



University
Centre
Somerset

PROSPECTUS 2021 - 22

**CONSTRUCTION, ENGINEERING,
NUCLEAR AND MOTORSPORT**



somerset.ac.uk



BRIDGWATER
& TAUNTON
COLLEGE



THE FIRST NEW NUCLEAR POWER STATION TO BE BUILT IN THE UK IN OVER 20 YEARS IS RIGHT ON OUR DOORSTEP **HERE IN SOMERSET**

THERE ARE **2.4 MILLION** CONSTRUCTION INDUSTRY JOBS IN THE UK
(Engineering UK: Key facts and figures 2019)

THE MEDIAN SALARY OF FULL-TIME EMPLOYEES WORKING IN PROFESSIONAL ENGINEERING OCCUPATIONS RANGE BETWEEN **£30,360 & £51,279**
(Engineering UK: Key facts and figures 2019)

4,300 UK BUSINESSES OPERATE IN THE MOTORSPORT SECTOR, SUSTAINING NEARLY **41,000 JOBS**
(www.theengineer.co.uk)



CONSTRUCTION, ENGINEERING, NUCLEAR & MOTORSPORT

University Centre Somerset has a thriving Engineering Department with both the Energy Skills Centre and the brand new Advanced Engineering Centre in Bridgwater, plus the National College for Nuclear Southern Hub in Cannington, providing outstanding learning environments.

With professional staff and advanced modern facilities, UCS offers a comprehensive range of higher-level construction and engineering qualifications.

Our College Motorsport Race Team, currently national champions, is made up of Higher Education students studying Motorsport and competing regularly across the country at circuits including Silverstone and Brands Hatch. Graduates have gone on to work for companies including McLaren F1 and Mercedes HPP.



CONTENTS

- 6 Facilities
- 8 Access to HE
- 10 Higher & Degree Level Apprenticeships
- 12 Construction & the Built Environment HNC Level 4
- 14 Construction & the Built Environment (Civil Engineering) HNC Level 4
- 16 Construction & the Built Environment (Civil Engineering) HND Level 5
- 18 Mechanical Engineering Foundation Degree
- 20 Mechatronics Foundation Degree
- 22 Electrical & Electronic Engineering HNC Level 4
- 24 Aeronautical Engineering HNC Level 4
- 26 Manufacturing Engineering HNC Level 4
- 28 Mechanical Engineering HNC Level 4
- 30 Engineering HND Level 5
- 32 General Engineering HNC Level 4
- 34 Motorsport Engineering Foundation Degree
- 36 Motorsport Technology BEng (Hons) Top-up
- 39 Nuclear Engineering Higher & Degree Level Apprenticeships
- 41 Where to find us
- 43 University Centre Somerset course list



Facilities

With professional staff and advanced modern facilities, the construction and engineering departments at University Centre Somerset offer a comprehensive range of HNCs, HNDs and degree-level programmes. All courses involve a mix of practical and theoretical learning and open up a world of possibilities in your chosen career.

We provide state-of-the-art, bespoke workshops and teaching areas for construction professions and various disciplines within engineering from manufacturing to nuclear. Significant investment in recent years across our campuses has seen these departments thrive. As our partnerships with EDF Energy, the Nuclear Decommissioning Authority and the National Skills Academy (Nuclear) demonstrate, we deliver education that is grounded in the requirements and expectations of the 21st century.

Advanced Engineering Centre (AEC)

The £7.5 million investment in the AEC at our Bridgwater campus has created a perfect environment to support this fast-paced industry. The Centre houses a design thinking lab and composite laboratory where students and prestigious employers work with materials that are transforming engineering.

Energy Skills Centre

Our flagship Energy Skills Centre at our Bridgwater campus provides opportunity and inspiration in equal measure. Our industry-standard laboratories and workshops are installed with an array of equipment that makes your learning experience all the richer. This includes the very latest computer-aided design facilities, robotic engineering equipment and space for fabrication, maintenance and modification.

Motorsport

Students have the opportunity to work on our own racing car and customer cars in fully equipped workshops using the latest tooling, diagnostics and IT equipment. Our Motorsport Race Team,

currently national champions, take 'Poppet', our Radical PR6 race car, all over the country, competing regularly at circuits including Silverstone and Brands Hatch.

Construction

Our construction courses are based at our Taunton campus, using workshops in the Industry Skills Centre and classrooms and computer suites in the Technology Centre. Students have access to the latest software and technology to support modules such as hydraulic principles and technical drawing.

National College for Nuclear (Southern Hub)

Our Cannington campus is home to one of two National College for Nuclear (NCfN) hubs in England. NCfN delivers high-level technical training to thousands of learners, and is developing and delivering the UK's nuclear curriculum; designing new qualifications and training courses that meet the demand for highly skilled workers in the nuclear sector. The building boasts virtual reality environments and a bespoke nuclear engineering workshop complete with flow rig.



Access to HE

An Access to Higher Education Diploma is designed to provide a route for learners aged 19 or over who possess few or no formal qualifications to progress to university-level study. It can lead to a wide range of career and Higher Education opportunities here at University Centre Somerset or at another university of your choice.

We offer four different routes, each with particular progression opportunities linked to them.

Courses include:

- Health & Social Care
- Nursing & Midwifery
- Science
- Social Science.

In addition, Access to HE students may study core subjects to support their learning. These include:

- Study Skills
- Information Technology
- English
- Maths
- Tutorial.

If you complete an Access to HE course and then go on and complete a degree or other recognised higher education course, you won't have to repay the remaining loan for the Access to HE course.



Teaching & Assessment

The majority of modules are taught via lectures; other teaching methods include seminars, tutorials, workshops and guided learning/ independent activities. There is one exam and you will also produce a portfolio of work over the year, from which you will accumulate credits towards the Diploma.

Where does it lead?

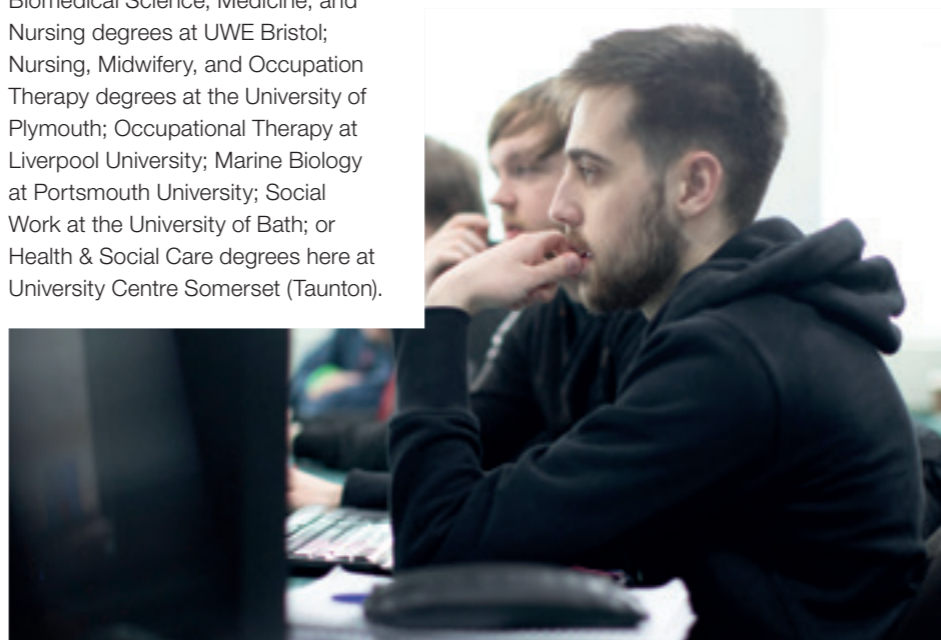
Successful completion of this course will provide you with a qualification that will allow you to apply to study a university-level course. In recent years, students have gone on to study a wide range of subjects including Biomedical Science, Medicine, and Nursing degrees at UWE Bristol; Nursing, Midwifery, and Occupation Therapy degrees at the University of Plymouth; Occupational Therapy at Liverpool University; Marine Biology at Portsmouth University; Social Work at the University of Bath; or Health & Social Care degrees here at University Centre Somerset (Taunton).

