closes 08 Sep 2016)

Module availability is subject to change

Career relevance and employability

This degree is relevant to careers in computing and IT systems – in hardware-based, software-based or systems-based contexts. It will help you show that you have a sound grasp of the principles of these technologies; can apply these principles; and are aware of the surrounding issues. The final project will demonstrate your ability to undertake a substantial piece of work; providing a valuable showcase for your abilities and professional skills, and a solid basis for postgraduate study. On graduation, you'll be well placed for careers in information technology, computing, communication technology and related fields.

Stage 3

120 credits required

You'll start your studies by choosing three options from the following list, building on the underpinning knowledge you've developed at foundation degree level:

- *Communications technology* (TM355) – looks at the underlying technologies of modern electronic communications, such as mobile data and telephony, broadband, Wi-Fi, and optical fibre.
- *Data management and analysis* (TM351) – an overview of the concepts, techniques and tools of modern data management and analysis.
- *Interaction design and the user experience* (TM356) – in this module you will learn the importance of user-centred design, and acquire practical skills for designing the interactive products of everyday life.
- *IT systems: planning for success* (TM353) – IT systems are a critical part of our world, yet they frequently fail, often spectacularly. This module teaches skills to enable you to contribute towards successful IT systems.
- *Software engineering* (TM354) – the intellectual tools needed to design, build and test software systems.
- *Web, mobile and cloud technologies* (TM352) – explores the technology and business aspects of cloud computing, from the underlying web infra-structure to flexible resource provisioning and leveraging cloud for mobile applications.

Some of these options assume specific prior study at foundation degree level, which may limit your module choices. When you apply for this degree, you'll be advised for which options your previous study have prepared you.

You'll conclude your degree with *The computing and IT project* (TM470), an individual project on a topic of your choice which you'll research, develop and write up – presenting your findings in a substantial portfolio report that you can show employers.

Module summary CREDITS CODE

Optional modules – 90 credits Select three from:

<i>Communications technology</i>	30	TM355
<i>Data management and analysis</i>	30	TM351
<i>Interaction design and the user experience</i>	30	TM356
<i>IT systems: planning for success</i>	30	TM353
<i>Software engineering</i>	30	TM354
<i>Web, mobile and cloud technologies</i>	30	TM352

Compulsory module – 30 credits

<i>The computing and IT project</i>	30	TM470
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Qualifications

Open qualifications



Great choice

The OU's Open degree is the largest degree programme in the UK.



Freedom to learn

Our Open qualifications mean you can study at your own pace, and choose the modules that interest you most.

BA or BSc (Hons) Open degree

The BA or BSc (Hons) Open is the most flexible degree programme in the UK because you can study any subjects you like, in any combination. This means you can build a qualification that's unique to you.

The degree allows you to choose modules from any subject area so you can, for example, combine computing modules with modules from other disciplines, such as science or the humanities.

Total credits: 360

Code: QD

Start date:

Oct 2016

(registration closes 08 Sep 2016)

Feb 2017

(registration closes 05 Jan 2017)

Career relevance and employability

Highly regarded by employers, an Open degree equips you with a wide range of expertise, skills and capabilities that are much sought after in today's highly competitive job market.

An Open degree on your CV shows more than your level of knowledge about a subject. It demonstrates to employers that you're someone who is up for a challenge and committed to successfully seeing it through, with excellent time management and prioritising skills.

The skills and knowledge you acquire by studying computing and IT modules as part of an Open degree could lead to exciting employment opportunities in business and industry, as well as the public and financial services sectors – your knowledge and expertise will be equally valued in the UK, elsewhere in Europe and further afield.

How you can focus your Open degree on Computing and IT

The suggested route opposite shows how you can focus on an aspect of computing and IT, such as computer science, in combination with other subjects that are of particular interest to you. However, this is just one example of the many combinations you can study and you are not restricted to this route in any way.

Stage 1

120 credits required

You can begin your computing and IT studies with *My digital life* (TU100), which gives you hands-on experience of designing, building, and programming computers, and explores the profound technological, economic, political, and ethical changes brought about by information technology.

For your remaining 60 credits, you'll have a free choice from a wide range of OU level 1 modules across different subject areas.

Module summary	CREDITS	CODE
<i>My digital life</i>	60	TU100
Choose from a wide range of OU level 1 modules	60	–

Stage 2

120 credits required

At Stage 2, you can begin to focus on computer science, to gain a grounding in programming and algorithm design.

In *Object-oriented Java programming* (M250) and *Algorithms, data structures and computability* (M269), you'll learn how to specify and design small computer programs using the Java and Python programming languages, and how to take a problem and state it precisely, so it can be solved with a computer.

For your remaining 60 credits you'll have a free choice from a wide range of OU level 2 modules across different subject areas.

Module summary	CREDITS	CODE
<i>Object-oriented Java programming</i>	30	M250
<i>Algorithms, data structures and computability</i>	30	M269
Choose from a wide range of OU level 2 modules	60	–

Stage 3

120 credits required

You'll continue your computer science studies with two modules that build on the underpinning knowledge you've developed at Stage 2:

- *Data management and analysis* (TM351) – an overview of the concepts, techniques and tools of modern data management and analysis.
- *Interaction design and the user experience* (TM356) – in this module you will earn the importance of user-centred design, and acquire practical skills for designing the interactive products of everyday life.

For your remaining 60 credits you'll have a free choice from a wide range of OU level 3 modules across different subject areas.

Module summary	CREDITS	CODE
<i>Data management and analysis</i>	30	TM351
<i>Interaction design and the user experience</i>	30	TM356
Choose from a wide range of OU level 3 modules	60	–

Diploma of Higher Education Open (W34) and Certificate of Higher Education Open (T09)

We also offer a diploma of higher education which follows the same structure as Stages 1 and 2 of the Open degree and a certificate of higher education which follows the same structure as Stage 1 of the degree.

MORE ONLINE



www.openuniversity.co.uk/qd

Postgraduate study

Computing and IT professionals with a strong skill set are very much in demand today. By developing your knowledge and skills, postgraduate study with the OU will keep you at the forefront of this rapidly growing and influential discipline.

How postgraduate study works

You achieve a postgraduate qualification at the OU by studying a series of modules.



Modules are our units of study. To work towards a qualification, you first need to choose and register on a module that counts towards that qualification. With each module you successfully complete you'll earn a set number of credits which you build up to gain your qualification.

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Postgraduate Certificate in Systems Thinking in Practice (C72)	40
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Postgraduate qualifications

The qualification descriptions in this prospectus list the modules that are currently available for study. However, as we review our curriculum on a regular basis, the exact selection may change over time.



There's more online

To find out more about a qualification that interests you go to www.openuniversity.co.uk/pg.

Qualifications

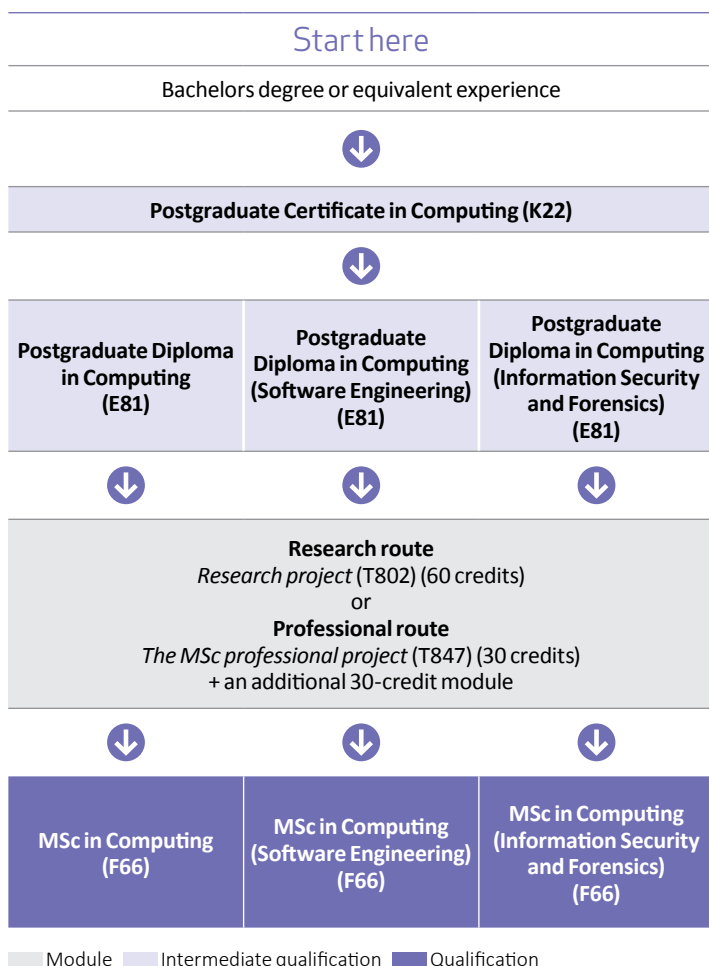
Computing

To provide you with a broad grounding in the subject, or to develop your knowledge in one of two specialist areas – software engineering or forensics – we offer industry-relevant qualifications, covering a range of topics.

