



SWINDON AND WILTSHIRE

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COURSE GUIDE



A TECHNICAL
SKILLS
REVOLUTION

 **New College**
SWINDON







WELCOME TO THE SWINDON AND WILTSHIRE INSTITUTE OF TECHNOLOGY (SAWIOT).

We deliver higher technical qualifications, apprenticeships and degree-level courses across the following fields:

Business Management

Creative Media

Digital & Computer Science

Engineering & Construction

Science & Health

**A TECHNICAL SKILLS
REVOLUTION**

OFFERING SKILLS TO THE **WORKFORCE OF THE FUTURE** IN HIGHER TECHNICAL VOCATIONS

WHAT IS AN INSTITUTE OF TECHNOLOGY?

Institutes of Technology are leaders in the provision of high-quality, higher-level technical education and training across a range of STEM occupations and industries.

Each IoT works with employers in their region to ensure that the education, training and experience will feed into the local economy, producing the leaders and thinkers of the future for the region.



FOR LEARNERS

At our core, we prioritise future-proofing your success. We pave the way for career prospects, whether you are entering the world of technical employment or seeking advancement within your current organisation. Leave with confidence, knowing you have the desired skills and knowledge that make you a top choice for employers in your chosen field.

Speak to us about blended learning options.



FOR EMPLOYERS

Our curriculum is shaped by the insights and priorities of leading regional, national and international employers, this ensures our graduates possess the skills organisations demand, for today and tomorrow. Whether you seek fresh talent or aim to empower your current workforce, we deliver tailored solutions to meet your needs.



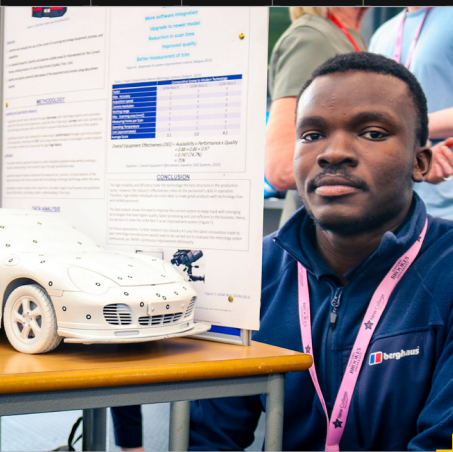
NATIONAL NETWORK

SAWIOT is one of 21 national IoTs. Each IoT is made up of a collaboration between experienced education providers and leading industry employers. The main goal of each IoT is to deliver regionally relevant world-class technical education and training.



Each IoT works with employers in their region to ensure that the education, training and experience will feed into the local economy, producing the leaders and thinkers of the future for the region.

WHY STUDY LOCALLY?



COST-EFFECTIVE EDUCATION

Lower tuition fees and reduced living expenses make it a more budget-friendly option than attending a traditional university.

PERSONALISED SUPPORT

Smaller class sizes mean more individualised attention from lecturers and better opportunities for one-on-one interactions, encouraging a supportive learning environment.





DEGREE LEVEL QUALIFICATIONS

Our qualifications are academically and educationally equivalent to university degrees, reflecting the same depth of knowledge and skill.



COMMUNITY ENGAGEMENT

Studying locally allows you to stay connected with your community, build local networks, and access job opportunities through local connections.



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EXPLORE THE COURSES WE OFFER ON THE FOLLOWING PAGES

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Disclaimer:

Information is accurate at the time of going to print. The SAWIOT reserves the right to make changes or cancellations to courses, their content, and delivery locations.



BUSINESS MANAGEMENT

PAGE 9-11

Management and Administration

Level 3



T-LEVELS

T Level Management and Administration
You will develop a range of skills vital for management and administration roles. You will choose an occupational specialism from one of the following: business improvement, business support, or team leadership/management.

Includes a minimum of 45 days working with an employer on an industry placement.

HND Business

Level 5



Elevate your career potential and explore an array of engaging topics, from local to global business challenges. You will cultivate invaluable skills like strategic thinking, problem-solving, and leadership. Each unit immerses you in theoretical knowledge and practical expertise, spanning management, HR, marketing, accounting, business strategy, and law. Prepare to excel in diverse fields within the dynamic business landscape.