Duration: 30 weeks

Location: Taunton

Entry requirements:

- Self-motivation and a willingness to learn along with sufficient time for independent study
- There are no formal qualifications required for entry but you will undergo an initial assessment to ensure you are on the right course for your skill level and you may need to have relevant work experience
- You are required to be aged 19 or over and may be eligible for a loan to cover your course fees.



Higher & Degree Level Apprenticeships

With the introduction of the Apprenticeship Levy in April 2017, employers are offering more Apprenticeships at various levels. Our expertise and partnerships with industry enables us to facilitate opportunities that address the increasing demand for higher-level skills in Somerset and beyond. Higher and degree level Apprenticeships are a popular choice and provide you the chance to gain applicable skills and knowledge about an industry. Please see our list of courses opposite, check our website or call for more information on the types of Apprenticeships we offer and our employer partners.

What is an Apprenticeship?

Apprenticeships are an effective way of studying, enabling you to gain a nationally recognised qualification whilst obtaining practical on-the-job experience. In our recent Ofsted inspection our Apprenticeship provision was rated Outstanding with Ofsted inspectors

stating that “Apprentices develop an extensive range of skills and knowledge and many extend and deepen specialist skills beyond the requirements of their qualifications.”

Higher Apprenticeships refers to Apprenticeships that may include the achievement of academic/vocational qualifications at Level 4 and 5 such as HNCs, HNDs and Foundation Degrees, while degree level Apprenticeships can provide qualifications up to Level 6 or 7, such as a full BA, BSc or BEng Honours Degree, or in some cases even a Masters Degree.

Increasingly, you may hear Apprenticeships referred to as standards. These were introduced by the government as part of ongoing Apprenticeship reforms to meet the needs of employers. Standards are occupation-focused, they are not qualification-led and the content is decided by each employer, depending on their business requirements.

Why choose an Apprenticeship?

They are a great option for anyone looking for a fast track into a career. A Higher or Degree Level Apprenticeship brings together the best of higher and vocational training and enables higher education study plus invaluable on-the-job training without having to cover the cost of tuition. Fees for Apprenticeships are subsidised by employers and the government, and a salary is then paid to the individual undertaking the Apprenticeship programme – meaning that doing a Degree Apprenticeship can leave you debt-free and provide you with many years’ industry experience.

What can I study on an Apprenticeship?

Today you can study anything from human resources to mechanical engineering, health & social care to cyber security, and much more. We have more than 20 on offer and are continually updating our portfolio to support industry demand.

How long is an Apprenticeship?

A Higher or Degree Level Apprenticeship will likely last as long as 3 years, but could take as long as 5-6 years. As an apprentice, you would be employed full-time, although the combination of work and study can vary from one employer to another. Generally you’ll be required to work 30 hours per week, to leave you time to study, but that could take one of several forms - options include:

- **Day release**
Studying at UCS one day per week
- **Block learning**
Studying for 1-2 weeks at a time

Full-time education

For some employers apprentices will study full-time for the first year of their Apprenticeship, working with the employer during UCS holidays, and starting full-time employment after that first year.

What should I do next?

If you feel that an Apprenticeship may be for you, get in touch with our dedicated team who can talk through your options and what to do next. Call 01278 655111 or email apprenticehelp@btc.ac.uk.

Higher & Degree Level Apprenticeships

Our Apprenticeship offer is continually developing and changing due to business demands and changes to the Apprenticeship structure. Therefore, this list should only be considered as a guide.

CONSTRUCTION

Construction Quantity Surveying Technician Level 4
Construction Design and Build Technician Level 4
Construction Site Engineering Technician Level 4
Construction Site Supervisor Level 4

ENGINEERING AND NUCLEAR

Engineering Manufacturing Technician Level 4
Process Leader Level 4
Aerospace Engineer Level 6 Degree
Nuclear Engineer Level 6 Degree

COMPUTING

Digital Technology Solutions Level 6 Degree

We also offer apprenticeships in a number of other sectors:

HEALTH AND SOCIAL CARE

LAND-BASED

For more information, visit www.somerset.ac.uk





“The staff and lecturers were brilliant, very informative as well as being very friendly. The family-feel that they created helped increase my confidence as well as give me friends for life. Since I finished my course I have been employed by a large architectural practice in Yeovil.”

Tom Twidale, HNC Construction & the Built Environment

PEARSON

Construction & the Built Environment

HNC Level 4

This course equips you with a nationally recognised qualification that enhances your workplace skills and helps prepare you to advance your career in the construction industry.

This is a professional qualification that provides the ideal foundation for further study, or helps you secure a job.

The Higher National Certificate (HNC) consists of eight units, covering key knowledge and practical skills for the sector.

The modules studied may include:

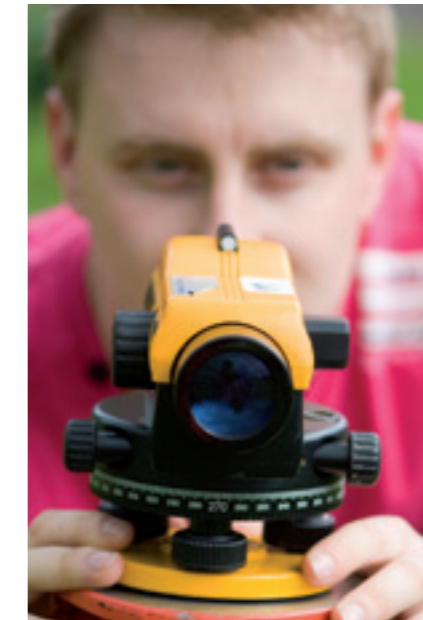
- Construction Practice & Management
- Legal and Statutory Responsibilities in Construction
- Construction Information (drawing, detailing and specification)
- Surveying, Measurement & Setting out
- Tendering and Procurement.

Teaching and Assessment

Assessment is by a mix of assignments, project work and some exams. Each module is assessed by means of a series of internally set assignments that involve a combination of scenario-based tasks linked to project work, practical exercises, timed tasks, individual study and presentations.

Progression Opportunities

There are more than 30 career choices within the construction professions, so the HNC really does open doors. In addition, you could go on to study at HND or degree level.



Entry Requirements

People come to this course from a range of backgrounds, and there is no single specific entry requirement. However, applicants would be expected to have at least one of the following:

- A minimum of 48 UCAS points from a full Level 3 qualification in a relevant subject
- A Level 3 National Diploma in Construction

Other appropriate qualifications may be taken into consideration, or relevant work experience.

