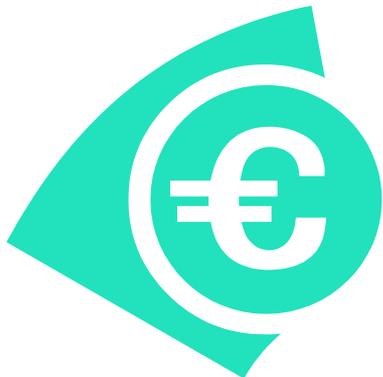


Year 8 Careers Workshop

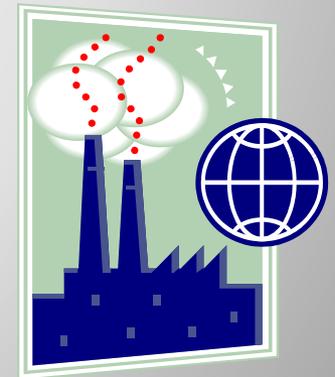
Labour Market Information

JOBS & MONEY



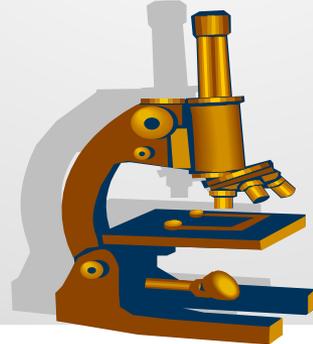
What affects your decision about which job/career you will follow?

- *skills and aptitude*
- *qualifications*
- *Labour Market Information (what jobs are good for the future in terms of supply and demand and earning capacity)*



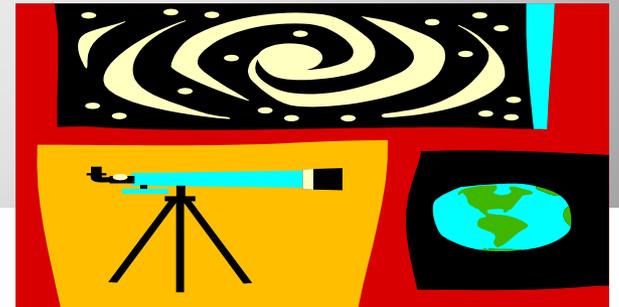
Labour Market Information tells us that STEM Careers (Science, Technology, Engineering, Maths) will be in high demand

- *The CBI Education and Skills Survey of 2010: 45% of employers are currently having difficulty recruiting STEM staff.*
- *Almost one third of businesses are anticipating difficulty recruiting STEM graduates.*
- *The UK Commission for Employment and Skills – Working Futures 2007–2017 predicts an increased demands for skilled technicians and association professionals of 654,000 over the period to 2017.*



STEM qualifications lead to a *wide range of opportunities* at *different levels* and are valuable for non-STEM jobs. **They keep your options open.**

- *STEM qualifications are valued by employers – 40% of businesses prefer STEM degrees when recruiting graduates.*
- *STEM courses and careers are open to all – you don't have to be a whiz at Maths or Science. You can get apprenticeships and diplomas and work in support roles or in different areas.*
- *STEM study (i.e. the subjects) helps develop your business and employability skills – analytical capabilities, problem solving, creativity.*
- *Many STEM jobs need creativity and design skills in combination with mathematical and scientific abilities*
- *Good salaries are available and locations for work vary, often not a desk or a laboratory*



- **Maths – important for all members of a modern society ... for its use in the workplace, business and finance ... tools for understanding economics ...essential for participation in the knowledge economy**
 - applications and implications of maths
 - work on problems and in contexts beyond the school (e.g. financial).
- **Science – discover how scientific ideas contribute to technological change – affecting industry, business ...**
 - applications and implications of science
 - experience science in the workplace, where possible.
- **Design and technology – skills and understanding of economic, industrial and environmental issues...evaluate present and past D&T, and its uses and effects**
- **ICT – understanding to apply skills purposefully in learning, everyday life and employment...economic implications of its use.**

Financial Sector

- **Banking** is for individuals and businesses to manage their money, access loans, buy property, exchange currencies and many other activities. It is organised into three core categories: Retail; Corporate; and Wholesale banking.
- **Investments** is about managing and growing the wealth of individuals and organisations.
- **Insurance** – covers a huge variety of risks, from cars and houses to ships, planes and satellites. For example, those working in the world's trouble spots need kidnap and ransom cover, oil pipelines need terrorism cover and music promoters insure against the non appearance of the leading act.
- **Credit, leasing and finance** refers to organisations that offer individuals and companies credit to purchase or lease products.
- **Financial Advice** is about working with people to plan their financial goals, based on their current situation and looking at the best ways they can achieve their financial objectives, such as helping someone to choose a mortgage, invest their savings or plan for their retirement.