Operations / Departmental Management

Level 5



Become the driving force behind achieving organisational goals and strategies. You will master the art of managing teams, projects, and change, while excelling in financial management, talent development, and resource optimisation. Elevate your skills in creating operational plans, coaching, and mentoring, as you prepare to make a significant impact on your organisation's journey to success.



Course	Level	Delivery Method	Duration
Management and Administration	3	T-LEVELS	2 years
HND Business	5	Full-time or Part-time	FT: 2 years PT: 4 years
Operations / Departmental Management	5	 Apprenticeships	24 months



CREATIVE MEDIA

PAGE 12-13

**HND Creative
Media
Production
(Film & TV)**

Level 5



Unlock your creative potential as you learn to craft compelling visual stories, master the art of cinematography, and gain hands-on experience in innovative production techniques. Explore the magic of filmmaking and television production while bringing your visions to life. Get ready to make your mark in the dynamic and thrilling realm of creative media.

**HND Creative
Media
Production
(Games Design)**

Level 5



Unleash your creativity and technical skills to craft immersive digital experiences. Dive into professional environments, harness industry-standard tools, and delve into game design, development, and storytelling. With hands-on experience, you will create interactive worlds that captivate gamers worldwide. Join us and become a visionary in the dynamic realm of game design.

Course	Level	Delivery Method	Duration
HND Creative Media Production (Film & TV)	5	Full-time	2 years
HND Creative Media Production (Games Design)	5	Full-time	2 years



DIGITAL & COMPUTER SCIENCE

PAGE 14-26

Multi-Channel Marketing (previously Digital Marketing)

Level 3



Multi-channel marketers play a pivotal role in various industries, driving customer-centric marketing strategies for products and services across sectors like finance, engineering, hospitality, and IT. Working within a team or independently, apprentices will craft campaigns, engage stakeholders, and innovate marketing approaches, shaping businesses in the ever-evolving market landscape.

Information Communications Technician

Level 3



ICT professionals are vital across all sectors, ensuring seamless operation of IT and telecommunications. They maintain systems, troubleshoot issues, and support users remotely or on-site, utilising diverse skills like networking, server management, and digital communications. Their role spans various fields, resolving complex problems crucial for organisational efficiency.

BTEC National Extended Diploma ESports

Level 3



Unlock your esports passion with this course. Gain essential skills for healthy competition, tournament organisation, and explore marketing, legal, and sports science in the industry. Complete units, including esports industry knowledge, coaching, branding, nutrition, game design, broadcasting, networking, customer immersion, and shoutcasting. Join the exciting world of competitive gaming.

Digital Support Services

Level 3



T-LEVELS

Discover the digital landscape's impact on business ethics and innovation! You will explore tech's influence on business, ethical considerations, data-driven software design, problem-solving techniques, legal obligations, data privacy, internet security, project planning, testing, and collaborative digital tools.

Additionally, you will dive into specific areas like roles, communication, and problem resolution within digital support services.

Includes a minimum of 45 days working with an employer on an industry placement.

Digital Production, Design and Development

Level 3



T-LEVELS

Explore the dynamic world where digital meets business ethics and innovation! Students delve into the impact of tech on business, ethical considerations, data-driven software design, problem-solving with digital tools, emerging trends like IoT and AI, navigating legal obligations, securing data, project planning, and harnessing digital tools for seamless collaboration.

Includes a minimum of 45 days working with an employer on an industry placement.

Software Development

Level 4



As a software developer, your core responsibility is crafting and testing robust code spanning front-end, logic, and database layers. Within a collaborative team, you will manage specific project components. Proficiency in interpreting design documents and specifications is essential to your role.

Cyber Technologist

Level 4



Safeguard organisations and data across sectors like digital, government, finance, and health from cyber threats. With roles including Cyber Security Engineer, Risk Analyst, or Defender & Responder, play your role in designing secure systems, assess risks, and respond to breaches in today's security-focused landscape.

