

## Materials Engineer

### What is it?

A Materials Engineer works to develop, test, and improve materials used in a wide variety of products, from cutting-edge technology to everyday items. They specialize in understanding the properties of materials like metals, ceramics, plastics, and composites to ensure they meet specific performance and sustainability requirements.

### Qualifications/Experience Required:

A degree in materials science, engineering, or a related subject such as mechanical, chemical, or structural engineering. A postgraduate qualification (e.g., MSc or PhD) can enhance career prospects, especially for research roles. Apprenticeships in engineering or materials science are also available. Work placements, internships, or entry-level roles in materials testing or manufacturing can provide valuable practical experience.

### What the Work Involves:

Analysing the properties and performance of materials to ensure they meet technical specifications. Developing new materials or modifying existing ones for better performance, sustainability, or cost-effectiveness. Testing materials under different conditions, such as high pressure or temperature, to assess their durability and safety. Collaborating with design, production, and quality teams to create materials suited to specific products or applications.

### Future Prospects – Labour Market Information:

Demand for Materials Engineers is growing, driven by advancements in industries such as aerospace, renewable energy, and medical technology. Career progression can include roles such as Senior Engineer, Research Scientist, or Project Manager. Opportunities are available in sectors like manufacturing, automotive, aerospace, energy, and construction.

**Annual Salary £25,000 - £70,000**

**Typical weekly hours: 40 hours**

### Type of person who may be suited to this job:

Are curious about how things are made and enjoy hands-on problem-solving. Have strong attention to detail and a methodical approach to work. Are interested in sustainability and innovation in material use. Enjoy working both independently and as part of a team in research and production environments.

### Money/Wage Guide:

**Starting salaries** range £25,000 to £30,000 per year

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

**Senior Engineers or with Specialised Companies** you may earn over £70,000

### Related Opportunities:

- Metallurgist:
- Chemical Engineer:
- Structural Engineer:
- Biomedical Engineer:

### Further Information:

**Institute of Materials, Minerals and Mining**

<https://www.iom3.org/>

Prospects UK

[Prospects | Job & Course Search | Career & University Advice](#)

**National Careers Service**

[Explore careers | National Careers Service](#)