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Sharp Electronics Ltd



Make a complex world yours

GCHQ, Hubble Road, Cheltenham, GL51 0EX

WE USE INTELLIGENCE
TO PROTECT THE UK.

Develop your career.



www.gchq-careers.co.uk



Make a complex world yours





ABOUT GCHQ

PUSHING TECHNOLOGY TO ITS LIMITS TO PROTECT THE UK.

Joining GCHQ at the start of your career is a unique opportunity. We've played an integral role in protecting the country since our creation as the Government Code and Cypher School after World War I. During World War II, our code breaking teams at Bletchley Park helped change the course of the conflict – and made a key contribution to the birth of modern computing.

In the decades since, our mission has evolved and expanded. We've strengthened and broadened our technical expertise – and earned a reputation as a centre of excellence in mathematics, languages, cyber-security and more.

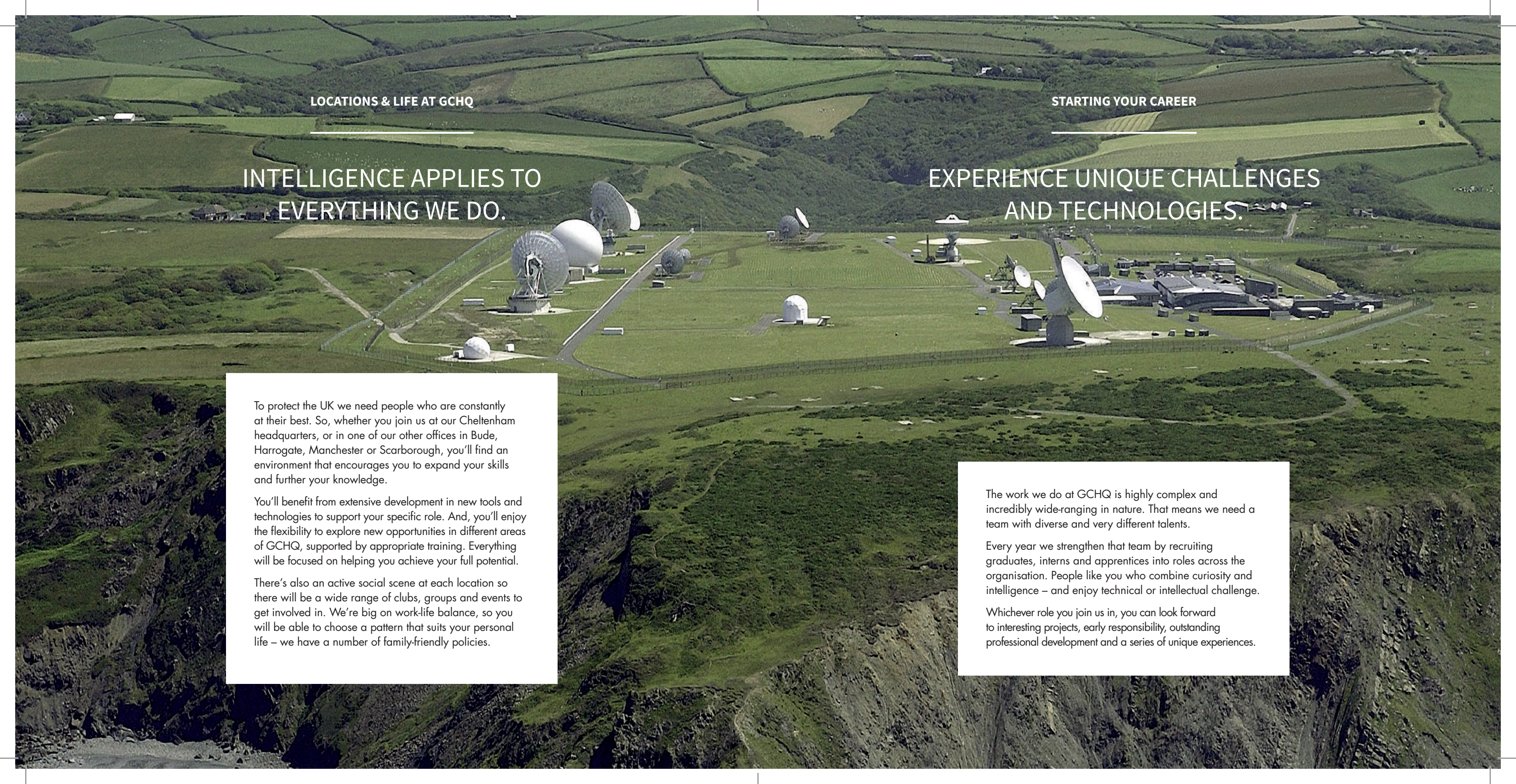
It's a proud history. Now you can be part of our future. In an ever more complex world, you can help us combat the terrorists, cyber criminals, fraudsters and crime gangs who pose a genuine threat to the UK. And we can help you to make the most of your talents and fulfil your full potential.