Data Analyst

Level 4



Data Analysts thrive across sectors, analysing data to shape decisions and solve problems. They dissect trends, recommend product strategies in retail, assess staff retention in HR, or optimise services in healthcare. Interacting internally and externally, they ensure data compliance while navigating an ever-evolving landscape of tools and trends.

Network Engineer

Level 4



As a Network Engineer, you will craft, implement, and manage communication networks, whether they are internal or span across multiple organisations. Your role involves optimising network performance, troubleshooting issues, and providing essential support to users.

Ensuring uninterrupted connectivity for employees and customers, you will offer expert technical guidance and a comprehensive understanding of network intricacies, keeping systems operational and efficient.

Software Tester

Level 4



Software Testers play a crucial role in verifying software functionality. They design test plans and execute testing processes to guarantee software meets its intended use. Testers' document and communicate test outcomes, possessing a solid grasp of software development practices and the software lifecycle, ensuring the reliability and quality of software products.

Dev Ops Engineer

Level 4



As a DevOps Engineer, you will oversee the full development and operations lifecycle, from design to release. Leveraging Cloud computing, you will define infrastructure through code, shifting away from traditional system administration focused on hardware troubleshooting.

Your role bridges the gap between development and operations, ensuring seamless product iteration and deployment.

HE Diploma Data Analytics

Level 4



Data analysts excel in managing, cleaning and abstracting data, as well as conducting diverse analytical studies. They offer technical data solutions, reporting findings, and making recommendations for business enhancement. Proficiency in data structures, databases, and analytical tools empowers them to deliver valuable insights to stakeholders.

HND Computing for England

Level 5



Embrace your passion for computer science and digital expertise with our dynamic and engaging qualification. Ideal for computing and digital tech professionals, it emphasises cybersecurity, networking, digital strategy, and software development – making it a perfect fit for those seeking hands-on learning and a stimulating journey in the digital realm.

FdSc Data Analyst

Level 5



This foundation degree primes students for a specialised role as Data Analysts. Upon Level 5 completion, candidates can advance to Level 6 BSc (Hons) in Computing (Data Analytics).

The curriculum covers diverse data analytic techniques, business intelligence, workplace professionalism, and the practical application of academic skills, ensuring graduates are well-prepared for the professional world of data analysis.

FdSc Network Engineer

Level 5



In this specialised pathway, students will engage in designing, building and testing network engineering solutions with a focus on applying engineering principles and ensuring security. They will analyse, design and create artifacts, while conducting tests to enhance efficiency and quality. Collaborative teamwork will be emphasised, with students taking significant responsibility in various networking projects, honing their skills in project management and network development.

FdSc Software Engineering

Level 5



Students will delve into designing, constructing, and testing software solutions, integrating engineering principles throughout the software development lifecycle, with a focus on security. They will analyse, design, and craft artifacts, conduct actions and tests to enhance efficiency and quality, and develop tools for configuration management, version control, and software build. Collaboration and teamwork skills will be emphasised, with students taking substantial responsibility in software project elements.

HND Esports

Level 5



Mandatory units cover esports ecosystems, skills analysis, event planning and project management. Cultivating creativity and critical thinking, You will apply principles adeptly in esports. Equipped with decision-making skills, you will be prepared for various career paths and excel in various roles.

FdSc Cyber Security

Level 5



This course blends essential fundamentals with innovative technologies, providing practical insights into designing, analysing, and implementing contemporary IT security systems. With hacking posing a pervasive threat to businesses of all sizes and sectors, cybersecurity has risen to global prominence as a paramount concern, making this course highly relevant in today's digital landscape.

DTSP Cyber Security

Level 6



Apprenticeships

This qualification will equip you with advanced expertise in cyber security, covering topics like cryptography, network security, ethical hacking, and incident response. This course emphasises hands-on learning, preparing graduates for in-demand roles in safeguarding digital systems against evolving threats.

DTSP Software Engineering

Level 6



Apprenticeships

This qualification offers advanced training in software development methodologies, algorithms, and system architecture. Focusing on practical skills and innovative solutions, this course prepares graduates for leadership roles in designing and creating complex software systems.

