University of
Staffordshire

COMPUTING

Your place
of possibility

We are delighted to announce that Staffordshire University has rebranded to become University of Staffordshire. It reinforces our commitment to Staffordshire and beyond. Our brand evolution also heralds an exciting new future, with lots of new opportunities for our students.

WELCOME TO
COMPUTING

Whether you want to be a software developer, cyber security expert or transform products using AI, we're your gateway to industry.

Break into our private, isolated network to test your ethical hacking skills. Run your own simulated companies. Or develop web applications and transform the user experience. Whichever course you choose, you'll gain real-world skills.

We offer next-level teaching, hands-on and personalised learning, and all the support you need to succeed. You can also gain certificates from Cisco and Amazon Web Services, which show you have the technical expertise required by employers.

Our degrees include Computer Science, Artificial Intelligence, Cyber Security, Cloud and Network Computing, and Software Development.

Many of our students spend a year working in industry as part of their course, with placements in the UK and abroad. The companies have included IBM, CERN, BAE Systems and BMW. It's a key reason why our graduates are in such high demand and go on to fantastic careers.

Some of our computing courses are available at both our Stoke-on-Trent and London campuses.
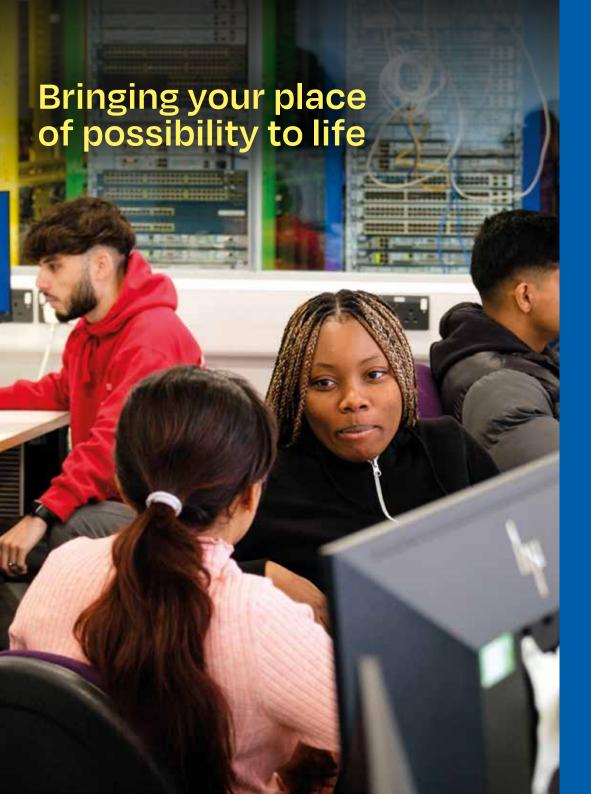
DISCOVER
OUR
COMPUTING
COURSES

Bringing your place of possibility to life

THIS IS YOUR PLACE

TOP 25 FOR STUDENT SATISFACTION FOR COMPUTER SCIENCE
Complete University Guide 2024

PAID INDUSTRY PLACEMENTS

WORK ON LIVE INDUSTRY BRIEFS

PARTNERSHIPS WITH STAFFORDSHIRE POLICE

INDUSTRY-STANDARD FACILITIES

GAIN MICROSOFT, CISCO AND AMAZON CERTIFICATIONS

AMAZON WEB SERVICES (AWS ACADEMY MEMBERSHIP)

CAMPUSES IN LONDON AND STOKE-ON-TRENT

TECH INDUSTRY GOLD ACCREDITED COURSES

GOOGLE APPROVED CURRICULUM

Find your gateway to industry and a future full of possibilities. An amazing community, where amazing things happen. **All built around you.**

WHY CHOOSE UNIVERSITY OF STAFFORDSHIRE

Leading modern courses

Right from the beginning, we've been at the cutting edge of industries and driving change. Building a bridge between the classroom and real-world practice. Learn the skills for the future on our career-focused courses.

Next-level teaching

We teach in the best way, not the old way. Pushing boundaries and using hands-on, personalised learning. Championing digital innovation, from CGI to games technologies. Immerse yourself in our simulation spaces, taking you from crime scene to courtroom or ambulance to operating theatre.