The demand for staff well-qualified in computing and IT is still very high in developed countries. Most commentators and professional bodies believe that globalisation

increases the importance of employing staff with more high-level and strategic skills and knowledge, including business awareness.

Study route diagram



Planning your studies

- To start this programme, you should normally hold a UK bachelors degree, or equivalent. If you do not hold a bachelors degree, you will need to study a module from the postgraduate certificate programme to demonstrate your ability to study successfully at postgraduate level.
- There is a choice of study routes in our computing programme, enabling you to either focus on specific topics in greater depth, or study a wider range of topics and gain a broader perspective. You can gain the postgraduate diploma and MSc with one of two specialist designations – software engineering or information security and forensics.
- If you are planning to gain a specialist qualification, it is important that you consider the specific advice for studying that specialist subject – in particular the presentation dates of the modules.
- You must complete the certificate within two years, the diploma within four years and the MSc within six years.

Postgraduate Certificate in Computing

Total credits: 60 Code: K22

This is an intensive programme of study designed for graduates and professionals with appropriate industrial experience.

It will develop your knowledge and skills in computing, support a professional approach to the application of those skills, and demonstrate your capability for advanced-level study. A wide choice of modules enables you to meet your immediate career needs or extend your understanding of this broad subject.

Module summary CREDITS CODE

Optional modules – 30 credits

Select one from:

Data management 30 M816

Information security 30 M811

Project management 30 M815

Software development 30 M813

Plus an additional 30 credits from the list above or from the following:

Advanced routing – CCNP 1 30 T824

Continuing professional development in practice 30 U810

Digital forensics 30 M812

Managing systemic change: inquiry, action and interaction 30 TU812

Managing technological innovation 30 T848

Network security 30 T828

Problem solving and improvement: quality and other approaches 30 T889

Software engineering 30 M814

Strategic capabilities for technological innovation 30 T849

Thinking strategically: systems tools for managing change 30 TU811

For module descriptions see pages 48–49 or go to www.openuniversity.co.uk/pg.
Module availability is subject to change.

Postgraduate Diploma in Computing

Total credits: 120 Code: E81

This flexible diploma enables computing practitioners to pursue their career goals by gaining advanced knowledge, skills and techniques; and to develop a professional approach to the study and application of computing.

A wide choice of modules means you can tailor your qualification to the varied requirements of industry and your own career needs.

Module summary CREDITS CODE

60 credits from the following optional modules:

<i>Data management</i>	30	M816
<i>Digital forensics</i>	30	M812

<i>Information security</i>	30	M811
<i>Project management</i>	30	M815
<i>Software development</i>	30	M813
<i>Software engineering</i>	30	M814

Plus 60 credits from any of the other modules listed for the Postgraduate Certificate in Computing (K22) (see page 33)

For module descriptions see pages 48–49 or go to

www.openuniversity.co.uk/pg.

Module availability is subject to change.

Postgraduate Diploma in Computing (Information Security and Forensics)

Total credits: 120 Code: E81

This specialist postgraduate diploma has two 30-credit compulsory modules, and two optional modules from the remaining computing and computing-related curriculum.

The compulsory modules are designed to give you in-depth, specialist knowledge in information security and forensics, while the optional modules allow you to focus on additional knowledge and skills for your chosen career path.

We recommend that you study the modules in the order they are listed.

Module summary CREDITS CODE

Compulsory modules – 60 credits

<i>Digital forensics</i>	30	M812
<i>Information security</i>	30	M811

Plus 60 credits from any of the other modules listed for the Postgraduate Certificate in Computing (K22) (see page 33)

For module descriptions see pages 48–49 or go to

www.openuniversity.co.uk/pg.

Module availability is subject to change.

Postgraduate Diploma in Computing (Software Engineering)

Total credits: 120 Code: E81

This specialist postgraduate diploma has two 30-credit compulsory modules, and two optional modules from the remaining computing and computing-related curriculum.

The compulsory modules are designed to give you in-depth, specialist knowledge in the area of software engineering, while the optional modules allow you to

focus on additional knowledge and skills for your chosen career path.

We recommend that you study the modules in the order they are listed.

Module summary CREDITS CODE

Compulsory modules – 60 credits

<i>Software development</i>	30	M813
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<i>Software engineering</i>	30	M814
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Plus 60 credits from any of the other modules listed for the Postgraduate Certificate in Computing (K22) (see page 33)

For module descriptions see pages 48–49 or go to www.openuniversity.co.uk/pg. Module availability is subject to change.

MSc in Computing

Total credits: 180 Code: F66

This qualification develops a rigorous approach to the study and application of computing, and incorporates transferable skills that are highly applicable to professional development in the field.

You can choose between the flexible MSc in Computing (offering a wide choice of industry relevant modules), and the more focused MSc in Computing (Software Engineering) or MSc in Computing (Information Security and Forensics) which enable you to develop in-depth specialist knowledge. All three routes finish with a substantial independent project, with either a professional or research orientation.

The professional project engages in a research scenario in an employment-related setting of your choice, while the research project enables you to design a

research proposal relating to an issue or problem of professional relevance to you or an employer, institution, or public body.

Module summary CREDITS CODE

120 credits from one of the following qualifications:

Postgraduate Diploma in Computing	120	E81
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Postgraduate Diploma in Computing (Information Security and Forensics)	120	E81
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Postgraduate Diploma in Computing (Software Engineering)	120	E81
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Plus 60 credits from either the Research route or the Professional route below:

Research route

<i>Research project</i> ¹	60	T802
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Professional route

<i>The MSc professional project</i> ¹	30	T847
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Plus an additional 30 credits of postgraduate study or 30 credits from any OU level 3 module

¹BCS, The Chartered Institute for IT, only recognises a 60-credit project as contributing to a specialist masters qualification, although a 30-credit project can contribute to a generalist masters qualification. If you are planning to seek BCS recognition for your study, you need to select your final project module accordingly.

For module descriptions see page 54 or go to www.openuniversity.co.uk/pg. Module availability is subject to change.

Qualifications

Advanced networking



We are offering the opportunity to study Cisco Certified Network Professional (CCNP) material as part of our postgraduate programme. There are four 30-credit modules which, when successfully completed, lead to the Postgraduate Diploma in Advanced Networking.

Cisco Systems are the market leader in the supply of networking equipment for the internet. They also have a well-established Academy programme aimed at educating network professionals. Cisco qualifications are highly regarded in the networking industry and are regularly updated to maintain their position at the leading edge of network development.

As a leading Cisco Academy, the OU can offer you the opportunity to study the Cisco Certified Network Professional (CCNP) programme using the latest online CCNP curriculum for most of your study. This postgraduate diploma will

provide you with the knowledge, understanding and skills needed to install, configure, and maintain local and wide area networks. You will be provided with hands-on experience of configuring networks and using online tools.