DTSP Data Analyst

Level 6



Apprenticeships

This qualification provides comprehensive training in advanced analytics, statistical modeling, and data visualisation. You will develop expertise in interpreting complex data sets, deriving insights, and making data-driven decisions, preparing you for high-demand roles in diverse industries.

DTSP Network Engineer

Level 6



Embark on a journey mastering intricate network architectures, security protocols, and optimisation strategies with our Network Engineer Level 6 qualification. Dive into cutting-edge technologies, becoming a skilled navigator in the digital landscape, ready to design, safeguard, and elevate complex networks for tomorrow's challenges.

BSc Computer Science Top-Up

Level 6



This qualification provides advanced knowledge in computer science for individuals with related diplomas or degrees, enabling enhanced expertise and career opportunities in the field.

BSc Cyber Security Top-Up

Level 6



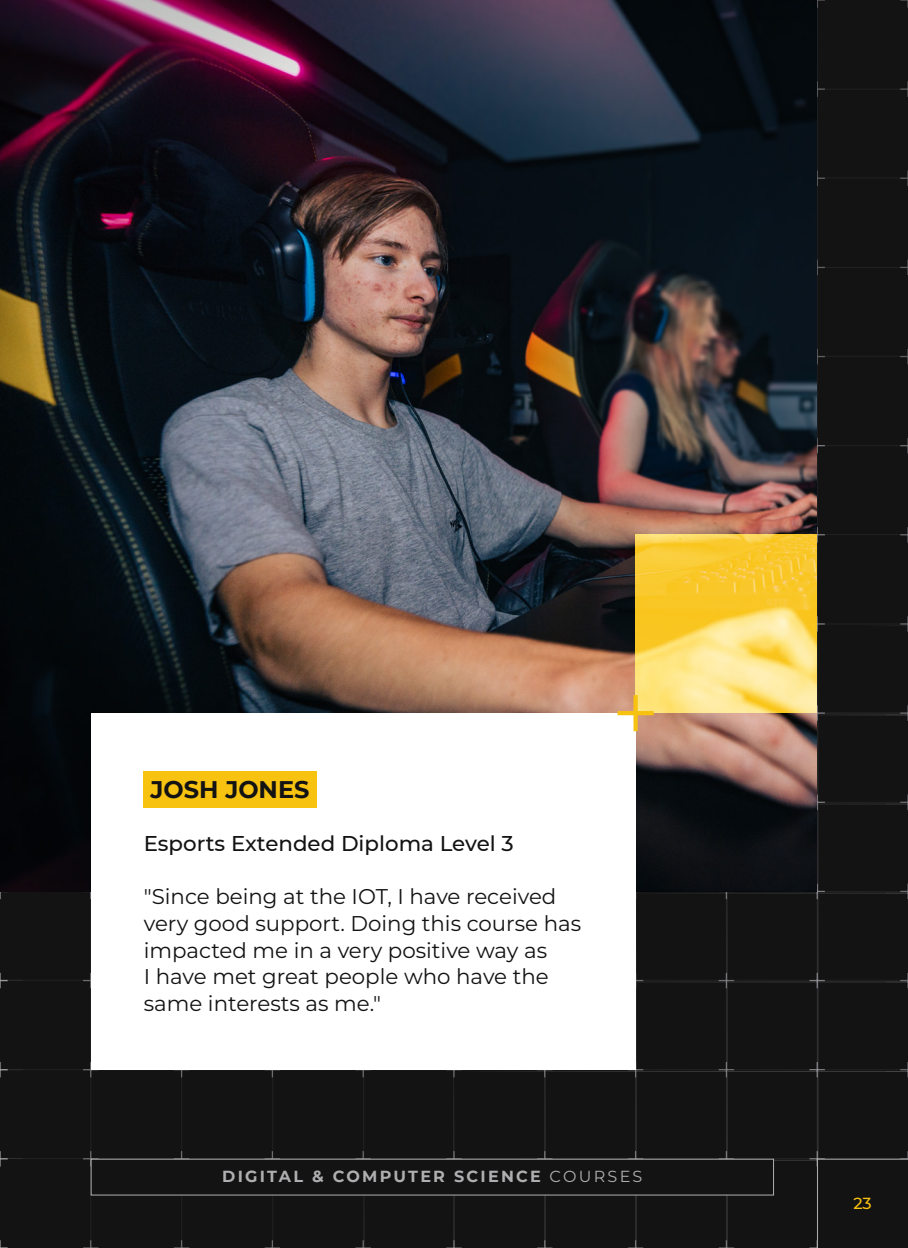
If you have a Level 5 qualification, this course will help sharpen your expertise in safeguarding digital systems and will prepare you for advanced roles in securing information and networks.

