Role Profile: Software Engineering Apprentice

A bit about us…

Amiosec is an exciting and growing UK technology company with innovation, agility, and state of the art technology at its core. We work in partnerships with UK government customers and commercial providers to deliver research, technology, products, solutions, and services in the communications security sector.

The opportunity…

We are extremely excited to announce the launch of our Degree Apprenticeship Scheme, starting September 2023. This five-year programme is an alternative to a full-time university course, which will allow you to study part-time for an Engineering Degree and gain vocational experience working with Amiosec. This will give you the opportunity to apply the theoretical learning to real-life projects in the workplace, all while being paid.

Our multi-disciplined teams design, develop, and evaluate Amiosec's secure communication products and technologies. We have an open and encouraging approach to software development and strive to stay ahead of the curve by improving the way we work and deliver our products. Working closely with these teams, as an Apprentice you will gain exposure to new and existing software products, building your overall product knowledge. You will get the chance to get stuck in at various stages of the software development lifecycle and learn the skills required to integrate developed software with other system components including firmware and hardware.

Delivery Module and Duration…

You will be working towards a BEng (Hons) Electronic and Computer Engineering Degree. The study element will take place at Gloucestershire College, Cheltenham Campus during the first three years and then UWE Bristol for the final two.

The Programme…

You will rotate around the business through both engineering and other business areas with ample time provided to upskill/train and focus on your university studies, so you can build-up the knowledge, skills and behaviours required to be a professionally qualified engineer.

You will also be assigned a Mentor and Line Manager, to provide you with structure and support throughout your apprenticeship.

Work Life Balance…

Work life balance is important, and we offer several options to support our engineers. We have an optional 9-day fortnight scheme, which gives the opportunity to compress a fortnights hours over 9

days to allow every other Friday to be taken off. We have a hybrid working policy, where we ask for a split of 3 days onsite and 2 days remote (both are subject to project and training needs).

NOTE: - Due to the nature of our work, all candidates will be required to obtain and maintain an appropriate UK security clearance.

Typical Activities

Subject Area	Activities
Business	• Understanding how each area of the business operates and interacts to provide a cohesive working environment
Development	• Design, development, and implementation of software primarily in C and Python, but also in other languages • Integration of developed software with other system components including firmware and hardware, with guidance
Documentation	• Documentation through software development tasks, following best practices • Documentation of research findings, providing contributions to engineering reports
Lifecycle	• Obtaining an appreciation and experience in all areas of the product lifecycle, from requirements through to testing
Technology Evaluation and Research	• Investigation of emerging frameworks, libraries, build tools, technologies
Team Activities	• Using Agile methodologies and getting involved with ceremonies • Working within teams to contribute to technical solutions
STEM outreach	• STEM outreach is very important to Amiosec and all early careers staff will be encourages to get involved with the creation of new activities and attending events

Technical Competencies

Subject Area	Competency
Qualifications	• 5 GCSEs at grade 9 – 4 or A* - C, including maths, English as well as science, technology or engineering related subjects. • A Levels at grade C or above in both a mathematical based subject and a science, technology or additional mathematics related subject, or 90+ credits in an Engineering BTEC. (Equivalent to 112 UCAS points)
Programming languages	• We are looking for someone who is familiar with the principles of writing software and may have some experience with pseudocode languages such as C or Python • Embedded programming languages: C, C++, Java or Rust • Scripting languages: Python and Bash

Core Competencies

Subject Area	Competency
Approach	• Enthusiasm for technology and desire to understand and utilise it to develop innovative solutions • Ability to quickly learn innovative technologies as needed
Working Style	• Ability to work individually or as a member of a multi-discipline team • Self-motivated • Ability to capture and articulate design ideas • Willingness to be flexible and embrace new technologies/techniques • Good time management skills • Ownership of own deliverables • Tenacious problem-solving skills • Comfortable with travel, as the degree will be taught in Bristol and Cheltenham.
Innovation	• Ability to foster and develop innovative ideas • Willingness to contribute to improvements in products and ways of working