It's hard to imagine a world without the internet - the web has become a fundamental part of our everyday lives. But while it's brought massive benefits, it's also changed the nature of the threats we face from terrorists, hostile states, criminals and fraudsters.

GCHQ is the security and intelligence organisation tasked with protecting the country's people, businesses and interests in the cyber age. To keep UK society safe, we gather and analyse intelligence from digital and telecommunications sources. We also ensure that IT networks, systems and data are secured against hackers and other threats.

Our remit and capabilities are unique, but we don't operate in isolation. Our teams collaborate closely with colleagues in MI5, SIS (MI6), the Ministry of Defence (MOD) and military, the National Crime Agency and the police – and with academia and industry too.

You can find out more about GCHQ's work and history on our careers site and main website.



LOCATIONS & LIFE AT GCHQ

INTELLIGENCE APPLIES TO
EVERYTHING WE DO.

To protect the UK we need people who are constantly at their best. So, whether you join us at our Cheltenham headquarters, or in one of our other offices in Bude, Harrogate, Manchester or Scarborough, you'll find an environment that encourages you to expand your skills and further your knowledge.

You'll benefit from extensive development in new tools and technologies to support your specific role. And, you'll enjoy the flexibility to explore new opportunities in different areas of GCHQ, supported by appropriate training. Everything will be focused on helping you achieve your full potential.

There's also an active social scene at each location so there will be a wide range of clubs, groups and events to get involved in. We're big on work-life balance, so you will be able to choose a pattern that suits your personal life – we have a number of family-friendly policies.

STARTING YOUR CAREER

EXPERIENCE UNIQUE CHALLENGES
AND TECHNOLOGIES.

The work we do at GCHQ is highly complex and incredibly wide-ranging in nature. That means we need a team with diverse and very different talents.

Every year we strengthen that team by recruiting graduates, interns and apprentices into roles across the organisation. People like you who combine curiosity and intelligence – and enjoy technical or intellectual challenge.

Whichever role you join us in, you can look forward to interesting projects, early responsibility, outstanding professional development and a series of unique experiences.

Graduates

We recruit graduates into entry level roles across the organisation and throughout the year – you can keep up to date with the latest opportunities via our careers website.

Whether you join us for a specific role or for our dedicated graduate development programme you can look forward to responsibilities and experience you won't find anywhere else.

Interns/Placements

Our placements offer a diverse range of opportunities to develop your skills on real projects. Whether you apply for a summer scheme or a year-long industrial placement, you'll gain unparalleled research, development and project experience.

Student Scheme for Technologists

This scheme offers an exciting opportunity for students considering a career in intelligence who are keen to contribute to our nation's security by utilising their innate inquisitiveness for technology. We offer 11 week summer placements for one or two of your university summers or we have a limited number of places for applicants who wish to have a period of 51 weeks industrial placement as part of their degree.

The work covers a full range of IT, internet and telecommunications technologies. Your work experience will be in one of GCHQ's technical areas (Software Development, Network Security, Applied Research (AR), Information Assurance and Systems Engineering). Candidates must be graduating in 2017 or 2018 and must be studying for their first degree in: Computer Forensics, Computer Science, Electronic Engineering, Information Technology, Information Assurance, Information Security, Physics, Software Engineering, Telecommunications or other related disciplines with a significant computing component. At the end of your placement you may be eligible to apply for permanent employment. You will need to obtain a minimum of a 2:2 degree or equivalent to be considered. For AR placements there are additional A-level criteria that can be checked on the careers website.

Maths Summer Students

GCHQ offers a unique working environment for mathematicians, providing the opportunity to undertake advanced mathematical research and solve challenging real world problems. We offer a nine week, paid summer placement, based at our site in Cheltenham. Students work in small groups, supported by our employees, on projects which are of real, operational interest.

Candidates must be current undergraduates studying for their first degree in mathematics or a Joint Honours subject with mathematics as the main component. By the start date of the placement students must have completed a minimum of three years of their degree (or equivalent for part-time courses) and should be on track to achieve a good 1st Class Honours qualification at the end of their degree.