BSc Software Engineering Top-Up

Level 6



If you have a Level 5 qualification and are looking to strengthen your skills in software development, this course will help to refine your expertise, for specialist roles in Engineering.







JOSH JONES





Esports Extended Diploma Level 3

"Since being at the IOT, I have received very good support. Doing this course has impacted me in a very positive way as I have met great people who have the same interests as me."

Course	Level	Delivery Method	Duration
Multi-Channel Marketing	3	 Apprenticeships	18 months
Information Communications Technician	3	 Apprenticeships	18 months
BTEC National Extended Diploma Esports	3	Full-time	2 years
Digital Production, Design and Development	3	T-LEVELS	2 years
Digital Support Services	3	T-LEVELS	2 years
HE Diploma Data Analytics	4	Full-time	1 year
Software Development	4	 Apprenticeships	24 months
Cyber Technologist	4	 Apprenticeships	24 months
Data Analyst	4	 Apprenticeships	24 months

Course	Level	Delivery Method	Duration
Network Engineer	4	 Apprenticeships	24 months
Software Tester	4	 Apprenticeships	24 months
Dev Ops Engineer	4	 Apprenticeships	24 months
HND Computing for England 	5	Full-time	2 years
HND Esports	5	Full-time	2 years
FdSc Data Analyst	5	Full-time	2 years
FdSc Software Engineering	5	Full-time	2 years
FdSc Network Engineer	5	Full-time	2 years
FdSc Cyber Security	5	Full-time	2 years



Course	Level	Delivery Method	Duration
DTSP Cyber Security	6	 Apprenticeships	36 Months + 12 months for EPA
DTSP Software Engineering	6	 Apprenticeships	36 Months + 12 months for EPA
DTSP Data Analyst	6	 Apprenticeships	36 Months + 12 months for EPA
DTSP Network Engineer	6	 Apprenticeships	36 Months + 12 months for EPA
BSc Computer Science Top-Up	6	Full-time	1 year
BSc Cyber Security Top-Up	6	Full-time	1 year
BSc Software Engineering Top-Up	6	Full-time	1 year



ENGINEERING & CONSTRUCTION

PAGE 27-35

Design and Development for Engineering and Manufacturing

Level 3



T-LEVELS

Design Engineers utilise cutting edge technologies and innovative solutions to develop products from prototype to reality using engineering skills in fields such as robotics, smartphones, sustainable energy and defence systems. You will study specialist units including: skills in producing mechanical drawings and representations; skills in designing and developing working models; skills in testing models and prototypes.

Includes a minimum of 45 days working with an employer on an industry placement.

Design, Surveying and Planning for Construction

Level 3



T-LEVELS

This course is ideal if you have an interest in Construction management and want to focus on design and surveying or civil engineering. You will gain the core knowledge required for the construction sector including: science and building technology; construction industry and sustainability; surveying and design for construction and the built environment; civil engineering; building services design; design and management of construction projects.

Includes a minimum of 45 days working with an employer on an industry placement.

Engineering, Manufacturing, Processing and Control

Level 3



T-LEVELS

You will develop an understanding of a broad range of issues relevant to the sector, including: how materials, conditions and context influence design processes and products; essential mathematics for engineering and manufacturing; materials and their properties; business, commercial and financial awareness.

