

ICT and Cyber Security

Worcestershire

**National
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Helping you take
the next step

The West Midlands area is home to more tech and digital businesses than any other area in the country, including major global employers as well as small and micro businesses (employing less than 10 people).

This sector includes areas such as software development, cyber security, computer programming, web development, telecommunication (wireless and wired) and internet provision.



A high proportion of roles require highly skilled workers and salaries are above the national average. In Worcestershire over half of advertised vacancies require a degree.

Cyber security is the fastest growing sector in the Midlands linked to growth areas such as advanced manufacturing, finance, automotive and transport/rail.



There is currently a skills shortage in this sector related to areas such as data analytics, big data and cloud computing.

Worcestershire overview

ICT and Cyber security is a key growth sector in Worcestershire and over 7,500 people are employed in this sector in Worcestershire.#



1,500 people are employed in computer programming activities such as creating software applications, databases, systems software and web pages and 2,500 people are employed in computer consultancy activities.#

The biggest cluster of cyber security firms outside of London is based in Cyber Valley in the Malvern Hills.

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Future trends

There are currently around 50,000 vacancies for tech positions across the UK* and there is a current drive to create 1 million tech jobs in London by 2023 to help meet demand.

There will be a higher demand for people who have higher skills in specialised areas such as 3D printing, web/software development and Building Information Modelling (BIM) and almost all new jobs will require a foundation degree or higher qualification.



There will be more developments in technology such as **autonomous vehicles**, the **Internet of Things (IoT)**, **cyber security**, **wearable technologies**, **Big Data** and **robotics**.

Worcestershire is a **5G** test bed which allows the industry to test new technologies that will impact on how businesses run in the future.

*Tech Nation

Local employers include:

QinetiQ, Openreach (BT), 3SDL, Deep-Secure, Namesco, Titania, Payara, Minster Micro Computers, TechTeam, Borwell, Open GI



Job roles in ICT, digital and cyber security include:

App developer • Business analyst • Computer games developer • Computer games tester • Cyber intelligence officer • Data entry clerk • Database administrator • Digital delivery manager • Digital marketer • Digital product owner • Forensic computer analyst • Head of IT (IT director) • IT project manager • IT security co-ordinator • IT service engineer • IT support technician • IT trainer • Information scientist • Network engineer • Network manager • Robotics engineer • Security Service personnel • Software developer • Solutions architect • Systems analyst • Technical architect • Technical author • Test lead • User experience (UX) designer • User researcher • Web content editor • Web content manager • Web designer • Web developer

Skills and qualities

In ICT, digital and cyber security, employers are particularly looking for:

Communication skills • An interest in maths, science and technology • Advanced digital and ICT skills • Ability to manage own time and prioritise tasks • An analytical and logical approach to solving problems • Attention to detail • Good organisation and planning skills • Ability to use own initiative • Creativity and innovation

What could you earn?

App developer **£21,000 - £55,000**
Computer games developer **£19,500 - £59,000**
Cyber intelligence officer **£31,500 - £50,000**
Data analyst **£23,000 - £70,000**
Digital delivery manager **£37,000 - £60,000**
Forensic computer analyst **£20,000 - £60,000**
Network engineer **£18,000 - £40,000**
Software developer **£20,000 - £70,000**
Web designer **£18,000 - £40,000**

Find out more

<https://www.bubble-jobs.co.uk>
<https://www.cybersecuritychallenge.org.uk/resources/careers>
<https://ada.ac.uk>
www.joincyberdiscovery.com
<http://www.skills4worcestershireshire.co.uk/>

Routes into this sector

Ways to get into this sector will vary depending on the job role.

Apply directly for roles such as data entry clerk – you may need GCSEs at grades 9-4 (A*-C) and basic IT skills. A temporary job may also be a good way in.

Choose a **college course** at level 3 (A level equivalent) or level 4 to add to your qualifications.

An **apprenticeship** could be a good route in – from **apprentice web developer** (advanced apprenticeship) to **cyber security** (degree apprenticeship). Always check the requirements for each individual apprenticeship.

For many roles, employers will look for someone who has a **university degree** but also check to see if an apprenticeship is an option for a graduate-level job.

Work your way up to roles such as supervisor or manager by training on the job.

For more job profiles and careers information visit the National Careers Service website: <https://nationalcareers.service.gov.uk> or call 0800 100 900



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