

Robotics Engineer

What is it?

A Robotics Engineer designs, builds, tests, and maintains robots and robotic systems. They combine knowledge of mechanical engineering, electronics, and computer science to create machines that can perform tasks autonomously or assist humans in industries like manufacturing,

Qualifications/Experience Required:

A degree in robotics, mechanical engineering, electronics, mechatronics, computer science, or a related field is essential. Postgraduate qualifications can be beneficial for advanced roles. Internships, work placements, or project-based experience in robotics or automation are highly valued. Knowledge of programming languages (e.g., Python, C++, or Java) and CAD software is often required

What the Work Involves:

Designing and developing robotic systems to perform specific tasks. Writing and testing software that controls robotic devices. Conducting research to create new materials, sensors, or control systems. Prototyping and testing robots to ensure they meet performance and safety standards. Diagnosing and fixing technical issues in robotic systems. Collaborating with other engineers, scientists, and manufacturers to bring designs to production.

Future Prospects – Labour Market Information:

Robotics is a growing field, driven by advancements in AI, automation, and industry demand. Opportunities exist across sectors such as manufacturing, healthcare, aerospace, agriculture, and logistics. Career progression includes senior engineer roles, project management, or specialisation in fields like artificial intelligence or humanoid robotics

Annual Salary £27,000 - £70,000

Typical weekly hours: 37 hours – 40

Type of person who may be suited to this job:

Are passionate about technology and innovation. Enjoy solving complex problems and thinking outside the box. Have a strong aptitude for mathematics, physics, and computing. Are detail-oriented and able to work precisely. Thrive in collaborative environments with engineers and designers.

Money/Wage Guide:

Starting salaries range £27,000 to £35,000 per year

Experienced Engineers can earn between £40,000 and £60,000.

Senior Engineers and specialists may earn over £70,000

Related Opportunities:

- Mechatronics Engineer
- AI Engineer
- Controlled Systems Engineer
- Biomedical Engineer

Further Information:

Institute of Technology & Engineering

<https://www.theiet.org/>

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