Mandarin and Russian Language Talent Programmes

The Mandarin and Russian Language Talent Programmes are our 11-week paid schemes for highly-skilled language students at GCHQ's headquarters in Cheltenham.

You will work as an integrated part of one of our intelligence analysis teams, using your language skills and analytical ability to directly contribute to our work and really make a difference. At the end of the scheme, students will be tested again at a graduate entry level and those who successfully pass these tests and competency interviews are then offered a permanent position as a language analyst.

Apprenticeships

British Intelligence Higher Apprenticeship in IT, Software, Internet and Telecoms

We run a two-year Higher Apprenticeship scheme that offers exposure to different technologies and the innovative ways we use them to provide intelligence to our customers. You'll learn while you earn, gain a recognised qualification (foundation degree with the potential to convert to a BSc at a later stage with an additional year of study), and build your experience and confidence in the workplace. Apprentices may have the opportunity to complete placements with our partner Agencies M15 and M16. The requirements are three A-levels (or equivalent) at grade A to C, including at least two in science, technology, engineering or maths-related subjects.

Technical Apprenticeship in Software Engineering - Greater Manchester

In addition to our Higher Apprenticeship this year we will be running a three-year BSc Honours Degree Apprenticeship in Software Engineering. You will be based in the Greater Manchester area for the duration of your degree. You will gain a fascinating insight into a world that you won't find on any other university course - cyber threats, terrorism, espionage and organised crime.

The requirements are three A-levels (or equivalent) with at least two A-levels in science, technology, engineering or maths (STEM) subjects, or equivalent qualifications in STEM subjects. Two of the A-levels must be at grade B or above.

Cyber Summer Schools

Because we're constantly on the lookout for new talent, we run two summer schools aimed at students with a strong curiosity about technology. Our Scarborough Cyber School runs for six weeks and our Cheltenham Cyber Summer Programme runs for ten weeks. Offering £250 per week plus free accommodation, both programmes give students the chance to gain an insight into how the internet works and how GCHQ uses it to protect and serve everybody in the UK.

The requirements for the Cheltenham Cyber Summer Programme are a minimum of a 2:1 degree in Computer Science (or equivalent) and the ability to programme in at least one language from C (including C++), Perl, JavaScript and Python. A minimum of two A-levels at grades A to C will be essential for the Scarborough Cyber Summer School.



CAREERS

THE VARIETY OF OUR WORK REQUIRES A UNIQUE RANGE OF SKILLS.

We offer the kind of opportunities you simply won't find anywhere else, whether you're an experienced professional or just starting out in your career. Take a look at the different careers options at GCHQ.



Solving the unsolvable

Maths & Cryptology

Mathematical expertise underpins our technical capability. We use academic theory to explore and solve increasingly complex problems, with help from some of Europe's most powerful computers. Joining us is your chance to work within a community of leading mathematical thinkers on challenging problems in fields like encryption, security, big data and mobile comms. Our research touches on cryptographic security, statistical pattern modelling, machine learning, quantum algorithms, high volume stream processing and many other areas.



Advancing the art of the possible Applied Research

Applied Research is a unit of highly skilled and motivated researchers, with a diversity of backgrounds and experience: recent graduates; world-class researchers; passionate techies. Through our combination of deep research skill and technological ingenuity, we predict and pre-empt threats and capitalise on opportunities.

Our researchers love to create and test new ideas, and to take to bits, understand and re-purpose ideas/capabilities/systems developed by others. While technical or scientific skills are useful, more important are tenacity, problem solving and the ability to learn new skills quickly: we develop GCHQ's experts.



Technology drives everything we do Technology & Engineering

For our engineers and technologists, each day brings major technical challenges. Their job is to acquire process, analyse and present huge volumes of data. To meet the evolving needs of our business, this involves using a broad range of sophisticated software, hardware and IT systems - in a constantly changing environment. The tasks and projects also vary widely - from making critical enhancements in response to world events, to building brand new systems to exacting requirements.



World-class consultancy Cyber Security and Information Assurance

Our Cyber Security team is a community of information assurance professionals delivering world class research, advice and consultancy in cyber security, cryptography and risk management. The team is safeguarding the UK's critical national infrastructure, data, systems and communications, through its expertise and relationships with the UK Government, academia and global industry partners. Join us, and you'll help ensure technologies used across the UK protect the information they carry. It's complex, challenging and high profile work where teams collaborate and use bespoke tools to find solutions. As we need to stay ahead of the ever changing technical landscape, our specialists benefit from tailored development, training and academic sponsorship.