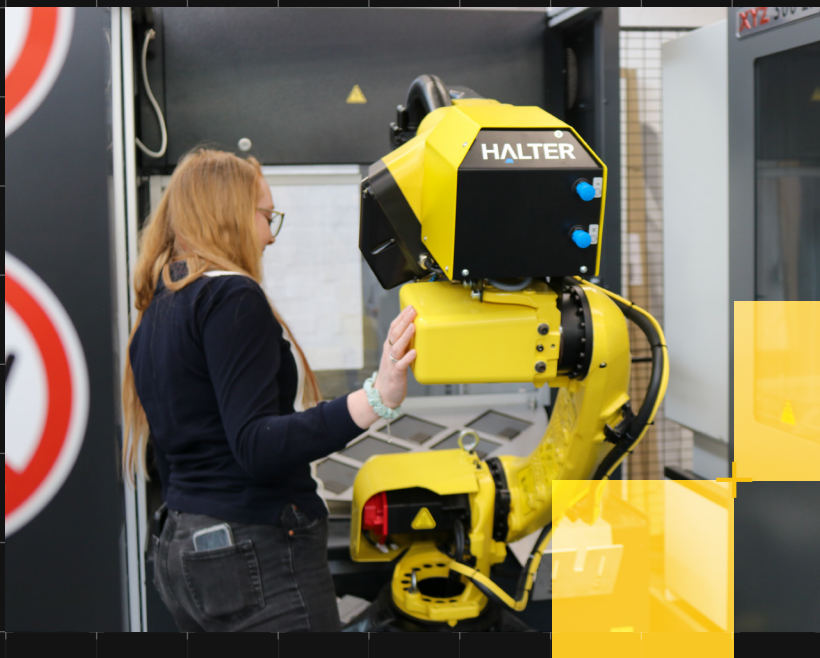
Includes a minimum of 45 days working with an employer on an industry placement.

Civil Engineering Technician

Level 3



This apprenticeship is for people who want to train and qualify as a Civil Engineering Technician. This role involves providing technical support to engineers and other construction professionals in a number of areas including: design, development, construction, commissioning, decommissioning, operation or maintenance of the built environment and infrastructure. Developing knowledge of Construction and the built environment, Further mathematics, Science and materials in construction, surveying and structural analysis.



Engineering Technician (Machining and Maintenance)

Level 3



This course dives deep into precision machining techniques and comprehensive equipment maintenance strategies. Equip yourself with the skills and knowledge to excel in the dynamic field of industrial technology and keep systems running smoothly.

Engineering Manufacturing Technician

Level 4



Take your engineering career to the next level with our Engineering Manufacturing Technician course. Explore advanced manufacturing techniques, innovative technologies, and hands-on experience. Elevate your expertise and become a sought-after professional in the rapidly evolving world of engineering and manufacturing.

HNC Manufacturing Engineering for England

Level 4



Unlock your potential with our HNC Engineering programme, specialising in Electrical and Electronics. Gain in-depth knowledge and hands-on experience in your chosen field. Prepare for a successful career in the ever-evolving worlds of electrical, electronic, or mechanical engineering.

HNC Electrical and Electronic Engineering for England

Level 4



Embark on a transformative journey with HNC Electrical and Electronic Engineering Level 4 in England. Experience hands-on learning, harness cutting-edge technologies, and pave the way for a dynamic career in this evolving field of innovation and discovery.

HNC Construction Management for England

Level 4



Our HNC courses in the professional construction department are meticulously crafted to enhance and expand the expertise of individuals employed in the construction and civil engineering fields. These programmes incorporate employer and professional sector input to ensure essential subject knowledge is comprehensive and industry-relevant, equipping students for success in their respective careers.

HNC Civil Engineering

Level 4



Discover the foundation of infrastructure and gain practical skills, dive into real-world projects, and shape the landscapes of tomorrow in this dynamic field of construction and development.

FdEng Manufacturing Engineering

Level 5



OXFORD
BROOKES
UNIVERSITY

Prepare for a rewarding career in the world of manufacturing with our FdEng Manufacturing Engineering qualification. Gain a comprehensive understanding of innovative manufacturing processes, automation, and quality control. Equip yourself with the knowledge and skills needed to excel in this dynamic and innovative field.

Manufacturing Engineering

Level 6



Reach the pinnacle of your manufacturing career with hands-on learning and advanced knowledge in strategic manufacturing, automation, and leadership. Embark on a journey that combines real-world skills and academic insights, shaping you into a future-ready manufacturing leader.