Personalised support

Get all the support you need to achieve real success. Whether you have a worry about money, your studies, your mental health or a personal issue, we're here for you every step of the way.

Gateway to careers

With our unique industry connections, you'll unlock your potential. Unleash your entrepreneurial skills as you take on projects, explore placements or exhibit your work at shows, and gain the skills for whatever comes next. You can even become a student consultant, marketing your expertise to employers.

Inclusive community

Become part of our open, inclusive and welcoming community. An environment that's big on personality and full of character. A place where you'll feel empowered and inspired. Where everyone is valued and you can be you.

Data Junction

FACILITIES

AT OUR STOKE-ON-TRENT CAMPUS

Dedicated specialist spaces where students have access to commercial grade networking hardware and software, virtual computing environments, forensic tools and more. Our network labs contain 400+ industry-standard network devices – including Cisco, Cisco Meraki, Brocade and Juniper – switches, routers, firewalls, wireless LAN controllers and network traffic generators.

Smart Zone
A bustling centre of invention, innovation and creation, the Smart Zone houses dedicated workshop space, the latest in digital technology and high-end computing facilities. The £1.3m space is the biggest collaboration space on campus, fusing state-of-the-art fabrication spaces with augmented and blended reality facilities, allowing you to bring your ideas to life using the latest digital and immersive technologies.

Cyber lab
Our Cyber Lab contains PCs bound within a dedicated and isolated network. Students can access powerful forensic tools used in the recovery of data and in criminal investigations and discover the software which enables data recovery from a wide range of devices such as PCs, phones, mobile devices, watches and Sat Nav units.

Data analytics centre
Get access to software including Oracle and SQL Server, NoSQL data stores such as MongoDB, and technologies which support Hadoop. Students learn in physical and virtual environments to develop practical skills.

Smart AI lab
A specialist space with 20, six-axis programmable robotic arms, autonomous vehicles, micro-controllers, motors, sensors and state-of-the-art design suites for embedded software programming and electronic design.

Software development environments
Students have access to development environments for desktop, mobile and enterprise applications, and a variety of mobile devices for testing.

Usability lab
Equipped with observation cameras and eye-trackers, our Usability Lab is used by students to analyse how people interact with software systems such as games, web and mobile applications.

FACILITIES

AT OUR LONDON CAMPUS

Data Junction
A mega-laboratory with advanced wireless casting and presenting facilities, learning spaces and a dedicated cyber and networking lab.

Cyber and networking lab
A self-contained lab with its own private internal network containing some of the latest equipment and software. The version of EnCase in the lab is the same version used by law enforcement.

OUR STUDENTS

" **Being able to work with real Cisco equipment in the labs has been great because it allows me to get a grasp of what it's going to be like after I graduate.** "

Tobi Papoola

BSc (Hons) Cyber Security

" **I think the course is incredibly dynamic blending both theoretical knowledge and practical skills. I've found the curriculum engaging and the lecturers have really helped me develop my knowledge further.** "

Yumi Verma

BSc (Hons) Computer Science

MEET THE EXPERTS

DR RUSSELL CAMPION
Head of Department (Computing)

Associate Professor Dr Russell Campion is a member of the British Computer Society, has a PhD in Computer Science and is a Senior Fellow of the Higher Education Academy. He has worked on external enterprise projects and collaborated on research grants for designing and implementing multimedia solutions. His publication topics include digital multimedia, web-based subjects and mobile computing.

DR DAVID DYKE
Course Director (Undergraduate)

Dr David Dyke is a chartered engineer and the Course Director for our undergraduate courses. His expertise focuses on control engineering, signal processing, electrical circuit analysis, analogue electronics, hardware-based digital electronics, radar and robotics.

DR. VAHID HEYDARI FAMI TAFRESHI
Course Director for Computing

Vahid is an enthusiastic researcher and course director for the Computing courses at University of Staffordshire London. His interests lie in the field of Internet Protocols and Architectures, Cyber Security and IoT Security.