Type:	HNC Level 4
Attendance:	Part-time
Location:	Taunton
Awarding body:	Pearson





Construction & the Built Environment (Civil Engineering)

PEARSON

HNC Level 4

Would you like to work towards a nationally recognised qualification that builds on the skills you have already developed in the workplace, to enhance your employability? If so, our Higher National Certificate in Civil Engineering is the perfect course to choose.

These professional qualifications provide the perfect foundation for a career in civil engineering. They are also a great basis from which to study a degree and blend theoretical and practical aspects of the discipline.

During your course you will cover a range of topics that may include:

- Construction Practice & Management
- Construction Information (Drawing, Detailing and Specification)
- Mathematics for Construction
- Principles of Structural Design
- Surveying, Measurement & Setting out.

Teaching and Assessment

Assessment is by a mix of assignments, project work and some exams. Each module is assessed by means of a series of internally set assignments that involve a combination of scenario-based tasks linked to project work, practical exercises, timed tasks, individual study and presentations.

Career Progression

Completion of the HNC in Construction and the Built Environment (Civil Engineering) enables you to apply for membership of the Institute of Civil Engineers. With this behind you, the world of work presents a variety of possibilities.

Our students have gone on to pursue careers such as Civil Engineer, Project Manager, Highway Engineer, Site Manager, Utilities Engineer and Structural Engineer.

You could go on to study the HND in Construction and the Built Environment at UCS. Alternatively, graduates may apply to study the discipline at degree level.

Entry Requirements

Typically entrants will possess at least one of the following:

- AS/A2 Levels
- Level 3 in Maths
- A National Certificate in Civil Engineering
- A National Diploma in Construction
- Relevant work experience

Other appropriate qualifications maybe taken into consideration.

Type:	HNC Level 4
Attendance:	Part-time
Location:	Taunton
Awarding body:	Pearson





Construction & the Built Environment (Civil Engineering)

HND Level 5

Would you like to work towards a nationally recognised qualification that builds on the skills you have already developed in the workplace to enhance your employability? If so, our Higher National Diploma in Civil Engineering is the perfect course to choose.

These professional qualifications provide the perfect foundation for a career in the construction industry. They are also a great basis from which to pursue degree level study in Civil Engineering, and blend theoretical and practical aspects of the discipline.

The programme is equally suited to those who may wish to progress on from the HNC in Civil Engineering to study at Level 5 or achieve a professional qualification to allow the application for chartered status in the future. The HND may be used as the Technical Certificate for a Higher Apprenticeship in Construction Site Management (Civil Engineering with Sustainability).

The modules studied may include:

- Applied Mathematics for Complex Engineering Problems
- Management Principles and Applications for Construction
- Health, Safety and Welfare for Construction and the Built Environment
- Advanced Civil Engineering
- Hydraulic Principles and Applications.

Teaching and Assessment

Assessment is by a mix of assignments, project work and some exams. Each module is assessed by means of a series of internally set assignments that involve a combination of scenario-based tasks linked to project work, practical exercises, timed tasks, individual study and presentations.

Progression Opportunities

Our graduates have gone on to pursue careers such as Civil Engineering, Project Management, Highway Engineering, Site Management, Utilities Engineering, Civil Engineering Surveying and Structural Engineering.

Entry Requirements

The HNC in Construction and the Built Environment (Civil Engineering) is a prerequisite to study for the HND in Civil Engineering. However, other Level 4 qualifications may be considered as recognised prior learning for entry onto the programme.

Employment in the civil engineering/ construction industry is helpful but not a prerequisite.

All applicants will be considered on individual merit and interviewed to ensure they have the potential to achieve this qualification.

Type:	HND Level 5
Attendance:	Part-time
Location:	Taunton
Awarding body:	Edexcel





Mechanical Engineering

Foundation Degree

The Foundation Degree in Mechanical Engineering is designed to provide the knowledge and understanding of how advanced and innovative engineering underpins the mechanical design, advanced manufacturing and technical service areas of the industry.

Mechanical engineers work to research, develop and manage projects, devising innovative solutions in design and manufacture. This course can also form part of a Higher Apprenticeship.

Modules may include:

- Stress and Dynamics
- Design, Materials and Manufacturing
- Fluid Dynamics
- Energy and Thermodynamics and Heat transfer
- Power and the Environment.

Teaching and Assessment

You will learn through a combination of lectures, directed study, course work, practical exercises and the completion of industry-related projects relevant to your employment. Your studies will be conducted in our Advanced Engineering Centre at the Bridgwater campus.

Assessment will be via a variety of assignments and examinations which will include the analysis and resolution of engineering based scenarios, as well as a portfolio of case work and reflective assignments.

Progression Opportunities

Direct progression onto the BEng (Hons) or MEng (Hons) Mechanical Engineering Degree at UWE Bristol is an option. This can be studied on full-time or part-time attendance patterns. Alternatively, you could progress to employment or to a higher apprenticeship programme.

Upon completion you may seek to progress your career in the engineering sector within industries such as manufacturing, automotive, aerospace, pharmaceuticals, energy and water.

Entry Requirements

Typically entrants will possess:

- A minimum of 120 UCAS points from a full Level 3 qualification in a relevant subject
- BTEC Level 3 Further Mathematics is required for applicants holding a BTEC Level 3 Diploma

Type:	Foundation Degree
UCAS Code:	093S
Institution code:	B70
Attendance:	Full-time
Location:	Bridgwater
Awarding body:	University of the West of England (UWE)

There may be the opportunity to study our full-time courses on a part-time basis, please contact us to discuss.





Mechatronics

Foundation Degree

This course aims to provide students with a higher education foundation in mechatronics with a work-based context. It links modules in electrical/electronic engineering and mechanical engineering to create a broad basis for further career development.

Modules may include:

- Design, Materials and Manufacturing
- Stress and Dynamics
- Electrical Technology
- Mathematics for Signals and Control
- Design and Electromechanical Systems.

Teaching and Assessment

This course is offered on a full-time or part-time basis. Teaching and assessment is via a combination of lectures and laboratory sessions, where you will complete project work, written reports and examinations. Your studies will be conducted in our Advanced Engineering Centre at the Bridgwater campus.

Progression Opportunities

You could qualify for direct entry on to year 3 of the BEng (Hons) Electronic Engineering at UWE Bristol. The course represents an ideal foundation towards progression into a professional engineering role.

Mechatronics engineers are required in a wide variety of industries from defence, automotive and aerospace to manufacturing and nuclear decommissioning.



Entry Requirements

- Typically entrants will possess:
- A minimum of 120 UCAS points from a full Level 3 qualification in a relevant subject
 - BTEC Level 3 Further Mathematics is required for applicants holding a BTEC Level 3 Diploma

Type:	Foundation Degree
UCAS Code:	834A
Institution code:	B70
Attendance:	Full-time
Location:	Bridgwater
Awarding body:	University of the West of England (UWE)

There may be the opportunity to study our full-time courses on a part-time basis, please contact us to discuss.





Aeronautical Engineering

PEARSON

HNC Level 4

The course is designed for those looking to develop their career prospects in the aeronautical industry after successfully completing a relevant Level 3 course, or direct entry for those with practical work experience. Learners study in new, state-of-the-art engineering facilities and are supported by a team of experienced professionals.