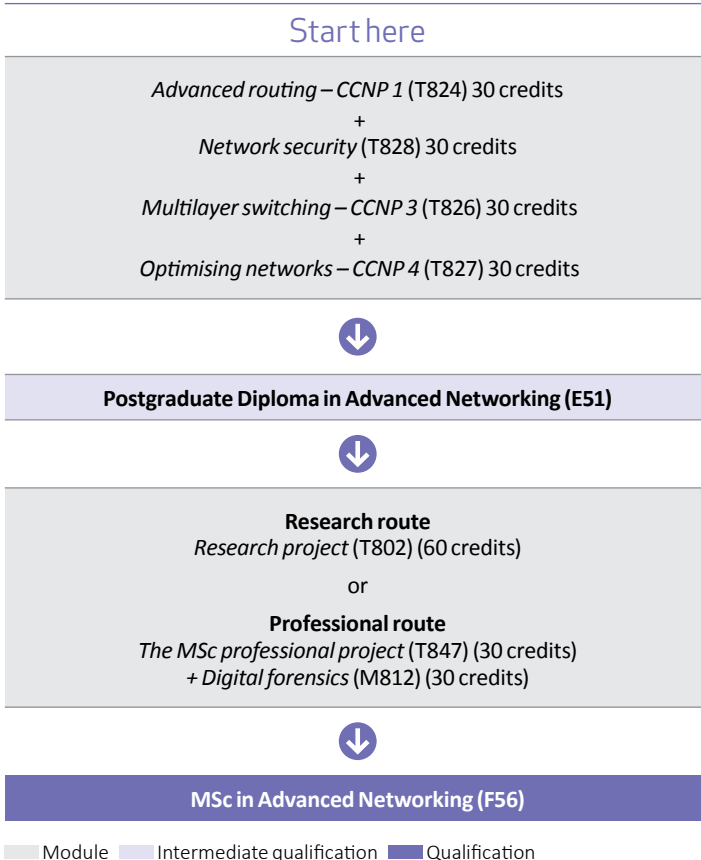
Simultaneously, the additional Open University study materials, assessment, and tutorial support provided will enable you to broaden your understanding beyond the Cisco domain and to gain a recognised postgraduate diploma. After completing this diploma you will be able to go on and gain industry-recognised certification by taking the CCNP examinations.

Planning your studies

- You don't need a formal qualification for the diploma modules but you should have advanced-level study skills. Study to HNC/HND level would be an advantage, but equivalent and relevant practical experience can also give you sufficient preparation.
- These modules build on Cisco-specific material included in the Cisco Certified Network Associate (CCNA) qualification. It is not an entry requirement that you have passed CCNA, but learners who have completed the OU undergraduate module *Cisco networking (CCNA)* (T216) or have experience of CCNA from elsewhere will be at an advantage.
- We recommend that you study only one module in the first six months, after which you'll have a clearer understanding of the study demands and you can decide whether to take more than one module at a time.
- You should start by studying the foundation module *Advanced routing – CCNP 1* (T824), as this includes some material reviewing topics from CCNA, and study the remaining modules in the order T828, T826, and T827. It is strongly recommended that you study the modules in this order. T824 and T826 must be studied before T827.
- You must complete the diploma within four years and the MSc within seven years.



Study route diagram



Postgraduate Diploma in Advanced Networking

Total credits: 120 Code: E51

This postgraduate diploma will provide you with the knowledge, understanding, and skills needed to install, configure and maintain local and wide area networks.

On completion, you will be able to go on and gain the industry recognised certification by taking the CCNP examinations.

Module summary CREDITS CODE

Compulsory modules – 120 credits

<i>Advanced routing – CCNP 1</i>	30	T824
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<i>Network security</i>	30	T828
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<i>Multilayer switching – CCNP 3</i>	30	T826
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<i>Optimising networks – CCNP 4</i>	30	T827
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For module descriptions see pages 50–51 or go to

www.openuniversity.co.uk/pg.

Module availability is subject to change.

MSc in Advanced Networking

Total credits: 180 Code: F56

This MSc is ideal for professionals needing knowledge and experience of advanced networking and research methods, and is also an excellent basis for further studies at doctoral level.

It consists of four professional vocational modules, which include Cisco Certified Network Professional (CCNP) materials, and either a final research project or a professional project combined with study of digital forensics – drawing together the knowledge and skills you have gained, and developing the skills required to address problems systematically.

Module summary CREDITS CODE

120 credits from the following qualification:

Postgraduate Diploma in Advanced Networking	120	E51
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Plus 60 credits from either the Research route or the Professional route below:

Research route

<i>Research project</i> ¹	60	T802
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Professional route

<i>The MSc professional project</i>	30	T847
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<i>Digital forensics</i>	30	M812
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¹ Please note: you will need to select a research topic in the area of advanced networking.

For module descriptions see pages 48 and 54 or go to

www.openuniversity.co.uk/pg.

Module availability is subject to change.

Qualifications

Systems thinking in practice

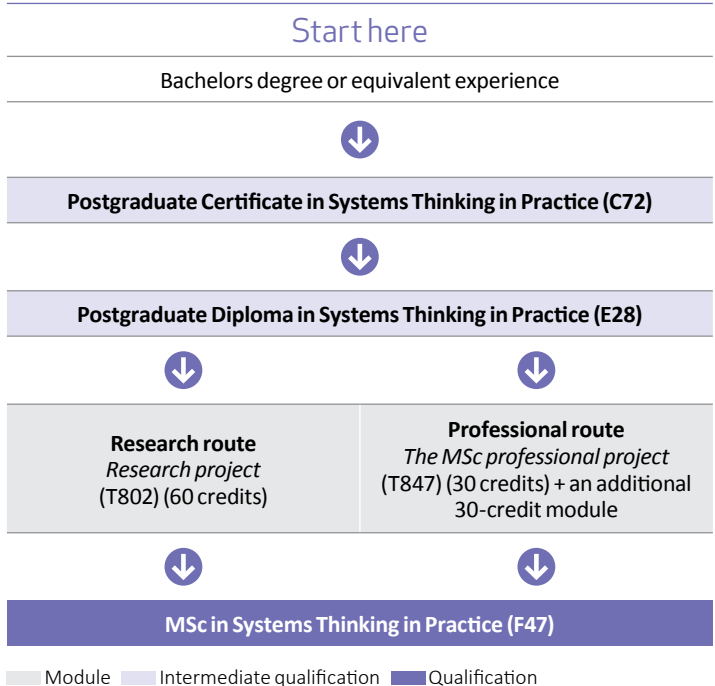
Understanding the increasingly complex and interconnected world we live in often demands more than common sense.

In everyday situations involving people, the environment and technology, where views and needs conflict, a systems approach can help you find better strategies and opportunities. Systems thinking in practice – regarded by some as one of today’s basic literacies – examines ways of managing complex interconnected situations across discipline and skill boundaries.

Planning your studies

- You should normally hold a UK bachelors degree, or equivalent. If you do not hold a bachelors degree, then you may be permitted to link modules to this qualification once you have demonstrated the ability to study at postgraduate level by successfully completing one of the modules.
- For more information and advice go to www.openuniversity.co.uk/pg or get in touch with our Student Recruitment Team on **+44 (0)300 303 5303**.
- Modules can count towards these qualifications for a maximum of eight years after we have stopped presenting them.

Study route diagram



Essential resource

We map our computing and IT modules to the Skills Framework for the Information Age (SFIA).

Postgraduate Certificate in Systems Thinking in Practice

Total credits: 60 Code: C72

This certificate may well change the way you think about the situations you face.

You will learn to think more holistically, understanding the roles other people play, taking account of the interconnectedness of all the components making up the problem and situation, and working more collaboratively. You will find out how to relate the ideas of key systems thinkers to your own practice.

The discipline of systems thinking gives you the tools to challenge your approach to complex situations; to assess how all the different components within a situation are related; to consider the roles other people play; to recognise that each person brings with them their own perspective on a situation and to work with those multiple perspectives.