DR JUSTIN CHAMPION
Senior Lecturer (Computer Science)

Justin has worked at the University for over 10 years as a senior lecturer in networking and cloud computing. He has been involved in both developing and teaching a number of courses for our students, and even external companies in his specialist area of network devices and technologies. Justin is currently a member of both our Cisco and AWS Academy teams with a specialism in routing technology.

CHRISTOPHER HOWARD
Course Director (Postgraduate)

Christopher is a networking professional with over 30 years' experience in the technical and academic field. He is currently Course Director for our postgraduate courses and is also a chartered electronics engineer. With a background in electronics, he has worked on numerous projects and even networked baggage handling systems at two international UK airports.

ROBIN OLDHAM
Course Director (Digital Apprenticeships)

Robin is a course director for computer science and digital apprenticeships at University of Staffordshire having worked in higher education for over 20 years as a lecturer, manager and technology professional. He has extensive experience of course design, development, validation, delivery and assessment across STEM subject areas in higher education.

FIONA KNIGHT
Course Leader (Software Development)

Fiona has worked at the University for over 20 years. She specialises in web development, and has completed a Masters where she investigated how voice applications on Alexa could be used to help students on their course. Fiona is interested in how interfaces can be designed to help users on many devices from voice, no screen, small design to design for large screens.

DR BENHUR BAKHTIARI BASTAKI
Course Leader (Artificial Intelligence)

Benhur is a professional member of the British Computer Society and the Programme Advisor for Microsoft Learn for Educators Institutional Programme. He has been involved in a wide range of external projects and activities, utilising his expertise in artificial intelligence, machine learning, and software development to the benefit of business, industry, and other organisations.

OUR COURSES

Course title	Award	UCAS Code	UCAS Offer	Duration in years
Stoke-on-Trent courses				
Artificial Intelligence	BSc (Hons)	I763	112–120	3
Artificial Intelligence (with foundation year)	BSc (Hons)	I764	48	4
Artificial Intelligence (with placement year)	BSc (Hons)	I765	112–120	4
Cloud and Network Computing	BSc (Hons)	I793	112–120	3
Cloud and Network Computing (with foundation year)	BSc (Hons)	I797	48	4
Cloud and Network Computing (with placement year)	BSc (Hons)	I796	112–120	4
Computer Science	BSc (Hons)	I743	112–120	3
Computer Science (with foundation year)	BSc (Hons)	I744	48	4
Computer Science (with placement year)	BSc (Hons)	I745	112–120	4
Cyber Security	BSc (Hons)	I751	112–120	3
Cyber Security (with foundation year)	BSc (Hons)	I752	48	4
Cyber Security (with placement year)	BSc (Hons)	I753	112–120	4
Software Development	BSc (Hons)	I106	112–120	3
Software Development (with foundation year)	BSc (Hons)	I108	48	4
Software Development (with placement year)	BSc (Hons)	I107	112–120	4

Course title	Award	UCAS Code	UCAS Offer	Duration in years
London courses				
Cloud and Network Computing	BSc (Hons)	I798	112–120	3
Cloud and Network Computing (with placement year)	BSc (Hons)	I799	112–120	4
Computer Science	BSc (Hons)	I746	112–120	4
Computer Science (with foundation year)	BSc (Hons)	I770	48	3
Computer Science (with placement year)	BSc (Hons)	I750	112–120	4
Cyber Security	BSc (Hons)	I302	112–120	4
Cyber Security (with foundation year)	BSc (Hons)	I771	48	3
Cyber Security (with placement year)	BSc (Hons)	I303	112–120	4

APPRENTICESHIPS
WITH UNIVERSITY OF STAFFORDSHIRE

If you're looking to study alongside work, University of Staffordshire can support you in achieving a higher-level qualification by combining practical on and off-the-job training with studying for a university qualification through a degree or higher apprenticeship.

Apprenticeship standard	Typical duration	Qualification level
Digital and Technology Solutions Professional Degree Apprenticeship	3.5 years	Level 6

This apprenticeship features an integrated degree to help ensure you are ready for the fields of cyber security, business analysis, network engineering, IT consulting and software engineering. Gain the necessary skills and training to help you thrive in the fast-paced digital and technological world.

