

1. What is Python?

Python is an **open-source general purpose programming language**. This means that it can be used to develop software for a wide variety of tasks.

Today Python is used to create and maintain a huge range of computer applications and services including in relation to web applications, cyber security, hacking (both ethical and non-ethical), performing data analysis and media processing, robotics and developing artificial intelligence (AI) systems.

Python is a popular choice for those wishing to learn computer programming and computer science fundamentals for the very first time because it is easy to learn, intuitive and is supported by an active global community of software engineers, data scientists and academics.



2. Why learn Python?

- Python is an industry-standard language that will equip you with the skills and knowledge to future-proof yourself against the rapid advancements in modern technology.
- Learning Python can open the doors to a huge and varied range of both hands-on and non-technical careers in technology, data and artificial intelligence.
- Learning Python will equip you with the fundamental knowledge and skills required to embark upon a career in tech, and enable you to command a significant salary as a result.
- You do not need a background in mathematics, science, computing or technology to learn Python - all you need is an interest in technology and, along with a basic desktop or laptop computer, you can be developing your own Python computer programs within minutes.



3. Careers in Technology - Example Career Pathways and Roles

Area of Interest	Entry Level Roles 0 - 3 years: £22k - £35k	Senior Roles 3 - 8 years: £40k - £80k	Executive Roles 8 years and more: £80k - £120k
Software Engineering	Software Engineer	Lead Engineer	Chief Technology Officer
Data Engineering	Data Engineer	Data Architect	Chief Data Architect
Data Science	Data Analyst	Data Scientist	Chief Data Scientist
Business Analysis	Business Analyst	Product Owner	Senior Project Manager
Design	Software Engineer	Technical Architect	Head of Architecture
Testing	Software Tester	Test Manager	Head of Quality Assurance
Management	Scrum Master	Product Owner	Senior Project Manager

For more information on each role: https://knowledgebase.hyperlearning.ai/en/courses/python-taster-course/modules/1/why-learn-python

4. Typical Benefits

- Flexible working hours.
- Hybrid (1 3 days office-based) or even 100% remote (work from home) working model.
- Private medical insurance including dependency cover.
- Pension schemes with employer contributions exceeding statutory obligations.
- Dedicated personal development and training budgets.
- Annual bonus based on company and personal performance.
- Diverse career progression opportunities.
- Dedicated R&D budgets including hackathons.



5. Exciting Projects

- Virtual and augmented reality.
- Artificial intelligence and robotics.
- Combatting climate change and disease.
- Chatbots and human-computer interaction.
- Medical devices and Al-powered healthcare.
- Digital finance and blockchain technologies.
- Social media platforms and recommendation systems.
- Next-generation military hardware.
- Space technologies and space exploration.



6. Typical Entry Requirements (entry-level roles)

- Demonstrable expertise in coding (such as Python and an associated certification).
- Knowledge of foundational computing concepts (including data structures, control flow and functions).
- Demonstrable interest in technology.
- Good communication and collaboration skills.
- Experience working effectively as part of a team and independently.
- Detail-oriented and takes pride in delivering high quality work.
- Enjoys problem solving with an analytical mindset.
- Proactive in one's own personal development (such as self-directed training, open source projects, blogs etc.)

