

Job title:	Automotive engineers design, develop, test and build cars and motorbikes.
Routes and Entry	University
requirements:	You'll usually need a foundation degree, higher national diploma or degree, before joining a company training scheme.
	Relevant subjects include:
	mechanical engineering
	electrical or electronic engineering
	design engineering
	<ul> <li>manufacturing engineering</li> </ul>
	automotive engineering
	A course with a work placement or an internship will be especially useful.
	You'll usually need:
	<ul> <li>at least 1 A level, or equivalent, for a foundation degree</li> </ul>
	<ul> <li>between 1 and 3 A levels, or equivalent, for a higher national diploma or degree</li> </ul>
	Apprenticeship
	You could get into this job through a manufacturing engineer degree apprenticeship or product design and development engineer degree apprenticeship.
	You'll usually need:
	• 4 or 5 GCSEs at grades 9 to 4 (A* to C) and A levels, or equivalent, for a degree apprenticeship
Skills required:	You'll need:
	maths knowledge
	<ul> <li>knowledge of engineering science and technology</li> </ul>
	design skills and knowledge
	knowledge of physics
	<ul> <li>to be thorough and pay attention to detail</li> </ul>
	analytical thinking skills
	<ul> <li>the ability to use, repair and maintain machines and tools</li> </ul>
	<ul> <li>thinking and reasoning skills</li> </ul>
	<ul> <li>to be able to use a computer and the main software packages competently</li> </ul>
What you'll do:	You might work on:
	body, chassis and engine systems
	<ul> <li>electrical and electronic instrumentation and control systems</li> </ul>
	thermodynamics, aerodynamics and fluid mechanics
	fuel technology and emissions
	You could work in:
	<ul> <li>design – turning ideas into blueprints for development and testing, taking into account safety, cost-</li> </ul>
	effectiveness, environmental impact and look
	<ul> <li>development – building and testing prototypes using computer simulations and physical models to</li> </ul>
	<ul> <li>assess components' strengths, weaknesses, performance and safety</li> <li>production – planning the production run, including redesigning machine tools, equipment and</li> </ul>
	<ul> <li>production – planning the production run, including redesigning machine tools, equipment and processes to make new parts, monitoring costs and production schedules, and overseeing quality control</li> </ul>
What you'll earn:	£20,000 Starter <i>to</i> £45,000 Experienced
Working hours, patterns and	Typical hours (a week) 39 to 41
environment:	<ul> <li>You could work evenings, on shifts</li> </ul>
	<ul> <li>You could work in an office, at a research facility or at a manufacturing plant.</li> </ul>
Career path and	With experience, you could progress to senior engineer roles, project team management, general managemer