FIND OUT MORE ABOUT OUR APPRENTICESHIPS

ARTIFICIAL INTELLIGENCE

From using virtual assistants to detecting fraud and diagnosing illnesses, artificial intelligence has become part of everyday life. Gain the skills, connections and experience to pursue a rewarding career in this rapidly growing field. We'll introduce you to projects with practical learning, and opportunities to use platforms you'll find in industry.

FIND OUT MORE ABOUT THE COURSE HERE

Why choose us…

- Through our close relationship with Azure, you'll have access to extra certifications to improve your employability.

- Spend a year working in industry on placement before you graduate, helping to transform services and products through AI.

- Explore mining data to identify patterns, use algorithms to predict what will happen, develop solutions to improve outcomes, and understand how computers process human language.

- Your skills will be in high demand as artificial intelligence is applied everywhere from mobile phone apps and self-driving cars to biometric recognition and customer service chatbots.

- Through knowledge transfer partnerships (KTPs), you'll have the chance to participate in exciting funded projects alongside local businesses specialising in AI, machine learning and data analytics.
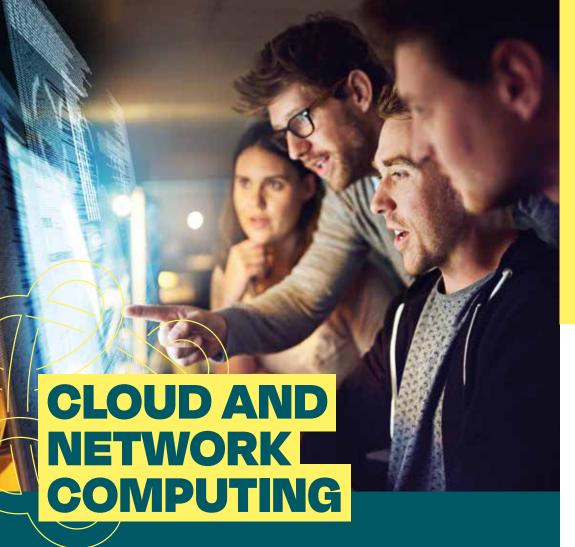
What you'll learn…

During this course, you'll acquire a solid foundation in programming using C# and Java. Additionally, you'll delve into various data types and explore techniques like data processing and data visualisation. The curriculum also covers exciting topics such as machine learning, natural language processing, deep learning, data analytics, and neural networks.

Module examples:
- Applications of AI
- Data Structures and Algorithms
- Advanced Machine Learning
- Computer Vision
- Natural Language Processing

What you could do next…

There's huge demand for skilled specialists who understand the opportunities of using artificial intelligence in lots of different contexts. Our graduates have gone on to work in a variety of sectors as data analysts, AI or algorithm developers, business intelligence developers, software developers and data scientists.

CLOUD AND NETWORK COMPUTING

Most companies rely on networking for their day-to-day work. As every second counts, they can't afford for networks to fail. This degree will give you the **fundamental networking and cloud technologies skills to become an expert in the configuration, design, implementation and evaluation of networked systems and devices.**

FIND OUT MORE ABOUT THE STOKE-ON-TRENT CAMPUS COURSE HERE

FIND OUT MORE ABOUT THE LONDON CAMPUS COURSE HERE

Why choose us…

- University of Staffordshire is a member of the Amazon Web Services (AWS) Academy and we've embedded the AWS Certified Solutions Architect knowledge within the course.

- You'll be encouraged to gain Cisco certifications, which are highly valued by graduate recruiters in the industry.

- We offer some amazing work placement opportunities with companies locally, nationally and abroad. You can spend a year working in industry before you graduate.

- Our facilities include the latest equipment you'll find in industry. Use our learner labs to experiment and create networks, or explore the cloud environment with your own Amazon Web Services (AWS) account.

- This hands-on experience is one of the reasons why we're ranked in the Top 25 for student satisfaction in Computer Science (2023 Guardian University Guide).

What you'll learn…

We teach the theory and practical aspects of cloud and network computing. It includes exploring serverless technology, databases and how to build cloud infrastructure. We'll also teach you how to create secure networks, using our own networking equipment. You'll apply your learning, rather than just learning the theory.