BEng (Hons) Manufacturing Engineering

Top-Up Level 6



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BROOKES
UNIVERSITY







Accelerate your engineering career with our full-time BEng Manufacturing Engineering top up qualification. Tailored for those with prior qualifications, this intensive course focuses on advanced manufacturing techniques, automation, and project management. Equip yourself with the expertise to thrive in the fast-paced world of manufacturing.




JACK PENDREY

**L3 BTEC NATIONAL EXTENDED DIPLOMA
IN ENGINEERING**

“SAWIOT offered an engineering course with new facilities and up to date technology. I like the engineering labs, 3D printers, workshops and robotic arms which are used in the industry. I’ve already been offered a Level 6 degree apprenticeship in engineering.”

Course	Level	Delivery Method	Duration
Design and Development for Engineering and Manufacturing	3	T-LEVELS	2 years
Design, Surveying and Planning for Construction	3	T-LEVELS	2 years
Engineering, Manufacturing, Processing and Control	3	T-LEVELS	2 years
Civil Engineering Technician	3	 Apprenticeships	42 months
Engineering Technician	3	 Apprenticeships	48 months
Engineering Manufacturing Technician	4	 Apprenticeships	42 months
HNC Manufacturing Engineering for England 	4	Part-time	2 years
HNC Electrical and Electronic Engineering for England 	4	Part-time	2 years
HNC Construction Management for England 	4	Part-time	2 years

Course	Level	Delivery Method	Duration
HNC Civil Engineering	4	Part-time	2 years
FdEng Manufacturing Engineering	5	Full-time /1 day a week	2 years
Manufacturing Engineering	6	 Apprenticeships	48 months
BEng (Hons) Manufacturing Engineering Top-Up	6	Full-time /1 day a week	1 year



A young man with brown hair, wearing safety goggles and a white lab coat, is working in a laboratory. He is pouring a yellow liquid from a white plastic bottle into a small white beaker that sits on a digital scale. A larger Erlenmeyer flask containing the same yellow liquid is in the foreground. The background shows a blurred laboratory setting with green and white equipment. There are yellow and white geometric overlays on the image.

SCIENCE & HEALTH

PAGE 36-39

Laboratory Technician

Level 3



Enter the world of lab technology by exploring dynamic opportunities across sectors like pharmaceuticals, biotechnology, nuclear, and more. Master safe laboratory practices, quality protocols, data analysis, and regulatory compliance. Uncover the secrets of scientific discovery and innovation in this exciting course.

Lab Science

Level 3



T-LEVELS

You will cover core components including aspects of physics (radioactivity, electronics, materials), chemistry (atomic theory, chromatography, titration analysis, catalysts and chemistry practical techniques) and biology (microbiology, infectious diseases and immunity, staining techniques and cell analysis, genetics and DNA), and working in the science sector. During the two years, a minimum of 45 days of work placement is undertaken.

Technician Scientist

Level 5



Conduct laboratory investigations and scientific experiments by combining a mix of routine and advanced skills. Adhere to established principles in science and technology, often in sectors like chemistry, pharmaceuticals, biotechnology, formulated products, or analytical services.

Healthcare Assistant Practitioner

Level 5



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UNIVERSITY

This qualification will equip you with advanced skills to assist you in clinical settings. Covering complex care procedures, leadership and critical thinking, this course prepares you to deliver high-quality patient care and contribute effectively within your healthcare team.

Health and Social Care Foundation Degree

Level 5



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BROOKES
UNIVERSITY

Empower yourself in health and social care by gaining practical expertise in diverse care environments, honing skills to assist professionals effectively. This programme equips you to make a meaningful impact on individuals' lives within the dynamic healthcare landscape.

FdSc Applied Science

(Chemical Science Pathway / Biochemical Science Pathway)

Level 5



This qualification prepares you for higher-level laboratory positions like Technician Scientist or Laboratory Scientist. It covers essential scientific content, such as biochemistry and chemistry (depending on your chosen path), alongside vital knowledge in regulation, quality assurance, project management and lab operations. If not currently in a lab role, gaining work experience is crucial to complete the second-year work-based project. We provide support for this.

