

R2S Career Factsheet: Mechanical Engineer

'In my opinion there is no right or wrong way to become a mechanical engineer. As a starting point I would find out in more detail what a mechanical engineer does in contrast to a civil engineer or other engineering disciplines. Then decide on whether you want to take the apprenticeship route or the university route. If you decide to pursue the university route, work hard and learn as many skills as you can whilst at university - not only academic skills. Try and develop other skills like communication and interpersonal skills through hobbies and interests. Before you graduate try and complete internships as this makes you more employable when you graduate and may give you hands on experience of mechanical engineering.'

'If university is not on the map for you then an apprenticeship is an equally good way of getting into the industry and earning income. You get to earn while you learn, plus you get hands on experience and most likely will be employed once you finished your apprenticeship. The choice is yours...'



Abiyomi Ajileye
Mechanical Engineer and finalist for the Young BME Engineer of the Year Award.
(Mott MacDonald)

Duties:

- Assessing new products and innovations
- Building prototypes
- Turning research into technical plans using computer aided design/modelling programmes
- Improving processes and overseeing the installation of machinery and parts
- Designing and implementing designs and testing procedures
- Providing technical advice
- Testing, modifying, re-testing and evaluating products
- Agreeing budgets, timescales and specifications with clients and managers.

Skills:

- Excellent communication and presentation skills
- Good problem-solving skills and a creative approach to new ideas
- Excellent technical knowledge
- Good team working skills
- Ability to prioritise and plan effectively
- High level of IT skill, particularly computer-aided design
- Good commercial awareness
- Ability to work under pressure and to deadlines.

To work as a mechanical engineer you will need a foundation degree, BTEC HNC/HND or degree in mechanical engineering, or a related engineering subject.

For a degree course you will usually need at least five GCSEs (grades A-C) and two or three A levels, possibly including maths and physics.

You may also be able to get into this career starting off as a mechanical engineering technician apprentice with a manufacturing or engineering company and then after your apprenticeship going on to higher education qualifications.

What does a mechanical engineer do?

Mechanical engineers research, design, develop, manufacture and test tools, engines, machines and other mechanical devices.

Who employs mechanical engineers?

- Engineering, manufacturing, construction and process companies
- Research and development organisations
- Consultancies
- Utility companies
- The civil service
- The armed forces

Income:

- Starting salaries can be between £19,500 and £22,000 a year
- Experienced mechanical engineers can earn between £26,000 and £39,000
- Engineers with chartered status can earn over £40,000 a year.

Career Opportunities:

- Chartered Engineer
- Human resources
- Sales and marketing
- Engineering consultancy
- Engineering director.

Reference Source List:

<http://targetjobs.co.uk/careers-advice/job-descriptions/276099-mechanical-engineer-job-description>
http://www.prospects.ac.uk/mechanical_engineer_career_development.htm
<http://www.topuniversityleaguetables.co.uk/top-universities-for-engineering-mechanical/>

Top universities for Mechanical Engineering

1. Cambridge
2. Imperial College London
3. Bristol
4. Sheffield
5. Southampton

2013/2014 (Rated by quality of course)