

# Computing, Digital and IT

## Digital Technologies for England: Artificial Intelligence (AI) Solutions and Applications - Higher National Certificate (HNC) (HTQ)

### In Brief

#### Start Date / Duration

The course begins in September 2025 and runs for 30 weeks.

#### Entry Requirements

- 64 UCAS points from either subject-relevant A Level or BTEC equivalent qualifications or an Access to HE Diploma.
- GCSE English and Maths at grade C/4 or above.

We welcome applications from students with prior learning and/or previous experience. Evidence should be submitted through the application and interview process.

#### You will achieve

You will achieve a Level 4 HNC in Digital Technologies for England (Pearson).

### Course Overview

Our HNC Computing has been aligned to the occupational standard for the industry. It has been approved by the Institute for Apprenticeships and Technical Education (IfATE). **Higher Technical Qualifications (HTQs) are Level 5 qualifications** that have been approved as meeting occupational standards for the relevant sector. To achieve the HTQ status both level 4 and level 5 pathways must be completed.

This is a contemporary, cutting-edge programme aimed at those who are eager to follow a career in various job roles within the high-tech and ever-changing world of artificial intelligence and software development.

Students on this programme will have a range of different backgrounds and interests meaning the programme will have a rounded approach to delivery and content created has a focused approach with selected specialist pathways in AI and software development lifecycles.

\*The course is currently under approval by the awarding body to run.

## Course Content

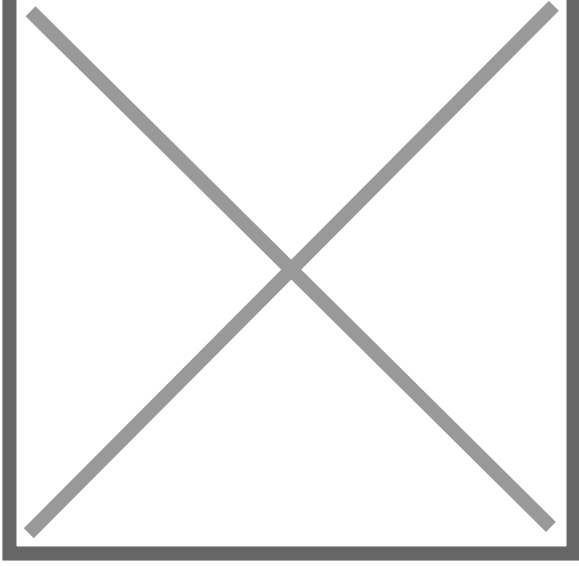
Having been developed in collaboration with employers in an ambition to meet the needs of the growing demands of the industry, our HNC in Digital Technologies for England provides the opportunity to gain the proper training, knowledge, and skills to be successful in the workplace. Complete with necessary resources, high-tech specifications and modern settings, you will study a broad range of computing topics that prepare you for your next steps.

In your first year of studying for the Level 4 Higher National Certificate in AI and software you will be required to complete the following eight mandatory units:

- Innovation and Digital Transformation
- Programming
- Professional Practice in the Digital Economy
- Big Data and Visualisation
- Cyber Security
- Cloud Fundamentals
- Software Development Lifecycles
- Fundamentals of Artificial Intelligence (AI) and Intelligent Systems

In addition, you will gain a wide range of sector knowledge tied to practical skills gained in research, self-study, directed study and workplace scenarios. You will also be given the opportunity to study units aligned to professional vendor qualifications and allow you, if you wish to apply after unit completion, to be assessed externally for the vendor qualification.

The Fundamentals of AI unit has been designed in partnership with industry specialists, working closely with employers to design the module to align to the skills desired by organisations.



[[https://www.barnsley.ac.uk/courses/higher-technical-](https://www.barnsley.ac.uk/courses/higher-technical-qualifications-htqs/)

[qualifications-htqs/](https://www.barnsley.ac.uk/courses/higher-technical-qualifications-htqs/)]

Logo for the Institute of Technology logo [<https://www.barnsley.ac.uk/syiot/>]

## **How will I be assessed?**

Specific assessment strategies include practical work, written assessments, examinations, case studies, presentations and reports offering the opportunity for students to demonstrate knowledge, understanding and application of both general and specific business principles. Such methods will also allow you to indicate both the breadth and depth of your directed and independent research.

Some modules are assessed partly using group activities as well as independent activities.

## **What Equipment Will I Need?**

All equipment will be provided.

## **Where will I study?**

South Yorkshire Institute of Technology  
Church Street  
Barnsley  
S70 2AN

## **What can I do next?**

After successfully completing the first year and achieving the Level 4 National Certificate in Digital Technologies for England, you can progress onto the Level 5 Higher National Diploma, which allows you to specialise by committing to a specific career path in Artificial Intelligence and Software Solutions, and progression routes directed towards further degree level study.

## **How much does the course cost?**

Course fees: tbc

## **Financial support**

You may be eligible for assistance with expenses such as travel, books, equipment and childcare. For further information please contact the Student Services Team on 01226 216 267.

## **Extra information**

### **Disability and Dyslexia Service (DDS) Higher Education**

We offer a service to any student who has a diagnosis of anything persistent or long-term which might interfere with how they study and manage their day-to-day academic engagement. The service is flexible and shaped around the needs of each individual; it might be consistent support or intermittent support.

For further information please visit the Disability and Dyslexia Service (DDS) [<https://www.barnsley.ac.uk/higher-education/dds-at-higher-education/>] web page for more information.

### **HE Student Finance**

As a Higher Education student living in England you may be eligible for the non-means tested Tuition Fee Loan from the Government and a Maintenance Loan.

Students with children or dependant adults may qualify for a Childcare Grant or Adult Dependents' Grant. Students can apply for these at the same time as applying for a Maintenance Loan.

Remember: Eligible students will not have to pay tuition fees in advance and can apply for the Maintenance Loan before they start the course.

Visit the Student Finance page on the Government website [<https://www.gov.uk/browse/education/student-finance>] for further details and to apply.

### **Full Fee Payable**

If the course is listed as full fee payable, you will have to pay for the course.

### **Contact the Information Unit**

For further information please contact our friendly Information Team on +44 (0)1226 216 123 or email [info@barnsley.ac.uk](mailto:info@barnsley.ac.uk) [<mailto:info@barnsley.ac.uk>]

### **Disclaimer**

Please note we reserve the right to change details without notice. We apologise for any inconvenience this may cause.

**Last updated:** 15th November 2024

**Want to apply?**

Visit <https://www.barnsley.ac.uk/apply> to get started

Call us on **01226 216 123**