The Level 4 Higher National Certificate in Aeronautical Engineering offers students a broad introduction to the subject area via a mandatory core of learning, while allowing for the acquisition of some sector-specific skills and experience through the specialist units.

The course has four core units:

- Engineering Design
- Engineering Maths
- Engineering Science
- Managing a Project

One specialist unit:

- Aircraft Aerodynamics

And three optional units, which may include:

- Aircraft Electrical Power and Distribution Systems
- Airframe Mechanical Systems
- Composite Materials for Aerospace Applications

Holders of a BTEC Higher National Certificate in Aeronautical Engineering meet the academic requirements for the Engineering Council Engineering Technician Standard (EngTech)

There may be opportunities for local work placements to further your practical experience and employability.

Teaching and Assessment

Continuous assessment of learner performance is carried out by means of assignments and may include verbal presentations, projects, group-work, practical exercises, written reports and integrative assignments that link various subject areas.

This full-time course is delivered over one academic year. The part-time option is delivered over two years.

Progression Opportunities

You could choose to progress on to an HND course or study a Degree level course at a university of your choice. Alternatively, you could progress into employment.

Entry Requirements

- Typically, student will possess:
- Level 3 qualification in a relevant subject, e.g. BTEC Level 3 Extended Diploma or A Levels.

Mature applicants with relevant experience who do not have the stated entry requirements are encouraged to apply.

Applicants with English as their second language must demonstrate a capability of English at a standard commensurate with IELTS 5.5, with a minimum of 5.0 being awarded on individual sections.

Type:	HNC Level 4
Attendance:	Full-time or part-time
Location:	Bridgwater
Awarding body:	Pearson



Aeronautical Engineering | HNC Level 4





PEARSON

Electrical & Electronic Engineering

HNC Level 4

This part-time, one day per week course is designed for those looking to develop a career in electrical and electronic engineering, with the emphasis on applying electrical, electronic and control principles to practical situations such as PLC and robot work cells. You will be studying in new, state-of-the-art engineering facilities, with industry-standard equipment such as robotic, PLC and process control technology.

You will be taught by staff with strong industry experience and links to key employers. In addition, fellow students will come from a broad range of employers. This course can also form the academic part of a Higher Apprenticeship.

The modules studied may include:

- Engineering Design
- Engineering Maths
- Engineering Science
- Managing a Professional Engineering Project
- Electrical and Electronic Principles
- Instrumentation and Control Systems
- Digital Principles
- Automation Robotics & PLCs.

Teaching and Assessment

Continuous assessment of your performance will be carried out by means of assignments and may include laboratory work, investigations, projects, practical exercises and integrative assignments that link various subject areas.

Progression Opportunities

You could choose to progress onto an HND course at University Centre Somerset or study a Degree course at a university of your choice. Alternatively, you could progress to employment. Graduates find roles within industries such as manufacturing, automotive, aerospace, energy and water.

Entry Requirements

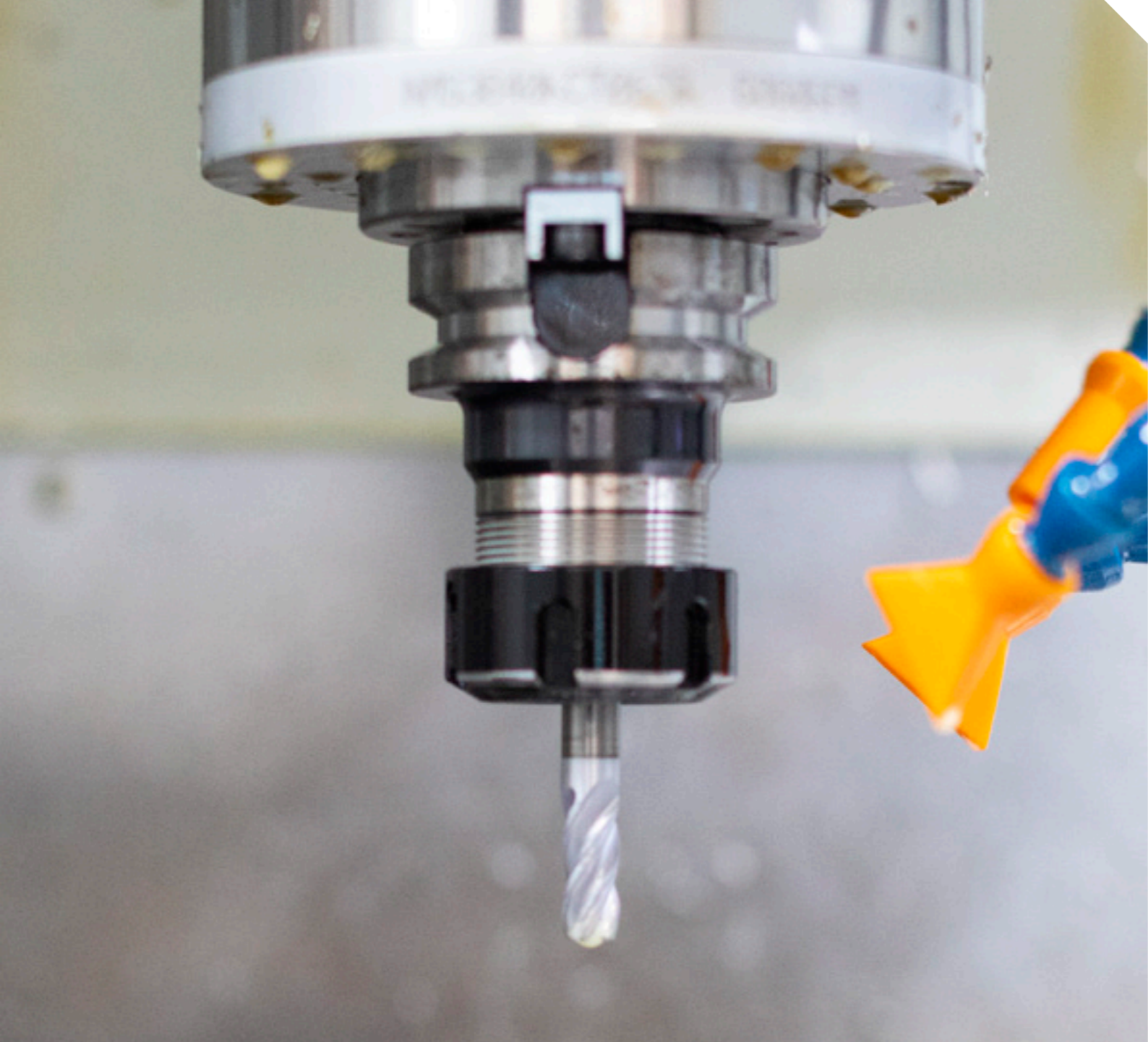
Typically entrants will possess:

- Level 3 qualification in a relevant subject

Mature applicants with relevant experience who do not have the stated entry requirements are encouraged to apply.

Type:	HNC Level 4
Attendance:	Part-time
Location:	Bridgwater
Awarding body:	Pearson





Manufacturing Engineering

HNC Level 4

This part-time, one day per week course is designed for those looking to develop a career in manufacturing engineering, with the emphasis on applying engineering principles to practical situations such as CAD/CAM and production lines. You will study in new, state-of-the-art engineering facilities, with industry-standard equipment. The units studied offer a broad understanding of key principles in production and manufacturing.

