

Diploma in Engineering

A 14–19 qualification available in Newham

Do you enjoy solving problems? Do you like getting things to work? Do you enjoy being creative and working in a practical way? If so, the Engineering Diploma might be for you!

IN THE MODERN WORLD, ENGINEERING IS EVERYWHERE!



From the moment you wake up, throughout the day and even in your sleep, engineering is all around you. Without engineers, you wouldn't have mobile phones, MP3 players or even the internet. The modern world we live in is full of engineering – from turning on the tap to stepping on the train or bus, engineering is everywhere!

Did you know that one and a half million people are employed in the engineering industry in the UK alone, and another two and a half million use engineering skills in their jobs?

JENSON BUTTON: from Karts to F1

Becoming a Williams F1 driver at the age of just 19 put Jenson Button in the limelight, but he'd always had a passion for speed. He started karting aged eight and went full time in 1989, winning the British Super Prix the same year, then the British Cadet Championship in 1990 and 1991 – in 1991 he won every race! He also won the British Open Championship in the same year. He switched to British Junior TKM in 1992 and won yet another championship.



Today, Button finds himself playing catch-up with Hamilton for the top spot in F1 and the competition is intense!

Diploma in Engineering students will be able to:



- Gain experience and understand the different areas of engineering such as mechanical, electrical/electronic, telecommunication, biomedical, aerospace, transport, design, environmental, oil, gas, chemical and nuclear energy and utilities, engineering manufacture and building services.
- Learn in a practical manner, getting involved in engineering design, manufacture, testing and maintenance.
- Learn about the importance of engineering in the modern world and the effect engineering has on our lives.

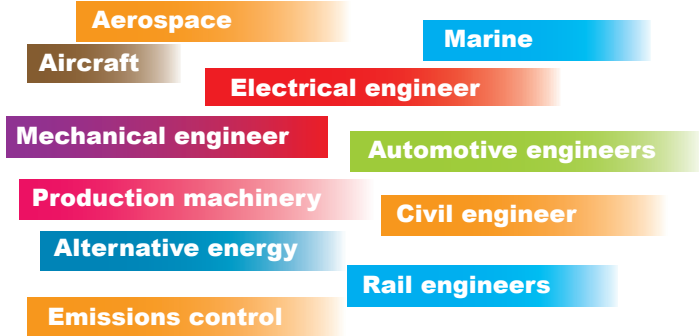
- Study at college and with industry as well as at school.
- Take a specialist engineering course such as in car and motorcycle maintenance or electronics.

Examples of activities in the Higher Engineering Diploma:

- Make the main parts for a wind turbine and design, make and test the blades for it.
- Make the circuit and casing for a small portable MP3 player speaker.
- Design, make and race a solar-powered model boat.



There is a wide range of careers in engineering, from aerospace to product packaging:



ENGINEER YOUR FUTURE!

WHAT DOES THE INDUSTRY NEED?

- More women! Only 3.2% of Chartered Engineers are women – lower than the percentage of female students graduating in an engineering-related subject.
- Technicians with a Level 4 (HND, Certificate of HE, NVQ 4) qualification. Over 10,000 required over the next ten years, especially in aerospace, automotive and electronic engineering.
- Professionally qualified engineers (Levels 6–8 First Degree up to PhD level) e.g. scientists, designers, mechanical and systems engineers.
- Younger entrants into the professions. The average age of registered engineers is 50+!

WHAT DOES ENGINEERING OFFER?

- Up to £150,000 per annum for an experienced Chartered Chemical Engineer.
- Between £17,000 and £30,000 per annum for new graduates, depending on your area – and range – of expertise.
- At least £6,500 per annum for an apprentice in the first year of training.
- Opportunities to travel overseas.
- Opportunities to work on specific contracts for a fixed period.
- Average working week of 38 hours.

HOW CAN THE DIPLOMA IN ENGINEERING HELP YOU TO PROGRESS?

Level 1 Foundation, equivalent to 5 GCSEs at grades D–G

- Will help you develop skills for work on a production line or at operative level.
- Will help you prepare for progression to Level 2.

- Will equip you with skills for semi-skilled or craft trades.

- May help you progress to technician level, by taking additional on-the-job training or the Advanced Diploma.

Level 2 Higher, equivalent to 7 GCSEs at grades A*–C

- Can be opted for (depending on your level of ability and skills) whether or not you've completed Level 1.
- Will develop your engineering interests, knowledge and skills.

Level 3 Advanced, equivalent to 3.5 A-levels

- Will help you to secure a place at university, or employment at technician level. You will still have a wide range of options to choose from and could progress to chartered status.

WHERE CAN YOU FIND OUT MORE?

- To find out more about the Engineering Diploma, ask your Connexions Adviser or go to: www.engineeringdiploma.com
- ENGINEERING & TECHNOLOGY CAREERS www.ingenuity.org.uk www.thelep.org.uk

- WOMEN INTO SCIENCE, ENGINEERING AND CONSTRUCTION Advice, ideas and fascinating facts for females interested in engineering and science. www.wisecampaign.org.uk www.engineergirl.org