

Leicester City Diplomas

The Advanced Diploma in Engineering



Brief Course description

The diploma in engineering introduces the key themes of engineering and will give an understanding of basic engineering principles. You will learn what engineering is all about and examine the different opportunities it has to offer. As well as understanding the theory behind engineering you will learn practical skills and develop an ability to solve problems both individually and as part of a team. The course is relevant to modern engineering and will open up a wide range of educational, training and career opportunities.

You should consider this course if you would like:

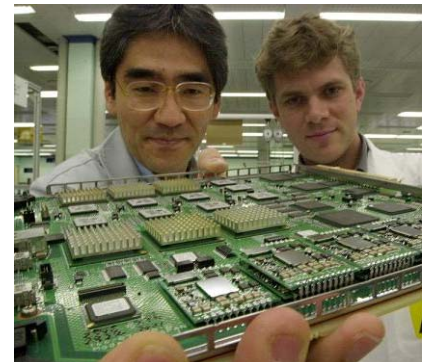
- An alternative to A Level options.
- A big qualification with a variety of units
- A course with practical and theoretical applications
- A broad understanding of Engineering
- A minimum of 10 days work experience
- A good progression route to higher level courses
- A course supported by industry and Higher Education
- A course with good employment prospects
- Experience of Higher Education



What will I learn?

You will study and experience the following 9 **Principal Learning** topics:

- Investigating Engineering Business and the Environment
- Application of Computer Aided Designing
- Selection and Application of Engineering Materials
- Instrumentation and Control Engineering
- Maintaining Engineering Plant, Equipment and Systems
- Investigating Modern Manufacturing Techniques used in Engineering
- Innovation Design and Enterprise
- Mathematical Techniques and Applications for Engineers
- Principles and Application of Engineering Science



Generic Learning

Here you will develop your skills in English, Maths and ICT. These are your Functional skills. You will also develop your personal learning and thinking skills (PLTS) and complete a project which demonstrates your skills and knowledge of the subject, for example, investigating the Engineering industry through visits to employers, and working as part of a team in a realistic working environment., or you may design a car powered by electricity or solar energy, or design a water pump for use in a third world country.

You will also be given the opportunity to study **additional, specialist subjects**, or take an additional GCSE part of your Programme.



Where will I learn?

You will study at Leicester College. Also you will take part in visits to Engineering based organisations. You will be required to take part in a minimum of 10 days of work experience at an Engineering employer, where you will gain valuable additional skills and knowledge, including interpersonal skills.

How will I be taught?

You will have opportunities to experience different styles of learning in different environments and with an emphasis on practical work. Employers will set challenge projects and exercises that you will be able to complete individually and by working in groups to find solutions.

How will I be assessed?

Most units will be assessed by your teachers and will be based on your practical, assignment and project based work. Employers will also help to assess your work particularly if they have set a project for you to complete. There will be two units where you will need to take an external test but the emphasis for the whole course is about continuous assessment by your teachers

What can I do after this course?

Whatever level of diploma you study for post 16, the diploma is designed to broaden your horizons and give you a wide range of next step options. You could progress on to a Higher National Diploma or First Degree course in Engineering. The Engineering diploma has been carefully designed to give you relevant transferable skills that will be welcomed by colleges, universities and employers.

What is this course “worth”?

The Advanced Diploma in Engineering is equivalent to 3.5 A Levels.

Entry requirements/skills needed

To be successful on the course it is recommended you have GCSE's, or equivalent in 5 subjects, including Maths and English, at grade C or above. Successful achievement of the Higher Diploma in Engineering or equivalent qualification would be acceptable.

It is also very important that you have:

- An interest in the Engineering industry
- A good attendance and punctuality record
- A good behaviour record
- Adequate literacy and numeracy skills

You will need to discuss with your teacher, which level of Diploma will be most appropriate for you. You will need to show that you have the potential to achieve at level 2, including functional Maths, English and ICT.

Employer links?

You will have the opportunity to visit, and/or attend work placement at a number of local employers, including:

- Leicester College
- TBA