So, you're thinking of a career in… TECHNICAL & HIGHER-LEVEL SKILLS

What is the Technical and Higher-Level Skills sector all about?

The Government has recognised that a world- class system of technical education is critical for two main reasons:

• It improves the skills of young people and helps to increase the productivity of our country and;

• It improves social mobility- which, simply, is the ability of individuals, households or groups to move and progress through society's hierarchy, including the types of jobs they access, how they access them, and the pay associated with these jobs.

Technological changes will alter the demand for skills- in particular the type, nature and location of job opportunities available. Equipping young people with higher-skills and technical skills required for the changing labour market, and in non- routine jobs, will help to ensure that they are more resilient to the potential effects of automation and the impact of digitisation.

Will there be any opportunities and where are they?

Forecasts suggest that expansion demand (newly created jobs which are an additional number of jobs in the economy) is expected to be focused in high-skilled occupations.

The demand for intermediate level jobs will, however, still exist due to an ageing workforce as well as companies growing and expanding- allowing young people and adults to progress to higher- level positions.

How to get into the sector?

Important skills to have:	Useful subjects to study:
Literacy and Numeracy	English and Maths
Problem Solving	Physics
Data and analytical	Chemistry
STEM	Biology
Planning and Construction	ICT/Digital
Project management	Design and Technology
Teamwork	Computer Science
ICT/Digital Skills	Electronics
Resilience, patience and problem solving	

What types of jobs are available?

IT operations technicians: IT operations technicians are responsible for the day-to-day running of IT systems and networks including the preparation of back-up systems, and for performing regular checks to ensure the smooth functioning of such systems.

Building and civil engineering technicians: Building and civil engineering technicians perform a variety of technical support functions to assist civil and building engineers.

Civil Engineers: Civil engineers undertake research and design, direct construction and manage the operation and maintenance of civil and mining engineering structures.

What types of jobs are available… continued

Design and Development Engineers: Design and development engineers conceive engineering designs from product ideas or requirements in mechanical, electrical and electronic engineering.

Science, Engineering and Production Technicians: Job roles in this group perform a variety of technical support functions.

Engineering Technicians: Engineering technicians perform a variety of technical support functions to assist engineers with the design, development, operation, installation and maintenance of engineering systems and constructions.

IT Business Analysts, Architects and Systems Designers: Job roles in this group provide advice on the effective utilisation of IT and design IT systems in order to meet the business objectives or to enhance the business effectiveness of the organisation.

Health professionals: Job holders in this group perform a variety of other health-related professional occupations.

Medical and dental technicians: Medical and dental technicians operate, calibrate and maintain cardiographic and encephalographic testing equipment, assist in the conduct of post mortems, give simple dental treatments, fit artificial limbs and hearing aids, and undertake a wide range of related medical and dental tasks.

Plumbers and Heating and Ventilating Engineers: Job holders in this group assemble, install, maintain and repair plumbing fixtures, heating and ventilating systems and pipes and pipeline systems in commercial, residential and industrial premises and public buildings.

Find out more…

Virtual Engineering Centre: find out about the development and integration of Virtual Engineering technologies: www.virtualengineeringcentre.com/about/

STEM Learning: www.stem.org.uk

Sci-Tech Daresbury: www.sci-techdaresbury.com