Module summary CREDITS CODE

30 credits from one of the following optional modules:

<i>Managing systemic change: inquiry, action and interaction</i>	30	TU812
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<i>Thinking strategically: systems tools for managing change</i>	30	TU811
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Plus 30 credits from either the other module listed above or one of the following:

<i>Capacities for managing development</i>	30	T878
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<i>Conflict and development</i>	30	T879
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<i>Continuing professional development in practice</i>	30	U810
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<i>Data management</i>	30	M816
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<i>Development: context and practice</i>	30	T877
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<i>Digital forensics</i>	30	M812
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<i>Information security</i>	30	M811
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<i>Institutional development</i>	30	TU872
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<i>Making environmental decisions</i>	30	T891
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<i>Managing for sustainability</i>	30	T867
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<i>Managing technological innovation</i>	30	T848
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<i>Problem solving and improvement: quality and other approaches</i>	30	T889
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<i>Project management</i>	30	M815
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<i>Software development</i>	30	M813
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<i>Software engineering</i>	30	M814
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<i>Strategic capabilities for technological innovation</i>	30	T849
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For module descriptions see page 52 or go to

www.openuniversity.co.uk/pg.

Module availability is subject to change.



Postgraduate Diploma in Systems Thinking in Practice

Total credits: 120 Code: E28

This diploma develops your ability to approach and tackle complex, messy problem situations, providing practical tools that will help bring new perspectives. It may well change how you think about a task and situation.

You will consider the roles other people play, reflect on your own and others' practice, and assess how the different components within a situation are related.

You will develop the skills to think more holistically and to work more collaboratively with others in order to move towards effective solutions and avoid systemic failures.

Module summary CREDITS CODE

Compulsory modules – 60 credits

<i>Managing systemic change: inquiry, action and interaction</i>	30	TU812
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<i>Thinking strategically: systems tools for managing change</i>	30	TU811
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Plus 60 credits from the optional modules listed for the Postgraduate Certificate in Systems Thinking in Practice (C72) (see left) or from the 60-credit module *Leading healthcare improvements* (K827)

For module descriptions see page 52 or go to www.openuniversity.co.uk/pg.
Module availability is subject to change.



MSc in Systems Thinking in Practice

Total credits: 180 Code: F47

This MSc explores the way we think about and approach tasks or situations. Everyone brings with them their own perspective, which means that we all see things in different ways.

The discipline of systems thinking in practice will provide you with the tools to challenge your approach to complex situations, consider the roles other people play, and assess how different components within those situations are related.

You will also develop the skills needed to think more holistically and work more collaboratively to avoid systemic failures. In this MSc you will have the opportunity to develop your capability to plan, organise, and carry out an extended independent study.

Module summary CREDITS CODE

120 credits from the following qualification:

Postgraduate Diploma in Systems Thinking in Practice	120	E28
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Plus 60 credits from either the Research route or the Professional route below:

Research route

<i>Research project</i>	60	T802
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Professional route

<i>The MSc professional project</i>	30	T847
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Plus 30 credits from the optional modules listed for the Postgraduate Certificate in Systems Thinking in Practice (C72), (see page 40)

For module descriptions see page 54 or go to

www.openuniversity.co.uk/pg.

Module availability is subject to change.

Qualifications

Technology management

In the next decade, the most successful organisations in the marketplace will be those with the skills to develop, plan and implement new technologies.

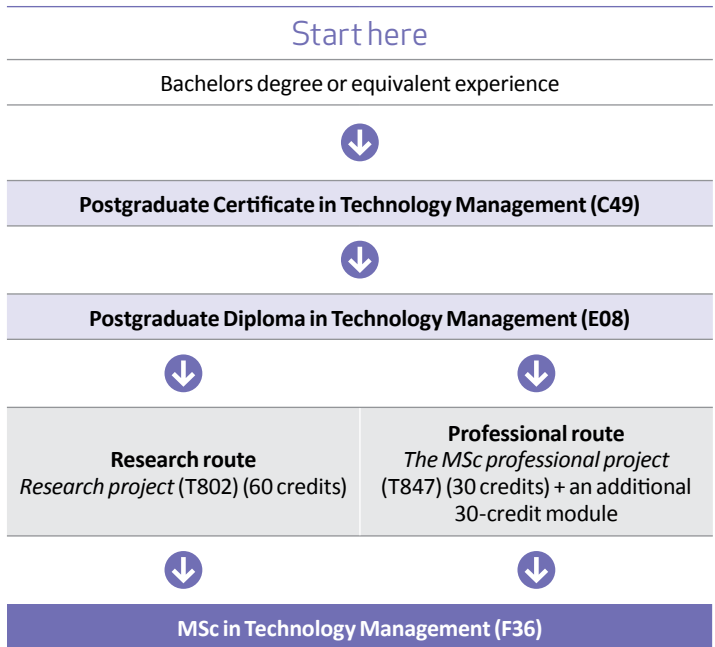
The individuals in most demand will be those who understand new developments and have the professional knowledge and vision to harness them effectively.

Whether you are an administrator, manager or technical specialist in this fast-moving area, our postgraduate programme with its leading-edge module content, could be a key component in making sure you and your organisation compete successfully. If technology is a significant success factor in your organisation or role, then technology management is relevant to you.

Planning your studies

- To start this programme, you should normally hold a UK bachelors degree, or equivalent. If you do not hold a bachelors degree, then you may be permitted to link modules to this qualification once you have demonstrated the ability to study at postgraduate level by successfully completing one of the modules. For more information and advice go to www.openuniversity.co.uk/pg or get in touch with our Student Recruitment Team on **+44 (0)300 303 5303**.
- Modules can count towards these qualifications for a maximum of eight years after we have stopped presenting them.

Study route diagram



■ Module ■ Intermediate qualification ■ Qualification

Postgraduate Certificate in Technology Management

Total credits: 60 Code: C49

If technology, innovation, and change are factors in your organisation or role, this certificate will extend your knowledge, skills, and capability – adding value to your career and your workplace.

It provides a rounded view of the management of technology and technological innovation, investigating topics such as the nature and types of technological innovation, technology transfer, and eco-innovation – which are relevant to all economic and organisational sectors and types of technology. The optional modules explore technology management within fields such as computing and ICT, business and management, development management, and environmental management.

Module summary CREDITS CODE

Compulsory module – 30 credits

<i>Managing technological innovation</i>	30	T848
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Plus 30 credits from the following optional modules:

<i>Advanced routing – CCNP 1</i>	30	T824
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<i>Capacities for managing development</i>	30	T878
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<i>Conflict and development</i>	30	T879
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<i>Continuing professional development in practice</i>	30	U810
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<i>Data management</i>	30	M816
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<i>Digital forensics</i>	30	M812
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<i>Information security</i>	30	M811
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<i>Managing for sustainability</i>	30	T867
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<i>Managing systemic change: inquiry, action and interaction</i>	30	TU812
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<i>Manufacture materials design</i>	30	T805
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<i>Multilayer switching – CCNP 3</i>	30	T826
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<i>Network security</i>	30	T828
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<i>Optimising networks – CCNP 4</i>	30	T827
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<i>Problem solving and improvement: quality and other approaches</i>	30	T889
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<i>Project management</i>	30	M815
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<i>Software development</i>	30	M813
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<i>Software engineering</i>	30	M814
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<i>Strategic capabilities for technological innovation</i>	30	T849
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<i>Thinking strategically: systems tools for managing change</i>	30	TU811
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For module descriptions see page 53 or go to

www.openuniversity.co.uk/pg.

Module availability is subject to change.



Postgraduate Diploma in Technology Management

Total credits: 120 Code: E08

This postgraduate diploma is designed to help you manage technology and innovation more effectively and realise its potential benefits – making a real difference to your organisation and your own professional development.

You'll begin by focusing on the operational aspects of managing technological innovation and change, before engaging with a range of capabilities that are key to the development and delivery of technological innovation – applying your learning to your own context as you study.

A wide range of optional modules enables you to choose a study pathway that suits your particular interests, including computing and ICT, business and management, development management, and environmental management.

Module summary CREDITS CODE

Compulsory modules – 60 credits

<i>Managing technological innovation</i>	30	T848
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<i>Strategic capabilities for technological innovation</i>	30	T849
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Plus 60 credits from any of the optional modules listed for the Postgraduate Certificate in Technology Management (C49) (see left)

For module descriptions see page 53 or go to www.openuniversity.co.uk/pg.
Module availability is subject to change.

MSc in Technology Management

Total credits: 180 Code: F36

Technology has the capability to transform products and processes and, if managed effectively, can make a significant contribution to organisational performance, economic growth, and social wellbeing.

