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Websites and Source of Information

This section offers a gateway to accessing key information relating to STEM subject choice, career pathways, and resources. The content is not intended to be exhaustive, but aims to save you time by pinpointing sites that will provide the most stimulating and relevant STEM information.

General:**National STEM Centre –**

www.nationalstemcentre.org.uk

Houses the national STEM careers collection and a wealth of other resources including regional contacts and support for STEM learning.

- STEM business and industry in the region – what are the region's major STEM sectors?
- Major employers – which businesses are the main STEM employers in the region?
- Looking forward – what are the potential STEM skill shortages for the region?
- STEM education support – who can I contact in the region?

The Centre for Science Education (CSE) –

www.shu.ac.uk/research/cse/

CSE is a research and business development unit specialising in the STEM subjects. CSE creates, manages and delivers resources, projects and initiatives to support teachers and students at all levels of education.

CRAC: The Career Development Organisation –

www.icould.com

Their site provides access to the career experiences of real people through their stories. It includes many inspiring examples of STEM careers at a variety of levels, and through the stories describes the pathways of people who used their STEM courses as a springboard into other opportunities.

Science Council Careers website –

www.futuremorph.org

The online portal for STEM careers including links to a list of relevant websites as a download. The site explores the world of STEM through case studies, job profiles, videos and lesson plans and has sections for different ages of young people, for advisers and for parents and teachers.

STEMNET –

www.stemnet.org.uk

The Science, Technology, Engineering and Mathematics Network helps schools/colleges to understand the range of STEM Enhancement & Enrichment opportunities available to them.

STEM Directories –

www.stemdirectories.org.uk

Site to download the STEM Online Directories (for enhancement and enrichment of the curriculum).

NOISE (New Outlooks in Science & Engineering) –

www.epsrc.ac.uk/noise

Includes exciting experiments to try at home and interesting blogs by young scientists, to great articles and details about 'cool' careers in science and engineering.

STEM Equality and Diversity Toolkit –

www.stem-e-and-d-toolkit.co.uk

An interactive toolkit to help to promote STEM careers to people with a range of backgrounds and needs.



UK Resource Centre for Women in SET –

www.theukrc.org

National programme that can provide statistics and material relating to increasing the number of females in science, engineering, technology and the built environment.

WISE (Women into Science, Engineering and Construction) –

www.wisecampaign.org.uk

WISE works with industry and education to inspire girls and attract them into STEM studies and careers. Advises on a range of initiatives, from running an outreach day to advising on new careers literature, challenging stereotypes in innovative and effective ways.

The UK Commission for Employment and Skills

www.ukces.org.uk

The website has a research portal to Employment and Labour Market Information and Sector data including the Working Futures 2007–2017 produced by the Institute of Employment Research at the University of Warwick in collaboration with Cambridge Econometrics (CE). You can register for a monthly e-briefing on key developments in employment and skills.

To help in finding the right science course in higher education, view –

www.science-engineering.net

This site offers a free University Information Service for science, engineering, and technology.

National Guidance Research Forum (NGRF) –

www.guidance-research.org

A comprehensive site for exploring labour market information, including an LMI Future Trends section. Managed by the University of Warwick Institute for Employment Research (IER) together with Deirdre Hughes (DMH Associates) and the International Centre for Guidance Studies at the University of Derby (iCeGS).

Science:

Society of Biology –

www.societyofbiology.org

The SoB aim to encourage a passion for biology in students, and help teachers with resources such as the BioEd e-newsletter and free online lesson plans.

Royal Society of Chemistry –

www.rsc.org

The RSC provides a range of careers materials for use by school students and teachers as well as a range of chemistry enhancement and enrichment activities for all ages.

Institute of Physics –

www.iop.org/careers

The IOP provides a range of support for teachers, students and working physicists and offers a large number of free resources related to studying physics and careers from physics. See the website for further information including access to the "Exploring physics, uncovering choice", a pack of materials to encourage teachers and advisers to

work together in providing a consistent approach to careers advice and guidance.

The Association for Science Education –

www.ase.org.uk

The school science site is packed with free online resources for both teachers and students, showing the applications of the science learnt at school from age 5 to 19.

Technology and Engineering:

EngineeringUK –

www.engineeringuk.com

The purpose of EngineeringUK is to promote the vital contribution that engineers, and engineering and technology, make to our society. Through initiatives such as The Big Bang, Tomorrow's Engineers and the Communications Hub, accurate and engaging information about engineering is communicated.

Tomorrow's Engineers –

www.tomorrowsengineers.org.uk/resources

Contains extensive links to careers resources including the 'What Is Engineering?' leaflets with posters and linked lesson activities.

The Design and Technology Association –

www.data.org.uk

The Design and Technology Association offer curriculum support through DfE funded projects such as CAD/CAM in schools, Electronics in schools (with support from the Institution of Engineering and Technology) and Food in schools.

Engineering Council –

<http://www.engc.org.uk/engineering-gateways/contact-us>

Use the Engineering Council website to access an updated list of engineering institutions that have websites which include careers information and careers resources.

Maths:

Maths Careers –

www.mathscareers.org.uk

The Maths careers site presents opportunities using maths in six main areas – sport, science and engineering, entertainment, business and money, health and society, the environment and a general 'I love Maths' section. Has sections for teachers, advisers as well as young people.

Sector Skills Councils (SSCs) and Industry Focus websites and resources

Cogent –

www.cogent-ssc.com

Cogent host an interactive 'Careers Pathways' site for the Chemical, Pharmaceuticals, Nuclear, Petroleum, and Plastics & Rubber (Polymers) industries. Includes case studies and salary information.