The course is designed to provide the knowledge and understanding of how advanced and innovative engineering underpins the manufacturing industry. This course can also form the academic part of a Higher Apprenticeship.

Modules may include:

- Engineering Design
- Managing a Professional Engineering Project
- Production Engineering for Manufacture
- Quality and Process Improvement
- Machining and Processing of Engineering Materials
- Computer Aided Design and Manufacture (CAD/CAM)
- Engineering Maths
- Engineering Science.

Teaching and Assessment

Continuous assessment of your performance will be carried out by means of assignments and may include laboratory work, investigations, projects, practical exercises and integrative assignments that link various subject areas.

Career Progression

You could choose to progress on to an HND course at University Centre Somerset or study a Degree course at a university of your choice. Alternatively, you could progress to employment. Graduates find roles within industries such as manufacturing, automotive, aerospace, energy and water.

PEARSON

Entry Requirements

Typically entrants will possess:

- Level 3 qualification in a relevant subject

Mature applicants with relevant experience who do not have the stated entry requirements are encouraged to apply.

Type:	HNC Level 4
Attendance:	Part-time
Location:	Bridgwater
Awarding body:	Pearson





Mechanical Engineering

PEARSON

HNC Level 4

This part-time, one day per week course is designed for those looking to develop a career in mechanical engineering, with the emphasis on applying mechanical theory to practical situations. You will study in new, state of the art engineering facilities, with industry-standard equipment.

Mechanical Engineers research, develop and manage projects devising innovative solutions in design and manufacture. Generally graduates find roles within industries such as manufacturing, automotive, aerospace, energy and water. The course is designed to provide the knowledge and understanding of how advanced and innovative engineering underpins the mechanical design, advanced manufacturing and technical service areas of the industry. This course can also form the academic part of a Higher Apprenticeship.

Modules may include:

- Engineering Design
- Managing a Professional Engineering Project
- Mechanical Principles
- Fundamentals of Thermodynamics and Heat Engines
- Fluid mechanics
- Engineering Science
- Engineering Maths
- Materials, Properties and Testing.

Teaching and Assessment

Continuous assessment of your performance will be carried out by means of assignments and may include laboratory work, investigations, projects, practical exercises and integrative assignments that link various subject areas.

Progression Opportunities

You could choose to progress on to a HND course at University Centre Somerset or a Degree course at a university of your choice. Alternatively, you could progress to employment.

Graduates find roles within industries such as manufacturing, automotive, aerospace, energy and water.

Entry Requirements

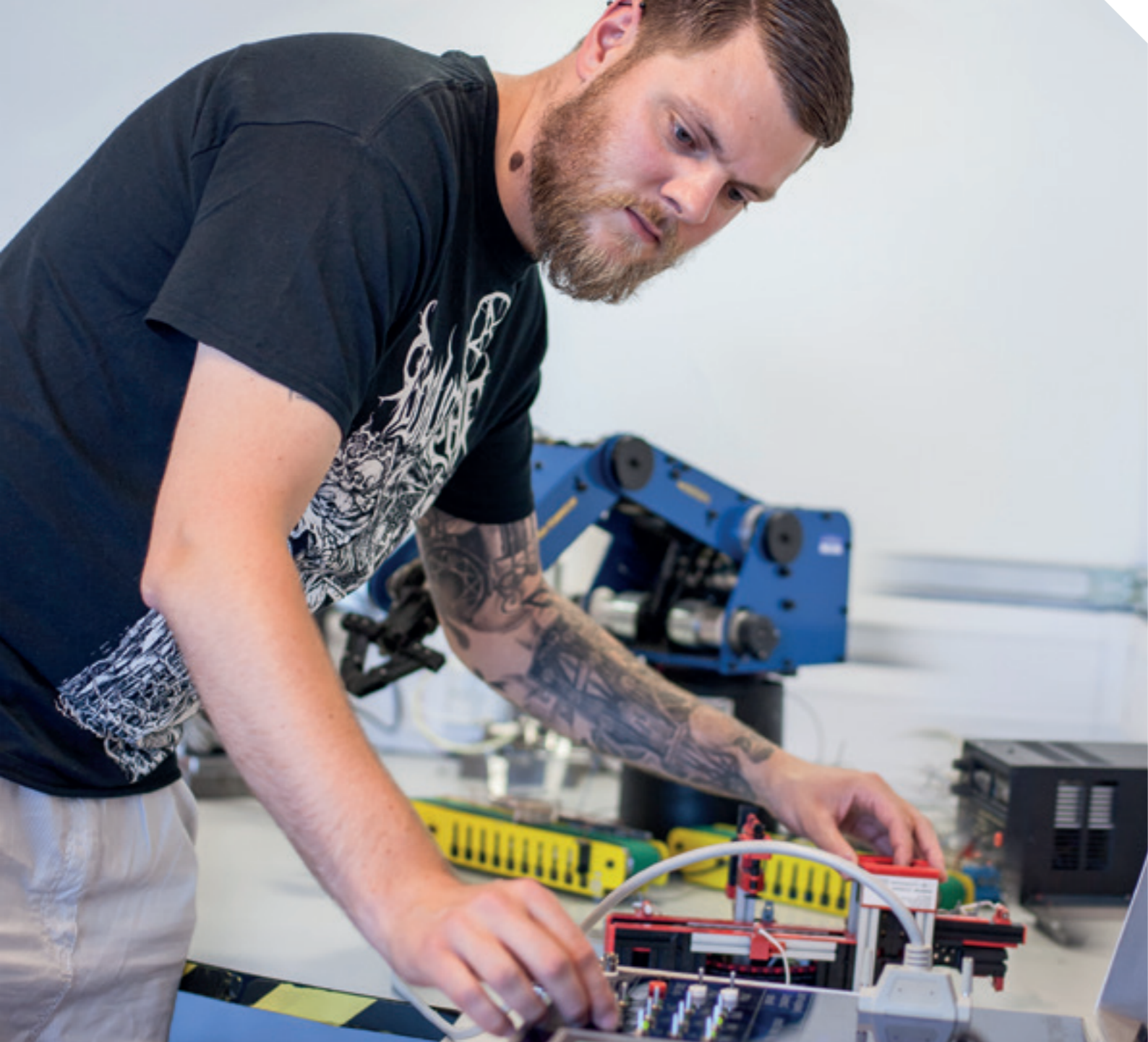
Typically entrants will possess:

- Level 3 qualification in a relevant subject

Mature applicants with relevant experience who do not have the stated entry requirements are encouraged to apply.

Type:	HNC Level 4
Attendance:	Part-time
Location:	Bridgwater
Awarding body:	Pearson





Engineering

PEARSON

HND Level 5

This top-up course can be undertaken in one of the following ways:

- One day per week over a two year period
- Two days per week over a one year period.

The course is designed for those already working in a relevant engineering role and looking to develop their career after successfully completing their HNC course (RQF). Learners study in new, state of the art engineering facilities and are supported by a team of experienced professionals. This course can also form the academic part of a Higher Apprenticeship.

The course builds on the units completed during a HNC programme to 'top-up' to a Level 5 qualification.

