



Your Future Fighting Cyber Crime





From school to Digital Defender



Cyber criminals are stealing our money and private information, harming our businesses, threatening our government and are now a real threat to society. The cyber security industry needs you to defend against hackers and other online criminals.

If you love computer games, problem solving, technology, or just want to make a difference, cyber security could be your dream career...

- You would be part of one of the most exciting, dynamic industries in the world.
- You would be making a real difference and getting well paid.
- There are opportunities in every sector, with the potential for international travel.

Whether you are a top coder or just want to work as part of a cyber defence team, there is a career option for you.

There are opportunities to enter the industry with GCSEs or A Levels, as part of Apprenticeship programmes or join at Degree level with opportunities to carry on learning and growing.

Want to be a Digital Defender? Find out more...





Whatever your interests and skills there is an exciting job for you

Technology skills are very valuable when it comes to working in cyber security, but this is not just a career for 'techies' as we need a very wide range of skills.

In addition to technology based careers, there is a wide range of other options including: threat intelligence, legal and regulatory compliance, digital forensics, cultural change, training, project management, business analysis, recruitment and more. All of these people are part of the Digital Defenders team who work together to win the fight against cyber crime.

Even among the technical careers, there is a huge choice including:

- Penetration testing
- Cyber incident response
- Malware reverse engineering
- Network monitoring and intrusion
- Security architecture
- Security product design

All these different career pathways can lead you to senior technical and management positions. You could even start your own business.

Visit www.inspiredcareers.org to see people talk about what they do and how they got into the industry and find your dream career.



Money makes the world go round

The world has woken up to cyber security with stories in the news almost every week of new cyber attacks

Faced with online attacks, business and government are looking for experts who can protect their systems from cyber criminals – and they are willing to pay high salaries and provide training and development.

There are great opportunities for anyone starting a career in cyber security:

- Salaries in cyber security are some of the fastest growing in the UK rising at an average 14% a year¹.
- For senior security professionals, earnings can quickly surpass £100,000 a year².
- Your earnings are based on merit, not your sex, age or ethnicity.

Of course a career in cyber security is not just about the money, but it helps.



Be part of a dynamic industry



From CSI: Cyber to James Bond's smart young techie sidekick 'Q', cyber security is being portrayed as an exciting, different and cutting-edge career.

This glamorous and fast-moving Hollywood film image is not that far from real life!

Governments, businesses and consumers know that cyber crime is one of the biggest threats they face. Every day there are more attacks, from major corporate hacks to the theft of people's credit cards and personal data. Companies can lose millions as well as their hard earned reputations and just think of the impact if a cyber criminal could cut off the Internet, electricity or water supply.

It is predicted that online crime will cost businesses as much as £1.4 trillion a year by 2019¹. So cyber security experts are among the most prized professionals worldwide.

What is more, the threat is constantly changing, which means you will always be learning and developing new skills and facing new challenges.

There is nothing dull or repetitive about a career in cyber security!

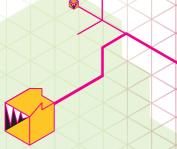


Robert Walters annual Global Salary Survey - www.robertwalters.co.uk/salarysurvey.html

²Harvey Nash & PGI Cyber Security Survey 2016 - www.harveynash.com/group/mediacentre/2016/01/almost_half_of_boards_lack_real_understanding_of_cyber_threat_harvey_nash_pgi_cyber_security_survey/index.asp



Juniper Research, 'The Future of Cybercrime & Security'www.juniperresearch.com/press/press-releases/cybercrime-cost-businesses-over-2trillion







Working for the greater good

Help companies and people stay safe by defending against cyber crime

Cyber crime is both global and personal.

UK companies have to defend against hundreds of thousands of cyber attacks EVERY DAY and in some cases we have seen attack numbers increase by 1,000% in just 18 months¹.

It is not just big business under threat. It could be someone you know. Take the case of the single mother of two from County Down in Northern Ireland who was robbed of nearly £77,000 in an email 'phishing' scam. She is just one of many individuals who get targeted by cyber criminals on a daily basis and you could make a real difference by helping to keep people like this safe.

The online threat to companies and people's safety is huge and growing. Across the UK, the National Crime Agency, police forces, company security teams and special initiatives like Action Fraud, Cyber Streetwise and GetSafeOnline are all fighting this menace – but they need more help. They need people like you.

If you want the satisfaction of doing a rewarding job and if you want to make a real difference, join us to become a Digital Defender and work in cyber security.



Everybody wants you!

There will always be a high demand for your skills

The UK is a cyber world-leader with a growing reputation for being at the forefront of industry, research, innovation and fighting international cyber crime. More than 40,000 people already work in the UK information security industry and demand for cyber skills is growing fast in every type of company and government department¹.

So, whether you dream of working in sports or fashion, media or the emergency services, finance or retail, cyber skills could be your route in. Regardless of size or type of organisation, they all need security experts to protect their sensitive data and customer information.

This situation isn't going to change any time soon. With a predicted worldwide shortage of 1.5 million information security professionals by 2020², cyber will stay an exciting and rewarding in-demand career – across every industry – for years to come.