So many uses for linguistic talents Language Analysts

The intelligence we gather comes in many languages, collected from a variety of digital communication sources. In response to changing world events, our analysts use their linguistic skills and deep knowledge of specific languages to piece together snippets of information. This provides invaluable insights into what's happening, where and when, across the world. GCHQ is the UK's largest employer of language analysts - typically, we recruit people who are native speakers, or who have degree-level knowledge of Arabic, Farsi, Hindi, Mandarin, Chinese, Mirpuri, Pashto, Punjabi, Russian, Urdu and West African languages. We also recruit European language speakers - and provide further training in rare languages.



Defending against cyber attack

Network Operations Specialists

Cyber crime costs the UK economy over £27 billion each year - while computer criminals and terrorists are constantly looking for new ways to threaten the UK.

As world-class experts in computer security we gather intelligence and explore new opportunities in internet technologies to stay one step ahead of the criminals. It's exciting, constantly evolving and technically challenging work that encompasses both cyber security and cyber intelligence – we work proactively both to detect and counter threats and to access devices and networks to gain clues and evidence.



No limits on our systems

IT Services

In IT Services we manage and deliver the services and infrastructure that GCHQ needs to meet constantly changing business demands. Using our expert knowledge of technology, we demonstrate the art of the possible, while maintaining the right balance between stability and agility.

Our work involves developing healthy partnerships with different areas of GCHQ, as well as the IT industry, partner agencies and academia. Most importantly, we aim to be easy to do business with, providing efficient, affordable and innovative solutions to meet the needs of our mission.



Analysis that protects

Analysis

Information comes into GCHQ from every corner of the globe. Our analysts draw on a variety of skills to evaluate it, produce reports and advise customers such as government departments and law enforcement agencies. Delivering this in-depth insight is one of the most intellectually challenging aspects of what we do. As our world is constantly changing, this is a career where you need to keep up with the latest communications technology, current affairs, and analytic techniques. We don't expect you to come to us with a wealth of technical knowledge or skills, but you will need to show us that you have the curiosity, capacity and ambition to learn. On entry to GCHQ, you will join our in-house development programme that will give you the chance to learn the skills and tools of the trade.



Contribute, your way

Corporate Services

From Audit and Finance to Vetting and HR, there are a host of opportunities at GCHQ. Whatever role you perform, working here is very different to being at other organisations. You'll find that supporting our operations presents unusual and interesting challenges – and there's a stimulating variety of work. You can also expect to develop your skills through a wide choice of training and development opportunities.



Projects like no other Project Management

Our diverse project environment will not only test and develop the full extent of your skills, but will also expose you to new and interesting challenges. You can expect to manage a huge variety of projects, many involving complex technical requirements, through the full lifecycle, from initiation to closure. You will be unlikely to run the same kind of project twice. You will be sure to develop your expertise with the support of our project management community.

You'll also have the chance to enhance your qualifications. We have also achieved corporate accreditation to the Association of Project Managers (APM) and sponsor all our project managers to gain PRINCE2 Practitioner status.



Smarter use of knowledge Information Management

Information management is an interesting, rewarding environment where you will be encouraged to develop innovative approaches to solve complex problems.

As information is the very lifeblood of our organisation, we're always looking for smarter ways to ensure it is managed, protected and exploited effectively. There will be scope to work across a wide range of projects in areas such as data management and modelling, risk assessments and open source data. That will mean a real variety of challenges and continuous opportunities to build on your knowledge and expertise, and develop into a well-rounded information professional.



Sharper Commercial Thinking Procurement

Our procurement team provide expert commercial services that impact directly on operational activity - equipping GCHQ to perform its critical mission. We let and manage hundreds of contracts and work closely with industry to purchase goods and services from the everyday to the never seen before. No two days are the same for our procurement team. One day you might be building supplier relationships, the next negotiating the best deal for cutting-edge technology. We are valued for our commercial expertise, so the culture is one of continuous professional development where all of our staff are supported to gain qualifications and achieve their full potential.



MY STORY

GRADUATE SCHEME.

I was looking for a development programme for future leaders; the kind that would let me build on the knowledge I'd gained from my masters degree, and reach my full potential too. This scheme attracted me especially because of the breadth of experience it offered.