The course includes the following units:

- Research Project
- Professional Engineering Management
- Further Maths
- Lean Manufacturing

- Sustainability
- Advanced Manufacturing Technology
- Manufacturing Systems Engineering.

Teaching & assessment

Assessment will be via assignments. Continuous assessment of learner performance is carried out by means of assignments and may include verbal presentations, projects, group-work, practical exercises, written reports and integrative assignments that link various subject areas. Learners attend College for one or two full days a week and will be expected to complete written assignment work in self-study time at home.

Progression options

You can look for work in a broad range of engineering occupations.

Many graduates from the HND course have gone on to study at degree level or have secured higher positions within their companies as engineers, managers and project team leaders.

Entry Requirements

This is a top-up programme following the successful completion of HNC in Engineering (RQF).

Students will progress on to this course having studied one of the current HNC Engineering programmes (RQF) within University Centre Somerset's Engineering department. HNCs awarded by other institutions will also be considered providing they meet the requirements of the RQF specification.

Applicants who are non-native English speakers, or who have not studied the final two years of school in English, must demonstrate a capability of English at a standard commensurate with IELTS 5.5, with a minimum of 5.0 being awarded on individual sections.

Type:	HND Level 5
Attendance:	Full-time or part-time
Location:	Bridgwater
Awarding body:	Pearson



Engineering | HND Level 5

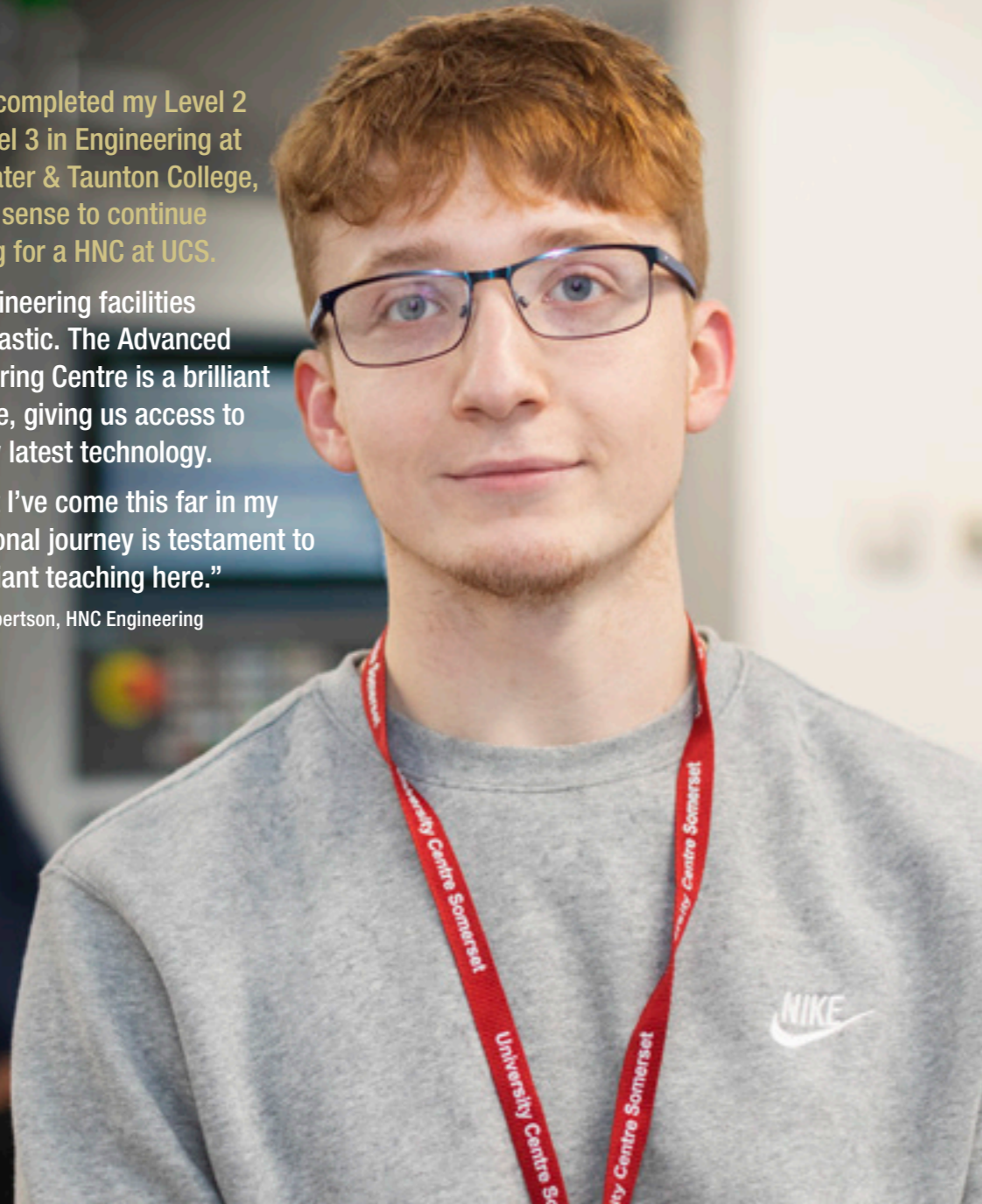


“Having completed my Level 2 and Level 3 in Engineering at Bridgwater & Taunton College, it made sense to continue studying for a HNC at UCS.

The engineering facilities are fantastic. The Advanced Engineering Centre is a brilliant resource, giving us access to the very latest technology.

The fact I’ve come this far in my educational journey is testament to the brilliant teaching here.”

George Robertson, HNC Engineering



General Engineering

HNC Level 4

This full-time course is delivered over one academic year. Lessons are held over two full college days per week.

The course is designed for those looking to develop their career prospects after successfully completing a relevant Level 3 course, or direct entry with practical work experience. Learners study in new, state of the art engineering facilities and are supported by a team of experienced professionals.

Modules may include:

- Automation, Robotics & PLCs
- Engineering Design
- Engineering Management
- Engineering Maths
- Engineering Science
- Machining and Processing of Engineering Materials
- Project
- Quality & Process Improvement.

Teaching & assessment

Continuous assessment of learner performance is carried out by means of assignments and may include verbal presentations, projects, group-work, practical exercises, written reports and integrative assignments that link various subject areas.

Learners attend UCS for two full days a week and will be expected to complete written assignment work in self-study time at home.

Progression options

Following this course you can look for work in a broad range of engineering occupations. Many graduates will join a Higher Apprenticeship or move straight into a senior role.

Many graduates from the HNC course progress to study a Level 5 HND course (one-year) at University Centre Somerset before ‘topping up’ to a full degree. Others secure senior positions within leading engineering businesses as engineers, managers and project team leaders.

Entry Requirements

Students will progress on to this course having studied a relevant Level 3 qualification at a college or sixth form, e.g. A Level or BTEC Level 3.

Applicants who are non-native English speakers, or who have not studied the final two years of school in English, must demonstrate a capability of English at a standard commensurate with IELTS 5.5, with a minimum of 5.0 being awarded on individual sections.

Type:	HNC Level 4
Attendance:	Full-time
Location:	Bridgwater
Awarding body:	Edexcel





WILLIAMS

“I chose to study at UCS because of the course content and professionalism of the lecturers. We had a vast amount of contact time, which was really beneficial.

