



Looking
for an
Exciting
Career?

then get an

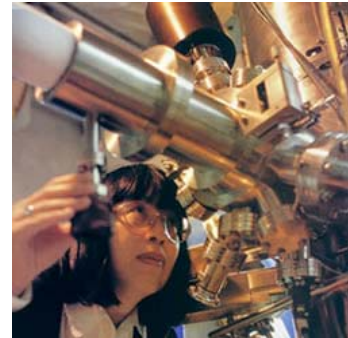
**Insight
Into
Engineering**

What is Engineering?

Engineering is the appliance of scientific concepts to solve real problems, to create and improve high-tech devices, innovative products and processes that enhance quality of life for everyone, whether they live in a city or a remote area.

Without engineers every facet of our lives would be very different, can you imagine a world with no electricity, plastic or communication systems?

Engineers are continually driving technology forward and developing applications for emerging technologies.



What are Some of the Main Branches of Engineering?

There are many disciplines of engineering which cover everything from nano-technology (machines smaller than a speck of dust) to the built environment (roads, bridges, buildings) but some of the best known disciplines are:

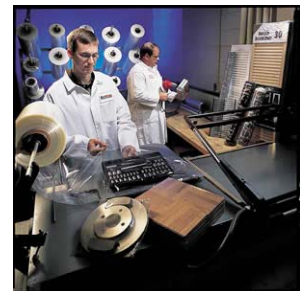


Civil Engineering – provides us with our road and rail networks as well as the buildings we live and work in, including all the infrastructure to support them (water supply, sewers etc).

Without civil engineers we would have no shopping centres, football stadiums, motorways, Channel Tunnel.

Mechanical Engineering – mostly to do with machines or products with moving parts. Mechanical engineers work on very small products like motors that turn a CD in a CD player as well as very large products including cars, coaches and trains.

Without mechanical engineers we would have no cars and aeroplanes would not be able to fly.



Chemical Engineering – changes raw materials into usable products. Chemical engineers develop the processes which change oil into plastics on a large scale.

Without chemical engineers we would have no synthetic fabrics, medicines or toothpaste.



Electronic Engineering – is all about designing and developing products that use electricity and handle information. Electronics Engineers make products ever smaller, faster and smarter.

Without electronic engineerswe would have no TVs, DVD mobile phones.

Electrical Engineering – is mainly about generating and supplying enough electricity to supply our ever increasing demand. This includes generating from fossil fuels as well as renewable technologies.

Without electrical engineers we would not be able to plug in our computers or CD players.

What is the Insight Into Engineering Programme?

A four day programme designed to allow Year 13 students to explore the exciting careers opportunities offered by a wide range of engineering disciplines. Your participation in the programme will give you the information you need to make informed career decisions.

During the programme you will meet and talk to role models from engineering, hear about the career experiences of a range of professional engineers, spend a day at Queen's University Belfast and the University of Ulster, engage in interactive problem solving activities and spend two days on placement with engineers in a discipline of your choosing.



When Will the Programmes Run?

Insight Into Engineering for Boys – Monday 30^h November – Thursday 3rd December 2009

GETSET Insight Into Engineering for Girls – Monday 1st – Thursday 4th March 2010

Who Can Apply?

If you are a Post 16 student studying physics and maths and have an interest in finding out more about engineering career opportunities, university courses and life as an engineer then you can apply.

What Are the Benefits of Participating?

By participating in the Insight Into Engineering Programme you will:

- Gain first hand experience from industrial engineers;
- Get a closer look at university facilities at Queen's University and the University of Ulster;
- Receive advice on entry requirements for undergraduate courses;
- Spend two days working with professional engineers;
- Be able to make informed career decisions.



How Do I Apply?

Complete and return an application form to Sentinus. Forms are available from your Careers teacher, alternatively you can request a form to be sent directly to you. Places on the programmes are limited and applications will be processed on a first come, first served basis. As demand for places is likely to be high you are advised to complete and return your application at the earliest opportunity.

For an application form contact your Careers teacher or:

Dominick McCartan, Sentinus
Tel: 028 9262 7755
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Email: info@sentinus.co.uk

Sentinus

Sentinus is a not for profit educational charity. It is one of the largest providers of business/education activity in the United Kingdom. Last year almost 60,000 students from 620 schools and colleges took part in Sentinus programmes equating to 130,000 full student activity days. Through the establishment of partnerships between education and employers the organisation supports the development of young people by enhancing essential life skills and creates an awareness of the many exciting career opportunities available to them. The organisation has a focus on young people, from 5 to 19 years old, developing their interpersonal skills through challenging and exciting experiences linked with the world of work.

Promoting Science, Technology, Engineering & Maths (STEM)

As the wealth creation sector of any economy, science and engineering are recognised as being among the most important areas of employment. Sentinus provides a wide range of programmes for young people of all ages to give them exciting and rewarding experiences in the STEM subjects and inspire them to consider careers in these areas. The programmes support the development of links with business, industry and public sector organisations and enrich the learning experience for pupils.



These programmes, designed to support the delivery of the curriculum, engage students in practical problem solving activities, research and development and investigative projects. Although focussing on science, technology, engineering and maths they also give significant opportunity to enhance employability and personal development through problem solving, teamworking, target setting, mentoring, working with adults and independent learning.

Sentinus programmes give young people the opportunity to work with other people, gain real experience of practical problem solving, develop communication skills, enhance their personal development and make informed career decisions.

Education for Employability

Sentinus offers a range of programmes which support CCEA's stated curriculum objectives of developing young people as individuals and contributors to society, the economy and the environment. These programmes include one day roadshows in schools focussing on areas including preparation for interview, personal career planning, personal effectiveness, business workshops and enhanced learning and can be incorporated into a structured programme aimed to support the development of students and their preparation for the work place. These interactive programmes are delivered by a team of expert Trainers and incorporate a wide range of practical activities.

In addition to the roadshows, through our Experiences of Work programme, we offer schools the opportunity to access trained role models from a wide cross section of business, industry and public sector bodies to relate their career experiences to young people.

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