**Job title: Robotics Engineer**

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| **Job title: Robotics Engineer** | Robotics engineers design and build machines to do automated jobs in industries like manufacturing, aerospace and medicine. |
| **Entry requirements:**  | You can do a degree or postgraduate qualification in:* artificial intelligence and robotics
* mechatronics
* robotics engineering
* mechanical engineering
* electronics engineering
* computer science
* mathematics

You can also work in the development of artificial intelligence if you have a qualification in psychology or cognitive science.**Entry requirements**You'll usually need:* 2 or 3 A levels, including maths and physics
* a degree in a relevant subject for postgraduate study

You can do a college course, which may help you to find a job as a robotics technician. Relevant courses include:* Level 3 Certificate in Robotics and Automation
* Level 4 Diploma in Computing
* Higher National Certificate in Electrical or Electronic Engineering
* With further training, you can qualify as an engineer.

**Entry requirements**You'll usually need:* 4 or 5 GCSEs at grades 9 to 4 (A\* to C) for a level 3 course
* 1 or 2 A levels, a level 3 diploma or relevant experience for a level 4 or level 5 course

You could do a degree apprenticeship in a robotics specialism. Apprenticeship examples include:* control and technical support engineering
* software development
* manufacturing engineering
* embedded electronic systems design

**Entry requirements**You'll usually need:* 4 or 5 GCSEs at grades 9 to 4 (A\* to C) and college qualifications like A levels for a degree apprenticeship
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| **Skills required:**  | You'll need:* knowledge of engineering science and technology
* knowledge of computer operating systems, hardware and software
* maths knowledge
* design skills and knowledge
* excellent verbal communication skills
* the ability to use, repair and maintain machines and tools
* thinking and reasoning skills
* complex problem-solving skills
* to be able to use a computer and the main software packages confidently
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| **What you'll do:**  | Your exact duties will depend on what part of a project you work on but may include:* understanding what customers want to automate
* designing processes and parts using computer aided design
* building and testing prototypes
* analysing data from robot sensors and cameras
* finding and fixing faults
* researching news ways to use robots and artificial intelligence
* demonstrating finished products to customers
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| **What you’ll earn:**  | * Starter: £27,500
* Experienced: £55,500*These figures are a guide.*
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| **Working hours, patterns and environment:** | * 37 to 40 hours a week, usually 9am to 5pm.
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| **Career path and progression:** | * You could become a lead engineer, with overall responsibility for managing a project.
* You could also specialise in a particular area of robotics, for example self-driving vehicles, space exploration, surgical instruments or deep ocean research.
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