This MSc will provide you with the knowledge and skills critical to making the right decisions about technology strategy, innovation and management to really make a difference to your organisation and your own professional development. It is applicable to a wide range of sectors, including IT, manufacturing, healthcare, defence, financial services, local and national government services. Throughout your studies you'll be encouraged to apply your learning to your own particular technology context.

You'll begin by focusing on the operational aspects of managing technological innovation and change, before moving to explore a range of capabilities that are key to the strategic development and management of technological innovation.

Your studies will conclude with an in-depth investigation of a technology management topic or problem of your choice.

Module summary CREDITS CODE

120 credits from the following qualification:

Postgraduate Diploma in Technology Management	120	E08
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Plus 60 credits from either the Research route or the Professional route below:

Research route

<i>Research project</i>	60	T802
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Professional route

<i>The MSc professional project</i>	30	T847
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<i>Plus Problem solving and improvement: quality and other approaches</i>	30	T889
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<i>Or Project management</i>	30	M815
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Or, if you have already counted one of these modules towards the Postgraduate Diploma in Technology Management (E08), you may study a further 30 credits from any one of the optional modules that count towards the Postgraduate Certificate in Technology Management (C49), (see page 45). Alternatively, you may study two of the following 15-credit modules: *Entrepreneurship: experience and perspective* (BB846), *Leadership and management in intercultural contexts* (BB848), *Management beyond the mainstream* (BB847), *Marketing in the 21st century* (BB844), *Strategic human resource management* (BB845), and *Sustainable creative management* (BB842).

For module descriptions see pages 53–54 or go to

www.openuniversity.co.uk/pg.

Module availability is subject to change.

Postgraduate modules

The following pages provide more detail on each of the postgraduate modules.

Assessment key

EMA: End-of-module assessment

TMA: Tutor-marked assignment

Modules: Computing

Data management (M816)

Credits: 30 at PG level

Study weeks: 26

Assessment: 3 TMAs, 1 EMA

Start: 01 Nov 2016
register by 30 Sep 2016

An organisation's most valuable asset is often its data, but careful management is required to ensure the maximum benefit is achieved. In this online module, you will acquire an understanding of the principles, practices, and technologies required for data management across the data life-cycle, and an awareness of the emerging issues in data management. You will gain the skills to analyse an organisation's data asset in order to develop policies, procedures, and systems that control, protect, deliver and enhance its value. This module is based on the internationally recognised Data Management Association (DAMA) Data Management Body of Knowledge (DMBOK) Framework.

Digital forensics (M812)

Credits: 30 at PG level

Study weeks: 26

Assessment: 4 TMAs, 1 examination

Start: 01 May 2016
register by 31 Mar 2016
01 May 2017
register by 31 Mar 2017

Digital evidence features in just about every part of our personal and business lives. Legal and business decisions hinge on having timely data about what people have actually done. This module will help you understand how to correctly gather, analyse, and present digital evidence to both business and legal audiences. You will also learn how to find tools to locate and analyse digital evidence and how to keep up-to-date with changing technologies, laws and regulations in digital forensics.

Information security (M811)

Credits: 30 at PG level

Study weeks: 26

Assessment: 3 TMAs, 1 EMA

Start: 01 Nov 2016
register by 30 Sep 2016

Whether in the public or the private sector, it is the value invested in a modern organisation's information assets that underpins its effectiveness and drives its profitability. This module explores the professional and technical skills which will enable you to understand, document, manage, and implement strategic and operational aspects of your organisation's information security – including the legal, social, ethical, professional, technical and organisational aspects.

By studying this module, you will better understand your organisation's information security requirements, developing your ability to deliver a fit-for-purpose information security management system, that safeguards the value of your organisation's information assets.

Project management (M815)

Credits: 30 at PG level

Study weeks: 26

Assessment: 3 TMAs, 1 EMA

Start: 01 May 2016
register by 31 Mar 2016
01 May 2017
register by 31 Mar 2017

Whether you are already a project manager, an aspiring project manager or a member of a project team, this online module will support you in improving your practice and making your contribution to the project even more effective. You will gain an understanding of the essential steps in the project life cycle and reflect on the techniques available to you and how they can be applied. You will have the opportunity to review, in the light of your new knowledge and experience, a project on which you have already worked. The topics covered include stakeholders, finance, risk, people, project administration and quality.

Software development (M813)

Credits: 30 at PG level

Study weeks: 26

Assessment: 3 TMAs, 1 EMA

Start: 01 May 2016
register by 31 Mar 2016
01 May 2017
register by 31 Mar 2017

This online module explores the principles and techniques of software development. You will acquire professional and technical skills together with a deep understanding of analysis, design, software construction and testing; engage with various design practices from design patterns to software architectures and frameworks; and explore emerging themes in software development. By studying this module you will develop your ability to deliver software artefacts fit for a real-world organisational context, alongside a wide range of postgraduate critical skills.

Software engineering (M814)

Credits: 30 at PG level

Study weeks: 26

Assessment: 3 TMAs, 1 examination

Start: 01 Nov 2016
register by 30 Sep 2016

This online module explores the advanced concepts and techniques used throughout the software life cycle, for the effective production and management of large, complex, and long-lived software systems. It provides a holistic perspective of technical and nontechnical factors involved in developing useful and safe software systems in complex social and organisational contexts. You will gain hands-on experience of software engineering practices, in both individual and team-working contexts. To study this module you will need to have completed *Software development* (M813), or have equivalent professional software development knowledge.

Modules: Advanced networking

Advanced routing – CCNP 1 (T824)

Credits: 30 at PG level

Study weeks: 24

Assessment: 3 TMAs, 1 examination

Start: 07 May 2016
register by 31 Mar 2016
06 May 2017
register by 31 Mar 2017

As a Cisco Academy, we can offer you the opportunity to study the Cisco Certified Network Professional module ‘Implementing Cisco IP Routing (ROUTE)’.

This module will provide you with the knowledge, understanding and skills to deploy and manage a range of internal and external routing protocols for a large scale internetwork using Cisco equipment. You will also be expected to undertake individual research to contextualise Cisco in the broader networking environment. You will be provided with hands-on lab experience via Netlabs™. If you successfully complete this module, you can progress to CCNP ROUTE certification.

Network security (T828)

Credits: 30 at PG level

Study weeks: 24

Assessment: 3 TMAs, 1 examination

Start: 05 Nov 2016
register by 30 Sep 2016

With organisations increasingly dependent on their information systems, there is a greater need to ensure that the underlying network infrastructure being used by these systems is secure. We are a leading Cisco Academy and this Cisco Certified Networking Associate (CCNA) Security module will give you a foundation to prepare for the Certified Information Systems Security Professional (CISSP) qualification. It will provide you with the knowledge, understanding and practical experience of managing secure communication across a large-scale internetwork using Cisco equipment. You will also be expected to undertake individual research to contextualise your Cisco study in the broader security management environment.

Multilayer switching – CCNP 3 (T826)

Credits: 30 at PG level

Study weeks: 24

Assessment: 3 TMAs, 1 examination

Start: 07 May 2016
register by 31 Mar 2016
06 May 2017
register by 31 Mar 2017

As a Cisco Academy, we can offer you the opportunity to study the Cisco Certified Network Professional module ‘Implementing Cisco IP Switched Networks (SWITCH)’ as the third module in the programme. You will be provided with the knowledge, understanding, and skills to deploy reliable, scalable, and secure multilayer-switched campus LANs using Cisco equipment. You will also be expected to undertake individual research to contextualise Cisco in the broader networking environment. You will be provided with hands-on lab experience via Netlabs™. If you successfully complete this module, you should be able to progress and complete the CCNP SWITCH certification.

Optimising networks – CCNP 4 (T827)

Credits: 30 at PG level

Study weeks: 24

Assessment: 3 TMAs, 1 examination

Start: 05 Nov 2016
register by 30 Sep 2016

As a Cisco Academy, we can offer you the opportunity to study this Cisco Certified Network Professional module, 'Troubleshooting and Maintaining Cisco IP Networks (TSHOOT)' as the fourth module in the programme. Cisco Systems are worldwide leaders in networking technologies, for telecommunication, corporate and private networking. You will be provided with the knowledge, understanding and skills to troubleshoot communication on large-scale data networks using Cisco equipment and extend your research skills. You will be provided with hands-on lab experience via Netlabs™. If you successfully complete this module, you should be able to progress and complete the CCNP TSHOOT certification.