Module examples:
- Networks and Communications
- Cloud Infrastructure and Design
- Automation
- Network and Cloud Security
- Cloud Architecture

What you could do next…

Cloud technologies are a major growth area and there's huge demand for skilled networking specialists, so your degree will make you highly employable. Possible careers could include computer network architect, network administrator, cloud infrastructure analyst or a cloud network engineer.

COMPUTER SCIENCE

You'll gain far more than just a computer science degree with us. We equip students with the skills and practical experience to become highly employable.

From the industry-standard facilities you'll use, through to opportunities to gain Amazon Web Services (AWS) and Cisco certifications, we know what makes the difference.
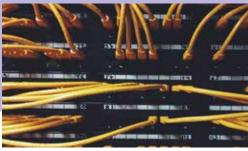
FIND OUT MORE ABOUT THE STOKE-ON-TRENT CAMPUS COURSE HERE

FIND OUT MORE ABOUT THE LONDON CAMPUS COURSE HERE

Why choose us…

- You'll have the chance to work in industry before you graduate, with companies locally, nationally or as far afield as the US and Singapore.

- Our facilities include the latest equipment you'll find in industry. From our learner labs, to exploring the cloud environment with your own Amazon Web Services (AWS) account, and our Collision Space, to give you the feel of a real workplace.

- You'll do everything from a real-world perspective, with opportunities to complete live briefs and set up your own simulated companies.

- This hands-on experience is one of the reasons why we're ranked in the Top 25 for student satisfaction in Computer Science (2023 Guardian University Guide).

What you'll learn…

The course will give you a solid foundation in all major aspects of computing. It includes digital technologies, network concepts, cyber security, programming, software development and cloud computing. From web design and user experience through to mastering programming languages, such as JavaScript and Python, you'll see how everything knits together.

Module examples:
- Computer Architecture and Operating Systems Design
- Hardware, Micro-Controllers and Sensors
- Interface Design and User Experience

What you could do next…

Our computer science graduates are snapped up by employers as their skills are in high demand. Some get offered jobs through their placements. Possible careers could include a computer systems analyst, computer hardware engineer, computer network architect, web developer or computer programmer.

CYBER SECURITY

Most businesses rely on cyber security to protect their critical systems and stay one step ahead of criminals. Viruses, malicious attacks and hacking can cripple company software and place confidential data at risk. Complete this degree and your specialist skills will be in huge demand as employers grapple with these challenges.

📱 **FIND OUT MORE ABOUT THE STOKE-ON-TRENT CAMPUS COURSE HERE**

📱 **FIND OUT MORE ABOUT THE LONDON CAMPUS COURSE HERE**

Why choose us…
- Gain practical experience through our amazing industry links and placement opportunities, and benefit from guest lectures and Q&A sessions.

- Through a partnership with Staffordshire Police's High Tech Crime Unit, you can take on a forensic internship prior to your final year.

- Alongside your degree, there's the chance to gain certification with EnCase, Microsystemation XRY and Cellebrite UFED.

- You can also become a certified ethical hacker through EC-Council.

- The version of EnCase we use in the lab is identical to the one used by real law enforcement agencies.

- We have a Cyber Lab with its own private, isolated network so you can test out scenarios and complete challenges.

What you'll learn…
You will develop an in-depth knowledge of cyber security as the course covers the essentials of networking, programming, software development, data analytics and machine learning. You'll look at regulations and ethics, as well as the theoretical and practical aspects of cyber security.

Module examples:
- Ethical Hacking
- Cloud Infrastructure and Design
- Digital Forensics Fundamentals
- Cryptography and AIR
- Network and Infrastructure Security

What you could do next…
There's huge demand for skilled specialists in cyber security and so your degree will make you highly employable. It could involve working in healthcare or financial services, for police forces and other law enforcement, Government security agencies or private companies.

SOFTWARE DEVELOPMENT

Specialise in back-end development, which is all about how things actually work behind the scenes. It involves server-side programming and mobile applications. It means you'll be able to program for websites and distributed, cloud-based systems to drive businesses forward and stand out in the increasingly digital world.

FIND OUT MORE ABOUT THE COURSE HERE

Why choose us...