Sources:

¹Cabinet Office - www.gov.uk/government/news/new-pathways-for-the-uks-future-cyber-security-experts

2 Frost & Sullivan / ISC(2) 2015 Global Information Security Workforce Study http://blog.isc2.org/isc2_blog/2015/04/isc-study-workforce-shortfall-due-to-hiring-difficulties-despite-rising-salaries-increased-budgets-a.html

Sources:

¹The Times - www.thetimes.co.uk/tto/business/dayos/article4670343.ece



Highly transferable skills mean you can move anywhere in the world

The UK cyber security industry contributes over £17 billion to the UK economy¹. Tens of thousands of home-grown experts are working to protect UK businesses, government agencies and consumers.

On a global scale, the rise in online crime is outpacing the supply of cyber defenders – and the UK's reputation for security skills means overseas buyers are also beating a path to our door.

Exports of UK cyber products and services are growing by over 15% a year². That means plenty of opportunities for UK cyber professionals to work overseas.

So, if you have always wanted to travel the world and experience life in other countries, a career in cyber security might just be your passport to success and open doors to exciting international opportunities, from Africa, Asia and Australia to mainland Europe, Canada and the USA.





Cracking cyber security problems is the ultimate challenge

An ideal career is one where you are valued, earn lots of money, enjoy yourself, are continually challenged, make a difference and get great job satisfaction while you are doing it. Does that sound like a career for you?

Cyber security ticks every box. Not only is it well-paid and in-demand, but if you like computer games and puzzles, you will spend your time doing what you do best and having fun, overcoming new challenges every day.

This is the ultimate technical challenge, guaranteed to keep you on your toes.

So, if you think this might be the career for you...

 Why not try out the free cyber games and competitions in the Cyphinx 3D virtual world? Anyone can play, whatever your age or skill level, competitively or just for fun.

www.cybersecuritychallenge.org.uk/cyphinx

- See if you can master the fun and challenging tech games at Junior Bring It On for 8-12 year olds.

www.juniorbio.com/stuff/cyber-game

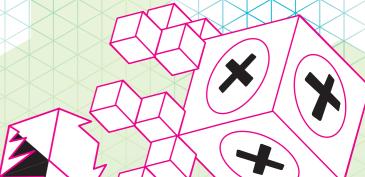
You might find you have a talent you didn't know you had – which means that when you leave school, you have a job you are good at and enjoy!



¹Cabinet Office - https://www.gov.uk/government/speeches/governments-role-in-supporting-the-cyber-security-sector-matt-hancock-speech

²UK Trade and Investment - www.gov.uk/government/statistics/uk-defence-and-security-export-figures-2013 www.gov.uk/government/statistics/uk-defence-and-security-export-figures-2014





Many paths to success

Your journey starts here!

Choosing your career is a big decision, but don't worry, if you like cyber security, you have options and opportunities at every stage in your education.

There's a route in whether you have GCSEs, A Levels, a Degree, or all of the above. Just choose the best option for you¹:

- If you are 16+ with 5 GCSEs at grades A*-C, including English Language and Maths, or equivalent qualifications, you could earn-while-you-learn through a cyber security or broader IT Apprenticeship.
- If you are 18+ with 2+ A Levels at grades A*-C or equivalent qualifications, you can kick-start your
 career through a Higher Apprenticeship or a Degree Apprenticeship, where you combine a university
 level education with practical experience at leading employers.
- If you are 21+ with a Degree or Higher Apprenticeship, you can move directly to applying for a well-paid and rewarding cyber security job.

Having a Computer Science GCSE and/or A level can be an advantage when seeking a career in cyber security, but is not essential. There are lots of jobs that do not require either. If you want further advice ask your school or college, or look at some of the information sources on our next page.



Sources

¹Tech Partnership TechFuture Careers - www.thetechpartnership.com/tech-future-careers

Where next?

Want to find out more about starting a career in cyber security, or just try some games and challenges to put the idea to the test? Here are some sites that can help...

https://inspiredcareers.org.uk

Inspired Careers is an interactive careers hub full of information for people looking to enter cyber security straight from education, moving from other industries or simply furthering their careers.

https://cybersecuritychallenge.org.uk

Cyber Security Challenge. Unearth your hidden cyber talents and find the education and training opportunities on offer. Includes national competitions and learning programmes.

https://cybersecuritychallenge.org.uk/cyphinx

Cyphinx. A 3D virtual world where budding security professionals can play games and competitions, and test and demonstrate their cyber skills to each other and potential employers.

https://www.thetechpartnership.com/tech-future-careers

TechFuture Careers. For anyone Interested in a tech career, no matter what stage of education you're at. Includes free resources for school computing classes and clubs, and access to challenges and competitions.

http://www.techfuturegirls.com

lech Future Girls. An online club with challenges to help girls develop their tech skills.

http://www.girlgeeks.uk/about-girlgeekscampus

Girl Geeks. Helps connect female students talented in STEM (science, technology, engineering, maths) with colleges, universities and businesses who are looking for them.

http://www.juniorbio.com

Junior Bring IT On (for 8-12 year olds). Includes cool jobs in IT and fun games.

http://www.futuremorph.org

Future Morph. Offers information, quizzes and games to help anyone aged 11-16+ studying STEM subjects to find their future career – and not just becoming a scientist or engineer!

https://www.gov.uk/apprenticeships-guide

Advice on apprenticeships.

https://www.gov.uk/government/publications/cyber-security-programmes-and-resources-for-schools-and-further-education

Information for teachers on all the cyber security learning resources and activities available to schools and further education

http://www.itiobswatch.co.uk/jobs/uk/cvber%20securitv.do

Find out more about salaries in cyber security.