For IT professionals
We're the largest and fastest growing Cisco academy in the UK.

Modules: Systems thinking in practice

Managing systemic change: inquiry, action and interaction (TU812)

Credits: 30 at PG level

Study weeks: 24

Assessment: 3 TMAs, 1 EMA

Start: 01 Nov 2016
register by 30 Sep 2016

This module views change as inescapable in managing everyday situations ranging from personal to workplace to society in general. Rather than passively accepting change, this module will equip you with skills to shape the nature and direction of change. It will develop your abilities to manage change with others so as to avoid systemic failures and improve joined-up actions amongst stakeholders along supply chains, in projects or even, social activism. It is about learning to use systems thinking and practice to help you engage with change and act accordingly to recognise the interconnected nature of organisations and environments.

Thinking strategically: systems tools for managing change (TU811)

Credits: 30 at PG level

Study weeks: 24

Assessment: 3 TMAs, 1 EMA

Start: 01 May 2016
register by 31 Mar 2016
01 May 2017
register by 31 Mar 2017

This module is about managing complex situations. Managing is ultimately about taking action in complex interconnected situations, where others involved may have contrasting understandings, motivations, and interests, and where conflicts inevitably arise.

You will develop your understanding of complex situations using robust tools from the traditions of systems practice to think strategically about change and uncertainty. The situations that you choose to work with in the module, to develop your practice with systems tools, can either derive from your existing, or aspiring, professional capacity or, simply be of general interest to you.



Modules: Technology management

Managing technological innovation (T848)

Credits: 30 at PG level

Study weeks: 26

Assessment: 3 TMAs, 1 EMA

Start: 01 May 2016
register by 31 Mar 2016
01 Nov 2016
register by 30 Sep 2016
01 May 2017
register by 31 Mar 2017

The history of technological innovation has been nothing short of remarkable, affecting our lives, the effectiveness of organisations, the profitability of industries, the well-being of societies, and the prosperity of nations. Understanding the processes that underpin technological innovation is therefore crucial, whether you are a user or producer of technological innovation. And if you are involved in managing innovation processes, an understanding of the overall process of innovation and its variations, is a core professional competence.

This module examines innovation from a management perspective, enabling you to improve how you contribute to the process and management of technological innovation.

Problem solving and improvement: quality and other approaches (T889)

Credits: 30 at PG level

Study weeks: 22

Assessment: 3 TMAs, 1 EMA

Start: 01 May 2016
register by 31 Mar 2016
01 Nov 2016
register by 30 Sep 2016
01 May 2017
register by 31 Mar 2017

Problem solving is a necessary activity for all organisations. However, it is frequently ineffective: chronic problems that were supposedly solved re-emerge, and opportunities remain unrealised. Although many organisations have had early successes with mechanisms for problem solving and improvement, these have often foundered over time.

This module provides a wide range of problem solving approaches, methods and techniques, and examines their underpinning concepts, principles and theoretical backgrounds. It will enable you to investigate problems properly; and generate robust, effective solutions that are sustainable. This module also explores the nature of problems and solutions, and the management of problem solving, and improvement.

NEW Strategic capabilities for technological innovation (T849)

Credits: 30 at PG level

Study weeks: 26

Assessment: 3 TMAs, 1 EMA

Start: 01 Nov 2016
register by 30 Sep 2016
01 May 2017
register by 31 Mar 2017

The need for ongoing technological innovation has become a strategic necessity for many organisations. Even in traditionally stable sectors, the option of maintaining the status quo is seldom viable. This creates challenges for how organisations acquire and manage the resources and capabilities necessary for effective approaches to innovation; and create and maintain contexts that support strategic action.

This online module draws on material from the resource-based view of organisations, and strategic and innovation management more generally, to produce a multi-layered, practical approach to the development and management of technological innovation. It is suitable for anyone interested in developing or improving their skills and expertise in this area.

Modules: Project modules

Research project (T802)

Credits: 60 at PG level

Study weeks: 52

Assessment: 4 TMAs, 1 EMA

Start: 01 Oct 2016
register by 31 Jul 2016
01 Feb 2017
register by 30 Nov 2016

This research module builds on your existing postgraduate diploma to enable you to complete your MSc. You'll design your own research proposal by identifying and developing a research problem relevant to your MSc. Your research will involve a literature review, original data collection, data analysis and the drawing of conclusions.

You will then communicate the outcome of your research by writing up and submitting your dissertation. Support is available to you at every stage from the study materials, your supervisor and online forums. Early registration is recommended as you will need to complete preparatory work before the module starts.

The MSc professional project (T847)

Credits: 30 at PG level

Study weeks: 24

Assessment: 3 TMAs, 1 EMA

Start: 01 Nov 2016
register by 30 Sep 2016

This research-based module is your opportunity to investigate a topic of your choice in what is likely to be a professional employment-related setting. Acting as an informed investigator you will design, conduct, analyse and report on your chosen research project, applying relevant conceptual, theoretical and methodological material at all stages of your work.

You will be expected to carry out your research in a rigorous fashion and to an appropriate academic standard. Spanning only six months, this module provides a challenging but valuable opportunity to engage in – and learn from – a research scenario of your choosing.

Practical information



How it works



Studied before?

Half of our Open degree students transfer credits from previous study, so your degree may be closer than you think.

Undergraduate study

To achieve your chosen qualification, you need to build up a set number of credits.



You gain credits by completing a series of modules. Credits vary by module.



You choose the modules you want to study, year by year. Depending on your qualification, some modules may be compulsory while others may be selected from a set of options.

Are there any entry requirements?

We believe that the grades you got at school aren't the only measure of ability, which is why you don't need any previous academic qualifications to study with us, but you do need:

- **A computer and reliable internet access** – they're an essential part of our study programmes. Depending on where you live and how much you earn, you could receive financial help to buy a computer.
- **A good grasp of the English language** – our modules are taught in English and you need to be a competent user of the English language to study at higher-education level. If you're not sure, help and guidance are available, go to www.openuniversity.co.uk/englishlanguage.

Decide what to study

We offer the following undergraduate qualifications:

- **Certificates of higher education (CertHE)**
- **Diplomas of higher education (DipHE)**
- **Foundation degrees**
- **Degrees** – a named degree in a specific subject or an Open degree.

Certificate of higher education (CertHE)

Equivalent to the first year of an honours degree, a certificate of higher education is perfect for rounding your knowledge in a particular skillset or area of study.

You'll need **120 credits** to complete a certificate.

Diploma of higher education (DipHE)

Our diplomas of higher education focus on a specific area of expertise. That may be a job, a profession, or a particular subject. Equivalent to two-thirds of an honours degree, they'll help you expand your knowledge and improve your current skillset.

You'll need **240 credits** to complete a diploma.

Foundation degree

Foundation degrees focus on a particular job or profession, so you must be working or volunteering in a related work setting. They're the equivalent to two thirds of an honours degree – and most of these are also offered as diplomas of higher education for people living or working in Scotland.

You'll need **240 credits** to complete a foundation degree.

Postgraduate study

A degree in a named subject

An undergraduate or bachelors degree is widely recognised among employers as being confirmation you've achieved a significant level of expertise in a field of study. The modules you'll need to study will be mainly in your chosen subject.

Like all universities based in the UK, we'll 'grade' your degree into one of four classes: 1 (first – the highest level), 2:1 (upper second), 2:2 (lower second) or 3 (third).

You'll need **360 credits** to be awarded a degree with honours.

An Open degree

Our most popular degree lets you tailor a qualification to your needs and interests, with a wider range of module choice. You can combine modules from similar or different subjects to suit either your particular career or personal interests.

You'll need **360 credits** to be awarded an Open degree with honours.

Count your previous study

If you've studied at higher education level before, you may be able to count this study towards your OU qualification, reducing the cost and saving you time too. To find out how this works, go to www.openuniversity.co.uk/credit-transfer.



You achieve a postgraduate qualification at the OU by studying a series of modules.