- You'll do everything from a real-world perspective, with opportunities to complete live briefs. It means you'll become agile and flexible – qualities valued by graduate recruiters.

- We offer some amazing work placement opportunities with companies locally, nationally and abroad. You can spend a year working in industry before you graduate.

- Our facilities include the latest equipment you'll find in industry. You'll have access to software development environments for desktop, mobile and enterprise applications.

- This hands-on experience is one of the reasons why we're ranked in the Top 25 for student satisfaction in Computer Science (2023 Guardian University Guide).

What you'll learn...

You'll focus on the software development lifecycle, from gathering requirements to systems integration. We'll also give you a grounding in application types and software architectures, including frameworks and design patterns. And you'll become fluent in programming with modern industry standard languages.

Module examples:

- Advanced Programming
- Clean Coding
- Cloud Based Software Development
- Mobile Application Development
- Software Development and Artificial Intelligence
- Web Development

What you could do next...

With a need for thousands more software developers in the UK, it's a specialist field with huge opportunities for our graduates. Our graduates are often snapped up through their work placements too. Careers could include software developer, application developer, web developer or computer programmer.

IMPORTANT INFORMATION

Subject to approval/validation

We're always striving to deliver the most current and relevant degrees, both by creating new courses and regularly reviewing our current offering.

Each time we make changes, the course goes through a rigorous approval process to ensure that it's the perfect fit for our students, employers and other relevant stakeholders.

Some of the courses inside this guide may be marked as 'subject to approval' or 'subject to validation',

but don't worry, this just means some of the details of the course won't have been finalised yet. As soon as new courses are approved and validated, up-to-date information will be provided on the online course pages at
www.staffs.ac.uk/courses

If you have been offered a place and there is a significant change to the course, or for any reason, the course doesn't run – we will contact you immediately and fully support you in finding the best suitable alternative.

At the time of printing in September 2024, the courses listed in this guide represent those we intend to offer for the 2025/2026 academic years. Very occasionally, however, we need to make changes to our courses, including their content and the way in which they are delivered. In some instances, courses can be discontinued or combined with other courses.

Reasons for withdrawing courses can include insufficient student numbers and courses not receiving the necessary accreditation or approval. Changes to course information may include operational and academic reasons.

If circumstances beyond our control mean we cannot provide particular educational services, all reasonable steps will be taken to minimise any disruption to those services. However, the University will have no liability for any loss or damage suffered by any prospect or student as a result.

As a prospective student of University of Staffordshire, it's your responsibility to ensure you have fully reviewed up-to-date course information before you apply,

and that your chosen course fully meets your requirements. You should also check the course still meets your requirements before accepting an offer to study with us.

Student satisfaction scores have been provided by Unistats and are correct at the time of going to print. For more information, visit: **discoveruni.gov.uk**

If we discontinue a course or programme and you're not happy with the alternative offered, or if a programme is changed and you're not happy with the changes, you'll be given the opportunity to withdraw from the programme. Up-to-date course information can be found on our website (**www.staffs.ac.uk**), or by calling us on **01782 294400**.

If you're offered a place at the University of Staffordshire, your offer will be subject to the University's Terms and Conditions of Offer. If you become a student of University of Staffordshire, you will enter a contract with us and be bound by our rules and regulations. These, too, may vary from time to time (**www.staffs.ac.uk/rulesandregs**).

University of Staffordshire

2ND IN THE UK FOR QUALITY EDUCATION

Sustainable Development Goal 4 THE
Impact Rankings 2024

5TH FOR FIRST GEN STUDENTS

The Mail University guide 2025

TOP 10 FOR CAREER PROSPECTS

Whatuni Student Choice Awards 2023

TOP 20 FOR FACILITIES

Whatuni Student Choice Awards 2023

TOP 10 FOR SOCIAL INCLUSION

The Times and The Sunday Times Good
University Guide 2023

87% OF RESEARCH IMPACT IS 'OUTSTANDING' OR 'VERY CONSIDERABLE'

Research Excellence Framework 2021

For more detailed information
on courses or studying at
University of Staffordshire visit:
www.staffs.ac.uk/undergraduate

Find us on:
www.staffs.ac.uk/socialmedia

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