The chance to join a student-led multi-championship motorsport team was also a big draw. That helped expand my knowledge, leading to my dream job with the Williams F1 team.

The highlight of the course was the hands-on experience I gained in the workshop and trackside. We also got fantastic exposure to the industry.”

James Tate, Motorsport Engineering Foundation Degree

Motorsport Engineering

OXFORD
BROOKES
UNIVERSITY

Foundation Degree

This course aims to develop the knowledge and skills that you will need to become a highly qualified engineer. Our excellent facilities include a rolling road, CAD suite, wind tunnel, damper dynamometer, advanced chassis set-up equipment, CNC and machine shop and cylinder head flow analysis equipment amongst a whole host of software packages.

This programme is accredited by the IET and IMechE as partially meeting the academic requirements for IEng status. To get full IEng recognition you will need to study an accredited BEng (Hons) Top-up. During each year we carry out a large range of industry partner visits to the likes of Xtrac, Williams, Force India and other related motorsport engineering companies. We also have a series of guest lectures throughout each year. You will also be given the opportunity to participate in the College race team.

Modules may include:

- Engineering Science
- Engine Technology
- Composites and Materials Technology
- Vehicle Dynamics and Performance Engineering
- Fluid Dynamics
- Electronics and Microprocessors.

Teaching and Assessment

You will undertake classroom lectures, coupled with practical sessions in manufacturing, composites, aerodynamics, chassis and engine technology. You will also be required to do a significant amount of self-study and research.

Assessment will include assignments, reports, portfolio, project, presentations, drawing work and practical skills assessments.

Progression Opportunities

On successful completion of this course you have the opportunity to progress to the BEng (Hons) Top-up Degree in Motorsport Technology at University Centre Somerset or at a university of your choice.

Alternatively, graduates can apply for a variety of roles in motorsport and other engineering disciplines. Recent graduates work with companies including McLaren GT, Bentley Motors, Jaguar Land Rover, MOD, Hyundai Motorsport (WRC), McLaren F1 and Neil Brown Engines.

Entry Requirements

Typically entrants will possess at least ONE of the following:

- A minimum of one pass at A Level
- 6-unit Vocational A Level (in Maths, Physics or a closely related subject)
- A National Certificate or Diploma or other full equivalent Level 3 qualification, in a discipline related to Engineering, including merits in the applied units.

Type:	Foundation Degree
UCAS Code:	H335
Institution code:	O66
Attendance:	Full-time
Location:	Bridgwater
Awarding body:	Oxford Brookes University

There may be the opportunity to study our full-time courses on a part-time basis, please contact us to discuss.



Motorsport Engineering | Foundation Degree





Motorsport Technology

BEng (Hons) Top-up

This course has been developed as preparation for a range of technical and management careers in motorsport engineering. The course aims to build upon the knowledge and skills developed from studying our Foundation Degree. This programme is accredited by the IET and by the IMechE for IEng status. You will be able to take advantage of brand new facilities, including a new race-team workshop and the Advanced Engineering Centre, as well as be a part of the race team.

Modules may include:

- Advanced Automotive Electronics
- Motorsport Engine Technology
- Project (double)
- Vehicle Dynamics
- Advanced CAD/CAM
- Management, Ethics and Energy and Sustainability (double).

Teaching and Assessment

You will undertake a range of classroom lectures, coupled with lab sessions. You will also be required to do a high amount of self-study in order to further research.

Assessment will be via a variety of methods including assignments, reports, dissertation, portfolio, and presentations.



Progression Opportunities

Upon completion you may progress to a range of Masters level courses that should result in a further year top-up, dependent upon study mode and compatibility of modules. You will also be well equipped to seek employment in the automotive and motorsport engineering industries.

Students will be able to apply for a range of graduate and junior roles within the motorsport and engineering industry.



Entry Requirements

Typically entrants will possess:

- A minimum of a Pass grade in the Foundation Degree in Motorsport Engineering (to include Motorsport Fluid Dynamics & Maths II) coupled with relevant prior qualifications including GCSEs.

Applicants with a Higher National Diploma or similar Foundation Degree are also encouraged to apply.

Entry may also be subject to interview.

Type:	Bachelors Degree
UCAS Code:	H333
Institution code:	O66
Attendance:	Full-time
Location:	Bridgwater
Awarding body:	Oxford Brookes University

There may be the opportunity to study our full-time courses on a part-time basis, please contact us to discuss.





“I really enjoyed the practical work we did right at the start of our course. This set the tone for our programme: it’s not just about learning in classrooms, but getting hands-on and solving problems.

UCS has brand-new facilities, which are really nice to learn in. I also like the breakout areas, including the brilliant café.

The teachers are all really helpful. They know their stuff and are always supportive if you have any issues.”

Amy Miller, Nuclear Engineering Degree Apprenticeship



Nuclear Engineering

Higher & Degree Level Apprenticeships

Higher and degree apprenticeships offer an exciting new way to enter professional careers and gain valuable work experience while achieving a degree-level qualification. This gives you a clear pathway to reach your career ambition in the workplace and will result in higher earning capacity, recognition and professional status.

Nuclear Engineering remains one of the UK’s most important industries, offering a diverse range of challenging apprenticeship opportunities within the Nuclear and Energy sectors including power generation, decommissioning, nuclear new build, defence or renewable energy.

Apprenticeships delivered in the National College for Nuclear Southern Hub (NCfN) have been developed with industry partners, educational partners and government to deliver tomorrow’s nuclear workforce. The NCfN has truly dedicated state-of-the-art facilities including reactor simulator, and virtual reality training environment and will provide tomorrow’s engineers with high-tech, specialist training to support the nuclear industry.

If you are interested in one of these apprenticeship opportunities, please contact us to discuss in more detail.

Teaching & assessment

You are assessed on your knowledge and skills on an on-going basis and will have to demonstrate that you can meet the required standards throughout your training. There will be a mixture of coursework, projects, vivas, exams and end assessment.

Where does it lead?

The Higher or Degree Apprenticeship will provide you with excellent career progression opportunities. Fully qualified engineers are in high demand, both at home and abroad. Degree Level students could progress onto suitable Masters Programmes and further industry specific professional training programmes.



Entry Requirements

- A minimum of 102 UCAS points
- A National Certificate/Diploma in a numerate or engineering discipline with a merit profile, to include Maths, or equivalent qualifications.
- or A Levels in relevant subjects

For mature applicants we will accept a wide range of non-standard and professional qualifications and experience, but if candidates are unsure as to whether they qualify we encourage them to contact us.

In order to undertake this course, you are required to have a relevant employer.

Attendance:	Up to 5 years, dependent on level and employer
Location:	Cannington



Nuclear Engineering | Higher & Degree Level Apprenticeships





Where to find us

One of the benefits of University Centre Somerset is our accessibility. So however you're travelling, you will find us easy to get to.