Modules are our units of study. To work towards a qualification, you first need to choose and register on a module that counts towards that qualification. With each module you successfully complete you'll earn a set number of credits which you build up to gain your qualification.

Decide what to study

We offer the following postgraduate qualifications:

- **Masters degree**
- **Postgraduate diploma**
- **Postgraduate certificate.**

You need **180 credits** to complete a masters degree, **120 credits** for a postgraduate diploma and **60 credits** for a postgraduate certificate.

Are there any entry requirements?

You will normally need to hold a UK bachelors degree, or equivalent qualification, to study at postgraduate level.

Specific entry requirements for each programme are given on our website, go to www.openuniversity.co.uk/pg.

As all of our teaching is in English, your spoken and written English must be of an adequate standard for postgraduate study. If English is not your first language, we recommend that you will need a minimum overall score of 6 and minimum score of 5.5 in each of the four components: reading, writing, speaking and listening under the International English Language Testing System (IELTS). Go to www.ielts.org for details.

Contact our Student Recruitment Team on **+44 (0)300 303 5303** if you would like advice about whether your qualifications and experience provide a suitable basis for study at postgraduate level.

Count your previous study

If you've studied at higher education level before, you may be able to count this study towards your OU qualification, reducing the cost and saving you time too. To find out how this works, go to www.openuniversity.co.uk/credit-transfer.

Plan your time

Most OU students study part time. Exactly how long it takes depends on how many credits you achieve each year, and which qualification you're working towards.

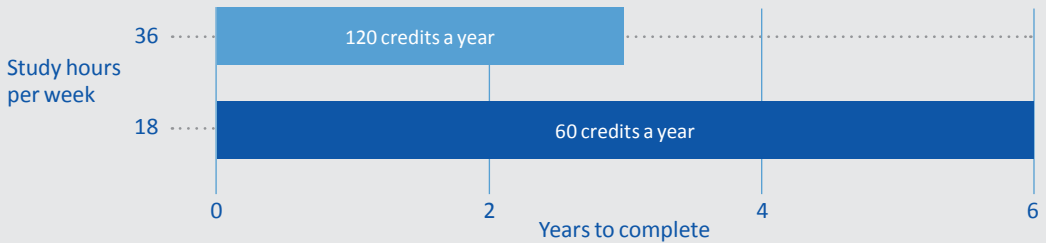
If you're thinking of studying full time, you'll need to plan your studies carefully as it involves studying more than one module at a time – we don't recommend that you take on more than two modules simultaneously. You'll also need to bear in mind that, depending on your chosen

qualification, the required modules may not all be available within your study year or may not be studied together for academic reasons. If this is the case, you won't be able to study full time.

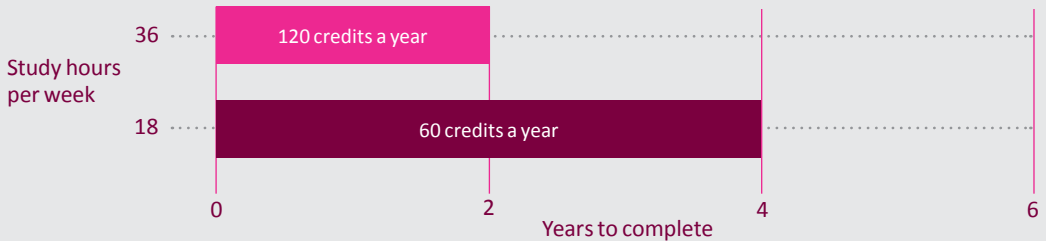
The tables below illustrate some examples of how long it will take to complete a qualification.

Undergraduate qualifications

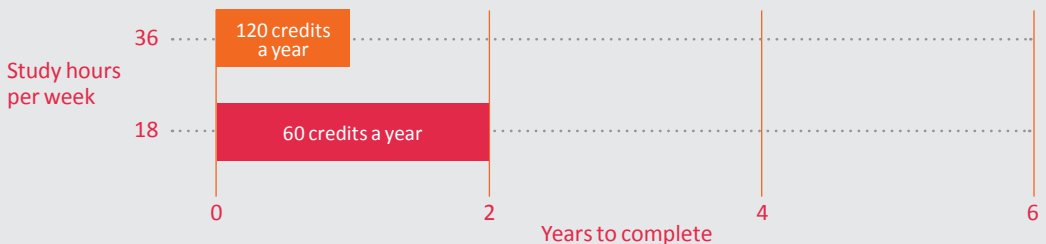
Degree (360 credits)



Foundation degree/Diploma of higher education (240 credits)



Certificate of higher education (120 credits)



Studying at a rate of 30 credits a year will require nine hours study per week. It will take double the time of studying 60 credits a year to complete your qualification.



“That’s what’s so great about the OU – it’s made to measure, it’s bespoke, it fits around you and your individual needs.”

Hazel Krolow, studied with the OU

Postgraduate qualifications

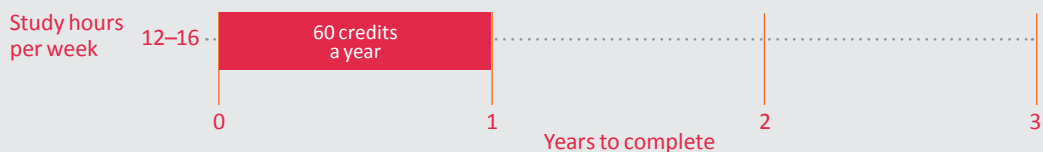
Masters degree (180 credits)



Postgraduate diploma (120 credits)



Postgraduate certificate (60 credits)



For students studying undergraduate qualifications

Deciding which qualification you'll study is the first step. Then it's time to work out how you'll go about funding your studies. We work hard to keep the costs low without compromising the quality of our teaching, meaning you get value for money.

We'll do our best to help you find a way of paying that suits your circumstances.

Access modules

You may qualify for a free Access module

It's our aim to do everything we can to help people who'd like to take their education further. We start by offering you the opportunity to study a free Access module if you meet the following eligibility criteria:

- you are resident in the UK or have a BFPO address outside the UK (excludes Channel Islands and Isle of Man)
- you are studying the module as an additional preparatory stage towards an OU qualification (this doesn't apply if you are resident in Scotland)
- you have a household income (or a personal income if you live in Scotland) of £25,000 or less, or are receiving qualifying benefits
- you have not completed any more than one year on a full-time undergraduate programme at NQF level 4/SCQF level 7 or above, or completed 30 credits or more of OU study.

If you don't qualify for a free Access module

The cost of an Access module varies depending on where you live:

- if you live in England, the Channel Islands or the Isle of Man the fee is £696
- if you live in Northern Ireland, Scotland or Wales the fee is £233.

You can pay up front by debit/credit card or by bank transfer, or you could spread the cost of your studies with an Open University Student Budget Account (OUSBA), see page 62 for more information.

If you're studying the Access module as an additional preparatory stage towards an OU qualification, and you live in England or Wales, you may like to think about covering the costs with a student loan, see page 62.

Understanding the OU's fees

If you're ready to study for a qualification such as a degree in a named subject or an Open degree, you can use the guide below to get an idea of the costs involved. You'll pay on a module-by-module basis, so you don't need to worry about paying for it all up front.

Living in England

Credits each year	Cost per year ¹
30 credits	£1393
60 credits	£2786
120 credits	£5572

¹ 16/17 prices; fees normally increase annually in line with inflation and the University's strategic approach to fees.

At today's prices, the total cost of a 360 credit honours degree would be £16,716.

Living in Northern Ireland, Scotland or Wales

Credits each year	Cost per year ¹
30 credits	£466–£589
60 credits	£893–£1065
120 credits	£1786–£2130

¹ 16/17 prices; fees normally increase annually in line with inflation and the University's strategic approach to fees.

Please note that fees for professionally relevant programmes of study (e.g. law) may be significantly higher than the ranges quoted.

At today's prices, the typical cost of a 360-credit honours degree would be between £5358 and £6390.

Living outside the UK

If you're living outside the UK, the fees will be the same as those for students living in England.

Additional costs

There may be extra costs on top of our tuition fees, such as travel to tutorials, set books and internet access.



"The tutor was great – supportive, clever and challenging – and the materials were superb."