This is very much a technical organisation, and I was recruited for my potential as a leader. So while learning the ins and outs of our technical capability has been difficult, it's been very worthwhile. What we do still astounds me every day, and I feel privileged to work with such talented people.

The very fact that I can't talk about the most interesting experiences on the scheme so far is proof enough that the work is unique, challenging, and interesting. It's beyond anything I could have experienced on any other graduate scheme.

MY STORY

TECHNOLOGY AND ENGINEERING.

I work in IT Service Management where we maintain the IT capability that GCHQ needs to perform its role. I was keen to join an organisation where IT was truly mission critical – it certainly is here.

I've been able to gain a comprehensive overview of the different aspects of service management – the pressure is certainly on when you're asked to resolve incidents and problems. I've also built up my knowledge of tasks like managing software assets and IT accounts. It doesn't sound that important initially – but if you think about the nature of our work and the need for security, this is essential stuff.

My technical skills and knowledge have come on leaps and bounds, but so have my people skills. In a sense, this is a technical role that's all about customer service. You learn how important it is to build relationships and put yourself in the shoes of users. I like that side of the job.

MY STORY

INDUSTRIAL PLACEMENT.

The student scheme technologist opportunity had everything going for it. I wanted to work for an organisation that's recognised on a global scale, alongside some incredibly talented people and experts in their field. Not to mention working on tasks that are helping to safeguard the nation.

There's a heavy focus on personal development and providing opportunities for you to develop even further. This starts with your day-to-day work. You're a member of a team, working on tasks with business value. And on the placement year you'll probably have the opportunity to change roles to expand your range of skills and knowledge.

And there's also huge scope for progressing my career here. As an industrial student I can attend an assessment centre to try to get a permanent role that I can take up once I've completed my degree.

MY STORY

LANGUAGES.

I've really enjoyed the chance to put my language skills to regular use - and to be constantly trying to improve them.

One of the most interesting aspects of the job is definitely the variety - you could be carrying out transcription work one day and then getting involved in technical analysis the next.

You don't work in isolation - you're very much part of the team - bringing your subject specialism to bear as part of a highly skilled team.

There is, of course, always someone around to ask for help or guidance. I enjoy working with a group of people who are really interested in their subject and are very friendly and welcoming. We also have a well-stocked cake table.

BRITISH INTELLIGENCE

OUR SECURITY PARTNERS.

The complexity of the threats to UK national security and economic wellbeing require the UK's Security and Intelligence Agencies (SIA) to work more closely than ever before. We bring our complementary skills together to tackle a range of issues including terrorism, cyber attacks, instability and conflict overseas, espionage, serious crime and the proliferation of weapons of mass destruction.



MI5 is the UK's national security intelligence agency.

MI5 safeguards the United Kingdom against threats to national security including terrorism, espionage, sabotage and the spread of weapons of mass destruction.



MI6 is the UK's secret intelligence service.

MI6 is responsible for collecting secret intelligence from both human and technical sources overseas in support of the UK Government's objectives. The information it collects relates to national security and economic well-being with particular reference to the government's defence and foreign policies. MI6 helps to make sure that the UK Government has the right information to counter these threats effectively.

RECRUITMENT PROCESS

WHAT YOU'LL NEED.

Due to the nature and importance of our work, we have a highly rigorous, but fair, approach to the assessment, selection and vetting of new joiners. In the majority of cases, the first step is to fill out an online application form. Depending on the role you are applying for, you may then be invited to an assessment centre and/or a face-to-face interview.

You must be over 18 to go through this Developed Vetting Security Clearance process, which is designed to clear you for work with the security services. In terms of vetting, there are stricter requirements in terms of nationality, residency and security than other Civil Service departments. The vetting process will also look into your character, family history and personal circumstances.

Once the vetting phase of an application begins, it normally takes around three months to complete - though the exact time can depend upon external factors such as the complexity of the case and the response times of applicants and their referees to vetting enquiries.

You need to be a British citizen to join us. We do employ those with dual nationality, though of course one nationality must be British. At least one of your parents is also required to be either a British citizen, or have substantial ties to the UK.

You usually need to have been resident in the UK for ten years before applying as well. Each case is, however, assessed on its merits. There are common exceptions such as studying abroad or living overseas with your parents.

Another point to note - if you apply to join us, you should only discuss your application with your parents, siblings and partner.

To Apply

Whatever your skills, you'll find a challenging, rewarding and stimulating career at GCHQ. To find out more about our current opportunities, or to apply, go to www.gchq-careers.co.uk



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