Rail

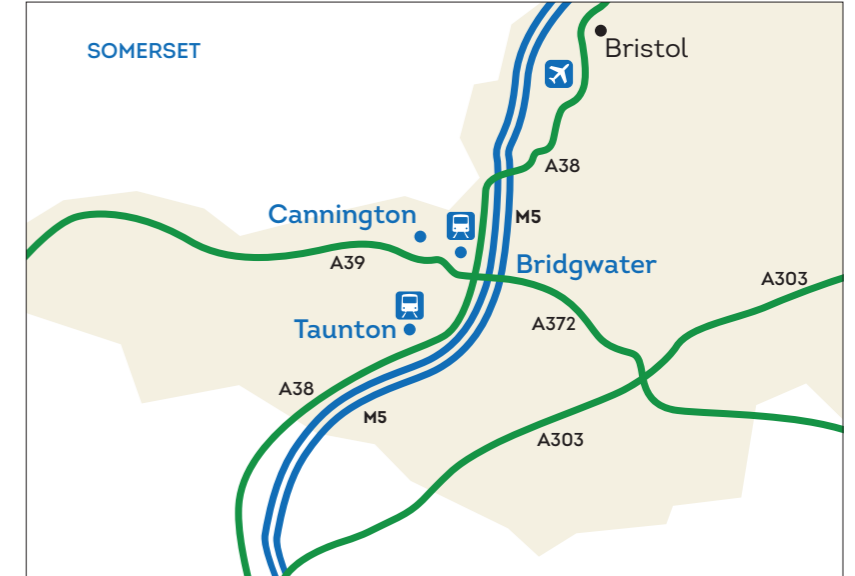
Our Taunton and Bridgwater campuses are easily accessible by train. Both towns are on the main line from Bristol to Exeter, and our campuses are within an easy walk or taxi ride of the station.

Bus

We have bus stops on each of our campuses, served by many local bus routes. A regular connection runs between the Bridgwater and Cannington campuses.

Car

All three campuses are easily accessible from the M5 motorway. Each campus offers limited parking, including designated areas for disabled parking, mopeds and bicycles. You will be charged **£1 per day to park at our Taunton campus**, while parking is free at the Bridgwater and Cannington campuses.



Taunton campus

Wellington Road
Taunton
Somerset
TA1 5AX

01278 455464
info@somerset.ac.uk



Bridgwater campus

Bath Road
Bridgwater
Somerset
TA6 4PZ

Cannington campus

Rodway
Cannington
Somerset
TA5 2LS





UCS course list

COMPUTING AND PROFESSIONAL

Computing & Digital Technologies
BSc (Hons)

Computing & Digital Technologies
Foundation Degree

Computing & Digital Technologies
BSc (Hons) Top-up

Accounting
AAT Level 4 Professional Diploma

Chartered Manager
Degree Apprenticeship Level 6

Operations/ Departmental Manager
Higher Apprenticeship Level 5

CIPD Human Resources Management
Level 5 Certificate

Education & Training
Level 4 Certificate

Education & Training
Level 5 Diploma

Certificate in Education
Level 4 Certificate

PGCE
Level 6 Diploma

Counselling Practice
Level 4 Diploma

Psychotherapeutic Counselling
Level 5 Diploma

Apprenticeships
Professional Accountant
Level 4

Project Manager
Level 4

Chartered Manager
Level 6 Degree

HR Consultant/Partner
Level 5

Operations/Departmental Manager
Level 5

Digital Technology Solutions
Level 6 Degree

LAND-BASED

Agricultural Management
Foundation Degree

Agricultural Management
BSc (Hons) Top-up

Animal Management and Wildlife Conservation
BSc (Hons)

Animal Management and Wildlife Conservation
Foundation Degree

Animal Management and Wildlife Conservation
BSc (Hons) Top-up

Animal Management
Level 4 Professional Certificate

Wildlife Conservation
Level 4 Professional Certificate

Apprenticeships

Agriculture
Level 4

For information about all of our courses visit www.somerset.ac.uk where you can also request prospectuses for each subject area.



CONSTRUCTION AND ENGINEERING

Construction and the Built Environment
HNC Level 4

Construction & the Built Environment (Civil Engineering)
HNC Level 4

Construction & the Built Environment (Civil Engineering)
HND Level 5

Mechanical Engineering
Foundation Degree

Mechatronics
Foundation Degree

Aeronautical Engineering
HNC Level 4

Electrical & Electronic Engineering
HNC Level 4

Manufacturing Engineering
HNC Level 4

Mechanical Engineering
HNC Level 4

Engineering
HND Level 5

General Engineering
HNC Level 4

Motorsport Engineering
Foundation Degree

Motorsport Technology
BEng (Hons) Top-up

Nuclear Engineering
Higher & Degree Level
Apprenticeships

Apprenticeships
Construction Quantity Surveying Technician
Level 4

Construction Design and Build Technician
Level 4

Construction Site Engineering Technician
Level 4

Construction Site Supervisor
Level 4

HEALTH, SOCIAL STUDIES AND SPORT

Early Childhood Studies
BA (Hons)

Early Childhood Studies
Foundation Degree

Early Childhood Studies
BA (Hons) Top-up

Early Years Advanced Practitioner
Level 4 (NCFE CACHE)

Advanced Practitioner in Schools and Colleges
Level 4 Certificate

Leadership for Children & Young People's Workforce Early Years Management
Level 5

Leadership & Management for Residential Childcare
Level 5

Health & Social Care
BA (Hons)

Health & Social Care
Foundation Degree

Health & Social Care
BA (Hons) Top-up

Adult Care
Level 4 Diploma

Leadership & Management for Adult Care
Level 5 Diploma

Assistant Practitioner (Health)
Level 5 Diploma

Primary Care and Health Management
Level 5 Certificate/Diploma

Sports Science with Sports Coaching Education
Foundation Degree

Applied Sports Science and Coaching
BSc (Hons) Top-up

Public Services and Criminology
Foundation Degree

Children, Young People and Families Practitioner
Level 4

Apprenticeships
Children, Young People and Families Manager
Level 5

Lead Practitioner in Adult Care
Level 4

Leader in Adult Care
Level 5

Healthcare Assistant Practitioner
Level 5

Leadership and Management for Adult Care
Level 5

Leadership and Management for Residential Childcare
Level 5

Adult Care
Level 4

Nursing Associate
Level 4

CREATIVE ARTS

Art & Design
Foundation Diploma

Creative Fashion and Textile Design
BA (Hons)

Creative Fashion and Textile Design
Foundation Degree

Fashion Design
BA (Hons) Top-up

Textiles & Surface Design
BA (Hons) Top-up

Fine Art
BA (Hons)

Fine Art
Foundation Degree

Fine Art
BA (Hons) Top-up

Creative Design and Communication
BA (Hons)

Creative Design and Communication
Foundation Degree

Graphic Media and Communication
BA (Hons) Top-up

Media Make-up
BA (Hons)

Media Make-up
Foundation Degree

Media Make-up
BA (Hons) Top-up

Media Production
Foundation Degree

Music Production
Foundation Degree

Performance Arts
Level 4 ATCL

Apprenticeships
Fashion & Textiles Product Technologist
Level 4

For information about all of our courses visit www.somerset.ac.uk where you can also request prospectuses for each subject area.





University
Centre
Somerset

Part of Bridgwater & Taunton College

COME AND SEE FOR YOURSELF

HE Open Events

Come and visit to see what makes University Centre Somerset the perfect place to start your journey.

Book your place now at
someset.ac.uk/events

Wellington Road, Taunton, Somerset TA1 5AX
01278 455464 | info@btc.ac.uk | someset.ac.uk



someset.ac.uk