Josephine Brew, studied with the OU

Ways to pay

We offer various ways to pay for your study.

Student finance

Living in England or Wales

Student Finance England and Student Finance Wales offer student loans to fund study.

Irrespective of how old you are or how much you earn, a student loan may be the best way to pay for your studies if you live in England or Wales. It's the most popular way to pay, and you only start paying it back when your salary exceeds the income threshold, currently £21,000.

Example repayment amounts:

Income each year before tax	Monthly repayment
Up to £21,000	£0
£22,000	£7
£25,000	£30
£30,000	£67

To qualify for a loan, you'll need to be studying at least one OU module, worth 30 credits.

If you get a student loan:

- You'll have nothing to pay for up to four years.
- Repayments will be based on what you earn, not what you owe.
- Payments will be deducted automatically from your salary.
- You can pay off the loan early without any penalties.
- If, for any reason, there's a balance outstanding after 30 years – it'll be written off.

Living in Northern Ireland or Scotland

If you live in Northern Ireland you may be eligible for a Fee Grant of up to £1230 to help towards the cost of your module fees. The amount you get depends on how much you earn and how many credits you're studying.

If you live in Scotland and your personal income is £25,000 or less, or you're on certain benefits, you could qualify for a Part-Time Fee Grant to cover 100% of your course fees. It isn't a loan – you won't need to pay it back.

Study support or discretionary funds

You may be eligible for means tested funding. It's for study related costs such as travel, childcare and internet access.

Self-funded studies

We make it easy to pay for your studies straight away with a credit or debit card, or via a bank transfer.

Or you could pay for your studies with an Open University Student Budget Account (OUSBA), see opposite for more information.

Open University Student Budget Accounts Ltd (OUSBA)

OUSBA offers a helpful way to budget for your qualification over a longer period of time, especially if you're studying alongside a career, or have a young family.

Pay by instalments – OUSBA can work out your OU fee and pay it, on your behalf, to the OU. OUSBA then spreads the fee and the interest payable over up to one year, letting you pay back your fees monthly.

Register first, pay later – OUSBA can pay your full module fee direct to the OU. You then repay OUSBA interest-free, in full, just before your module starts. 0% APR representative.

You must be at least 18 years of age and credit is subject to your financial circumstances and status.

Employer sponsorship

When you're better qualified, you're a more valuable employee. So it's always worth talking to your employer, to find out if the company or organisation would be willing to sponsor you.

MORE ONLINE



To find out more about paying for your studies, go to www.openuniversity.co.uk/ug-fees

Or call an OU adviser on **+44 (0)300 303 5303**

For students studying postgraduate qualifications

You pay for your postgraduate studies module by module. The module fee you pay is dependant on what you study and where you live.

To find out the fee for your chosen module, go to www.openuniversity.co.uk/pg.

Self-funded studies

We make it easy to pay for your studies straight away with a credit or debit card, or via a bank transfer.

Or you could pay for your studies with an Open University Student Budget Account (OUSBA), see below for more information.

[Open University Student Budget Accounts Ltd \(OUSBA\)](#)

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Employer sponsorship

When you're better qualified, you're a more valuable employee. So it's always worth talking to your employer, to find out if the company or organisation would be willing to sponsor you.

Looking at other funding options

If you are an OU graduate with an honours degree, support may be available from the Crowther Fund. The Crowther Fund is intended to help OU graduates build upon their OU degrees, either by formal study or research or by generally broadening their experience through a period of voluntary work. The fund doesn't take account of financial circumstances. The application closing date is 28 February each year.



MORE ONLINE



To find out more about paying for your studies, go to www.openuniversity.co.uk/pg-fees

Or call an OU adviser on **+44 (0)300 303 5303**

Other useful information

Studying outside the UK

Wherever you are in the world, you may be able to study directly with the OU.

For information on available qualifications, your study experience, and what the OU can offer you, go to www.openuniversity.edu or call **+44 (0)300 303 0266**.

Equality and diversity

We're committed to creating an inclusive university community, where everyone is treated with dignity and respect. We will challenge inequality, and anticipate and respond positively to different needs so that everyone can achieve their potential.

More information is available on our Equality and Diversity website, go to www.openuniversity.co.uk/equality.

Students under the age of 16

Very exceptionally, we consider applications from particularly gifted students under the age of 16. If you'd like to make an application, please contact us directly on **+44 (0)300 303 5303**.

Data protection

We record your personal information when you contact us and use this to manage registration, study, examination, and other services. When you register, we'll tell you more about how we process and use your personal information.

Calls may be recorded to help us improve what we do for you.

Contacting us in writing

If you need to contact us in writing, you can use the following address:

**The Student Recruitment Team
The Open University
PO Box 197
Milton Keynes
MK7 6BJ
United Kingdom**

Students with additional needs

When you register to study with us, we'll ask you whether you have a disability, health condition, mental-health disability, or specific learning difficulty (such as dyslexia) that might affect your studies or examinations. If you do, we'll direct you to more detailed information about the services we offer.

Disabled Students' Allowance (DSA) – UK students only

Disabled Students' Allowances help with study costs that result directly from your disability or specific learning difficulty. Allowances are not means-tested and may go towards specialist equipment (such as an adapted computer), non-medical study support (for example, a sign-language interpreter; a note-taker or a dyslexia support worker) or other related expenses. You can also apply for help with study-related travel costs that directly result from your disability.

Eligibility and allowances depend on where you live and what you're studying. If you are eligible for a DSA the University will only provide study support that cannot be provided by the allowance.

For information and advice about all services for students with disabilities, speak to an OU adviser on **+44 (0)300 303 5303** or go to www.openuniversity.co.uk/disability.

Other ways to read this prospectus

You may find it easier to access information from our website at www.openuniversity.co.uk.

We can also supply this prospectus as a PDF and in other formats. Please call **+44 (0)300 303 5303**, or email us from our website at www.openuniversity.co.uk/contact.



Ordering other prospectuses

You can go online at www.openuniversity.co.uk/prospectus to download or order one of our other prospectuses.

Access Module Certificates

Introductory modules to build your confidence

Open qualifications

Build a qualification that's unique to you

Other subject-specific prospectuses

- Arts and Humanities Prospectus
- Business and Management Prospectus
- Education, Childhood and Youth Prospectus
- Engineering, Design and Technology Prospectus
- Environment and Development Prospectus
- Health and Social Care Prospectus
- Languages Prospectus
- Law Prospectus
- Mathematics and Statistics Prospectus
- Psychology and Counselling Prospectus
- Science Prospectus
- Social Sciences Prospectus

MORE ONLINE



While you're online, you'll see that we have a huge range of taster modules available. OpenLearn is available to everyone, it's free of charge, and gives you a good idea of what higher education is like in almost every subject.

www.open.edu/openlearn

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The Open
University



When you have finished with this prospectus please recycle it.



Contact us

In England, Scotland, Wales, the Channel Islands, the Isle of Man and BFPO addresses outside the UK

- Go to www.openuniversity.co.uk
- Call our Student Recruitment Team on **+44 (0)300 303 5303**

Lines are open (UK time):

Monday to Friday 08:00 to 20:00

Saturday 09:00 to 17:00

Calls are charged at the UK local rate when calling from a UK mobile phone or landline.

- Email us from our website at www.openuniversity.co.uk/contact

In Northern Ireland

- Go to www.openuniversity.co.uk
- Call our Belfast office on **028 9032 3722**
- Email us at northernireland@open.ac.uk

In the Republic of Ireland

- Go to www.openuniversity.edu
- Call our Enquiry and Advice Centre in Dublin on **(01)6785399** or our Belfast office on **+44 (0)28 9032 3722**
- Email us at ireland@open.ac.uk

All other countries

- Go to www.openuniversity.edu
- Call us on **+44 (0)300 303 0266**

I siaradwyr Cymraeg

Os ydych yn siarad Cymraeg a byddai'n well gennych drafod eich anghenion astudio drwy gyfrwng y Gymraeg, cysylltwch â:

Y Brifysgol Agored yng Nghymru,
18 Heol y Tollty, Caerdydd, CF10 1AP

- Ffoniwch **029 2047 1170**
- Ebost wales-support@open.ac.uk

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