Improve –

www.improve-skills.co.uk/careers

The careers site for the food and drink industry. Includes entry qualifications, employment trends, case studies and access to a virtual careers adviser.

SEMTA –

www.semta.org.uk

The SSC for science, engineering and manufacturing technologies. Eight different industry focused sections with information on funding, training information and skills: Aerospace, Automotive, Electrical, Electronics, Marine, Mechanical, Metals and Science & Bioscience.

Technology and Engineering:

e-skills –

www.e-skills.com

e-skills aims to transform attitudes, inspire interest and prepare young people with the technology-related knowledge and skills employers need. The site provides information on career opportunities and the skills required for a career in IT and Telecommunications.

Summitskills –

www.summitskills.org.uk

Summitskills is the SSC for the Building Services Engineering sector. Includes the dedicated 'Good Day' careers website.

Classroom websites and resources

General:

British Gas –

www.generationgreen.co.uk

Fun online student activities including building an energy efficient house or fixing the online interactive house that is wasting a lot of energy.

Careersbox –

www.careersbox.co.uk

Over 100 short career, learning and training film clips, including STEM related employment situations. Case study film showing real people doing real jobs. Careersbox are digital media innovators in the CEIAG world.

NPower Education Programme –

<http://education/npower.com>

The 'Brighter Futures' website includes a STEM section with challenging activities.

WISE (Women into Science Engineering and Construction) –

www.wisecampaign.org.uk

WISE works creatively with industry and education, offering colourful and innovative tools and approaches to support them in encouraging girls into non-traditional STEM careers. Included in this site is a link to STEMgirls, supported by WISE and the British Science Association, where professionals working in STEM careers will answer questions.

Working in ... booklets –

www.babcock-lifeskills.co.uk

Attractive high quality careers information booklets that include Science; Manufacturing; Hospitals; Construction & the Built Environment; Transport & Logistics; Food & Drink; Maths; Computers & IT. Each booklet contains a sector overview and real life case studies.

Science:

The Association of the British Pharmaceutical Industry –

www.abpischools.org.uk

The ABPI Resources for Schools website provides curriculum related resources for use by teachers and their students. ABPI also host a 'Careers' website for information on careers in the pharmaceutical industry.

BP –

www.bp.com/bpes/cft

Carbon footprint toolkit containing interactive CD-Rom, lesson plans, 3D animations, starter activities, how to calculate your school's carbon footprint.

The Geological Society –

www.geolsoc.org.uk

Contains material relevant to teachers and students, including 'The Rock Cycle', a school-specific teaching resource for KS3.

Making the Modern World –

www.makingthemodernworld.org.uk

Powerful stories about science and invention from the eighteenth century to today, using the web and dynamic multimedia techniques.

NHS Careers –

www.nhs-careers.nhs.uk

The information service for careers in the NHS in England. Includes an 'Explore by Career' section.

National Space Centre –

www.spacecentre.co.uk

Use this site to access information about the Space Academy school visits, learning resources, and Curriculum Focused Programmes for key stage 3 to key stage 5 students.

Planet SciCast –

<http://scicast.org.uk>

The SciCast team will take mini movies of science demonstrations from schools and enter them into their competition. Short films, real science!

Planet Science –

www.planet-science.com

Offering young scientists of school age the inspiration and excitement that will support their study of science at school and beyond. Planet Science is there to support classrooms, curriculum and teachers by exciting interest and unleashing a passion in science.

Science Learning Centres –

www.sciencelearningcentres.org.uk

Provide quality continuous professional development for everyone involved in science education, with a network of 9 regional centres and 1 National Centre providing innovative and inspiring courses.

Science and Maths –

www.futuremorph.org/scienceandmaths/

Contains inspirational case studies including sports technologist, cosmetics specialist, and digital designer.

Science Upd8 –

www.upd8.org.uk

Provides short downloadable, easy to use science classroom activities based on up to the minute science in the news and popular culture with a growing STEM careers section.

The Vega Science Trust, Science Career Videos –

www.vega.org.uk/video/series/10

These videos show a day in the life of a young scientist, giving insights into the lives of young people at the cutting edge of British science and engineering – these are the people who are making things happen.

Technology and Engineering:

BLOODHOUND Education Programme –

www.bloodhoundssc.com

The BLOODHOUND SSC (Super Sonic Car) engineering adventure enables schools to access teaching and learning materials to research, design, build and test the car.

BT –

www.connected-earth.com/Learningresources

From telephone to telegraph to wireless to computer, including good animations such as showing which bit does what inside a mobile phone. Teaching resources to show how communication shapes the world.

Tomorrow's Engineers –

www.tomorrowsengineers.org.uk

A site that provides information about engineering careers, access to teaching resources and links to over 50 other relevant organisations.

e-skills UK in schools –

www.e-skills.com

e-skills have created BigAmbition, a site designed to inspire 14–19 year olds by demonstrating the wide range of IT career options, and how to get into them. The site features interactive tools and video profiles of IT professionals – go to: www.bigambition.co.uk

The Design and Technology Association

www.data.org.uk

Hosts curriculum resources that integrate careers work into Design and Technology.

Maths:

The Association of Teachers of Mathematics (ATM) –

www.atm.org.uk

ATM aim to provide teachers with the resources to help them develop their maths teaching in creative and broad-thinking ways. FREE resources are provided on their website for teachers to download or use online in the classroom.

Maths Careers –

www.mathscareers.org.uk/teachers.cfm

This link will provide access to exciting classroom resources that emphasise the transferable skills that maths provides for students, whatever jobs they eventually enter. Also includes enrichment activities such as after school STEM clubs.

Further Maths Network –

www.fmnetwork.org.uk

Information and resources to encourage access to Further Maths, including advice on progression to university courses in STEM subjects.