BSc Professional Development in Health and Social Care (top up)



Level 6



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BROOKES
UNIVERSITY


Enhance existing knowledge for healthcare professionals. Tailored to deepen expertise in management, research, and specialised care, it empowers individuals to advance their careers and make meaningful contributions in diverse healthcare and social service settings.



Course	Level	Delivery Method	Duration
Laboratory Technician	3	 Apprenticeships	18-24 months
Lab Scientist	3	T-LEVELS	2 years
Technician Scientist	5	 Apprenticeships	36 months
Healthcare Assistant Practitioner	5	Full-time	2 years
Health and Social Care Foundation Degree	5	Full-time	2 years
FdSc Applied Science (Chemical Science Pathway / Biochemical Science Pathway)	5	Full-time	2 years
BSc Professional Development in Health and Social Care (top-up)	6	Full-time	1 year

NOT YET A PARTNER?...

LET'S WORK TOGETHER



Our tiered partnership is flexible to maximise the opportunities for employers to engage with students and curriculum teams.

Bronze Classroom

Work directly with our students by delivering engaging activities within the classroom.

- Provide guest lectures
- Deliver expert workshops and masterclasses
- Provide real-life scenario-based activities and live briefs
- Use our state-of-the-art facilities to deliver CPD for employees and lecturers alike
- Judge end-of-year projects and competitions.

Silver Classroom *PLUS* Curriculum

Influence curriculum development to help shape the future of skills and qualifications.

- Attend and engage with employer forums
- Collaborate in the development of new qualifications and delivery models and with Awarding organisations
- Co-create assignments and briefs to meet expectations of skills enhancements.
- Provide industry insights into skills and equipment needs, working to identify the skills deficits and opportunities.

Gold Classroom, Curriculum *PLUS* Careers

Provide a bridge between college and the workplace, helping students kick-start their career.

- Conduct mock interviews and feedback
- Provide work experience and traineeship opportunities
- Hire apprentices.

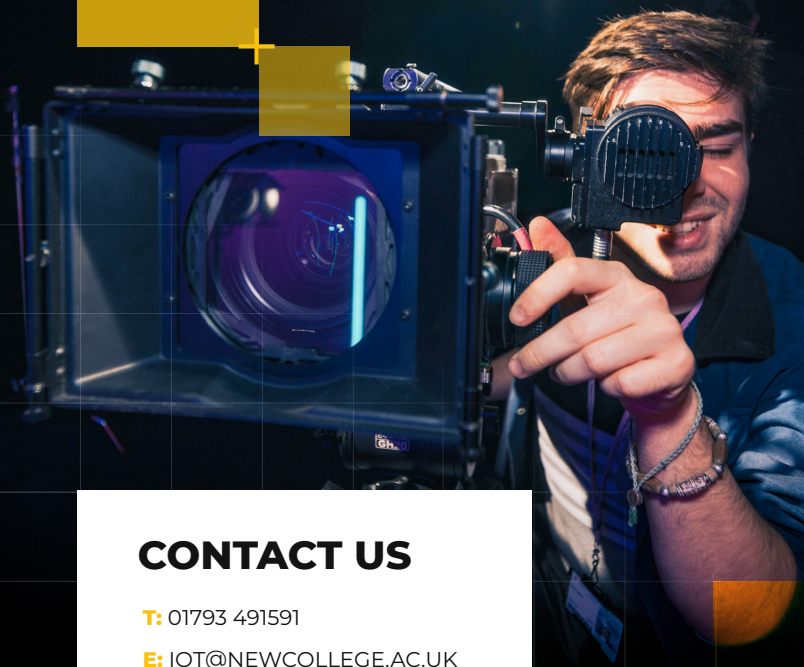
If you're an employer looking to get involved.
Contact our **business development team** today.

Email: employers@newcollege.ac.uk

PARTNERS & STAKEHOLDERS



FOR MORE INFORMATION, VISIT: WWW.SAWIOT.AC.UK



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INDUSTRY FOCUSED. CAREER READY.

SWINDON AND WILTSHIRE

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