

Computing, Digital and IT

Computing: Software Development Level 3 T Level

In Brief

Start Date / Duration

This programme starts in September 2024 and takes two years to complete.

Entry Requirements

- Five GCSEs at grade 4 or above including English and Maths
- You may also require a DBS

You will achieve

Level 3 Digital Production Design and Development (Software development) T Level.

Course Overview

The T Level in Software Development is designed to equip you with theoretical knowledge and practical skills in digital innovation, with a focus on production, design, and development of software. You'll gain a comprehensive understanding of programming languages such as C# and Python, essential for any aspiring developer. This course covers:

- Software Design and Development
- Creation of Sophisticated Web Applications
- Industry Placement

Course Content

Our Software Development T Level is designed with employers to give you the industry skills you need in order to start your career within the digital industry, you will cover digital-related topics such as:

- Business Contexts – from infrastructure design to managing change.
- Digital Culture – covering ethical/moral issues.
- Data Analysis – with data capture, collection, visualisation and modelling.
- Digital Analysis – understanding algorithms, abstraction, pattern recognition and decomposition.
- Digital Environments – covering system fundamentals for physical, virtual and cloud computing.
- Diversity and Inclusion – understanding and valuing differences, sensitivities and equality.

- Digital Learning – covering emerging technologies, internet of things (IoT), artificial intelligence (AI), augmented reality (AR), computer graphics (3D).
- Digital Legislation and Security – from data protection and intellectual property to security and data sharing.
- Planning and Programming/Software Development – building project plans, integrating software development lifecycle (SDLC), critical paths, application and solution development.
- Testing and Tools – covering testing methods/types, industry-based digital tools and usability/user experience (UX) user interface(UI) testing.

This specialist course will also allow you to enhance your broader skills in literacy and numeracy, develop transferable skills in communication (working with real colleagues, customers and clients) and undertake research and live project development work.

Whilst engaging with specialist tutors, support staff and work placements co-ordinators, you will also be required to complete an industry placement of at least 45 days – providing the much needed real-world experience needed for this industry.

How will I be assessed?

In year one, you will take two paper-based exams and undertake an employer set project.

In year two, you will complete an occupational specialist project set by industry partners.

In addition to the above, you must complete an industry placement, lasting a minimum of 315 hours.

What Equipment Will I Need?

Please bring a folder, paper, pens and pencil. While a personal laptops is not required, it is beneficial.

Where will I study?

SciTech Digital Innovation Centre
Falcon Street
Barnsley
S70 2EY

What can I do next?

Employment, University, Apprenticeship.

Many students go onto university after completion to study a wide range of computing subjects. Due to the wide variety of skills acquired by learners, this could be: networking, software development, games design, computer science, big data analytics, cyber security, social media and business.

See what careers are available in the Computing

[<https://www.barnsley.ac.uk/app/uploads/2023/10/Computing-careers-2023-24.pdf>] and Games

[<https://www.barnsley.ac.uk/app/uploads/2023/10/Games-Design-careers-2023-24.pdf>] sectors. Use

our online careers tool, Career Coach [<https://barnsley.lightcastcc.com/?radius=®ion=Barnsley>] , to find out what your next steps could be.

How much does the course cost?

16 – 18 year olds

Full-time Barnsley College students aged 16-18 years old do not have to pay tuition fees.

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

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>]

Want to join Barnsley Sports Academy and Honeywell Sports Village?

Barnsley College has a range of sports opportunities for all students to take part in, gain professional training and compete nationally and internationally. We also have a state-of-the-art fitness village, Honeywell Sports Village [<https://www.barnsley.ac.uk/shops-services/honeywell-sports-village/>] where students can make use of our fitness suite, spinning studio and classes for competitive rates. You don't have to be studying sport to get involved in the Sports Academy [<https://www.barnsley.ac.uk/barnsley-sports-academy/>] .

Additional Learning Support

Our Additional Learning Support team can provide you with the support you need. Call 01226 216 769 for further information.

English and Maths

Having good English and Maths qualifications are important for most careers and we want to give you the help you need to succeed.

If you are aged 16 – 19 and don't hold a grade C/4 or above in GCSE English and Maths, you will automatically be included in your study programme. If you want to work towards achieving a higher grade in English and Maths, we can help you do that too and we offer Level 3 Mathematical Studies (Core Maths) which can be added to your study programme.

If you're aged 19 or above and don't hold a a grade C/4 or above in GCSE English and Maths we can help. We offer FREE English and Maths qualifications that can be studied on a part-time basis, subject to eligibility.

If you need any further information, please contact our Information Team by calling 01226 216 123 or emailing 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 October 2024

Want to apply?

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

Call us on **01226 216 123**