FINANCIAL SECTOR

- Contrary to popular belief, the majority of jobs here are not Bankers and Stock Brokers who earn mega salaries
- They are Financial advisers, brokers and IT professionals.

New roles

Currently, there is a trend for an increased need for:

- Compliance, risk management and corporate governance professionals, which is in response to an increased need for a review of regulation policies and practices
- customer services and relationship management roles and skills as there is an increased focus on customer service, both to retail and corporate customers
- Financial crime and fraud
- Higher level IT skills, which is the result of the increase in the use of technology

Salary and working hours

- Financial services workers generally earn more than their counterparts in other sectors. The **average annual salary of a full-time employee in financial services is 87% higher** than the average earnings across industries.

FINANCIAL SECTOR

Entry requirements

- **Apprenticeships and Advanced Apprenticeships** are available for Providing Financial Services and Advising on Financial Products. Apprenticeships are available for people already in employment although some companies may also advertise for an 'apprentice'.
- **Graduate Training Schemes** are available for people who have achieved a good degree – most employers will require a 2.1. These schemes often last two years and the candidate will work in different departments within the firm and will undertake professional qualifications as part of their training.
- Increasingly, a university **degree is becoming the minimum requirement for entry-level roles** in much of the sector. In wholesale banking, for instance, graduate recruitment is a highly structured and highly competitive process.
- **Employers tend to recruit from a small number of elite universities. Although no disciplines are considered irrelevant, firms tend to prefer applicants with proven quantitative skills. The emphasis on high-level numeracy and previous work experience, in particular, are driving increasing level of post-graduate recruitment.**

IT Sector

- Research shows IT & Telecoms plays a large role in working Britain with a workforce of 1.5 million. 862,700 people work in IT & Telecoms products and services. 673,900 IT & Telecoms professionals work for organisations outside the IT & Telecoms industries. IT & Telecoms is a major employer.
- One in 20 UK workers is employed in the IT & Telecoms workforce.
- Recruiters report skills shortages in IT & Telecoms-related skills shortages were reported by 3% of recruiters
- Requires a range of skills depending on the position, including creative, analytical, practical and hands on, vocational.
- Jobs in this sector are constantly emerging given the rapid advance of technology
- Cyber security is a key issue

IT JOBS

- **Analyst:** Assess the performance of technology and diagnose technical problems as they arise. These jobs can also involve financial analysis.
- **Architect:** This individual draws up plans for technology systems and implementations, including software, hardware and websites.
- **Chief Information Officer:** The CIO oversees all the other types of personnel listed in this article and plans a company's entire technology budget.
- **Consultant:** Professionals with "consultant" in their job titles tend to work for multiple clients and are their own bosses.
- **Designer:** This role can involve planning new technology, enhancing application usability or designing websites,
- **Developer:** Sometimes the term "developer" is interchangeable with "programmer," referring to people who create new software, or customize applications to fit a company's needs.
- **Engineer:** Typically engineers develop anew or upgrade existing software, hardware, networking, or Internet applications.
- **Manager:** Like the title suggests, managers oversee other technology employees and encourage them to meet standards of excellence.
- **Programmer:** This typically entails coding new software or web-based applications, but there are also programmers who work at machine level to build hardware.
- **Statistician:** Measuring the performance of a company's technology is a job for a statistician, who may work with analysts to apply these numbers.
- **Support:** Also referred to as help-desk staff, these employees respond to queries to help software, hardware and other technology to run smoothly.
- **Technician:** Usually, technicians install, maintain and repair [computer hardware](#) or other types of technology equipment.

Science and Engineering

- The science industries comprises pharmaceuticals, manufacture of medical and surgical equipment plus science and engineering research and development, so covers a range of disciplines. This research and development work takes place in a variety of establishments, such as university departments, research based employers or other scientific based employers.

skill shortages and gaps

- Clinical/pharmacology/translational medicine
- Bioscience
- Analytical and physical chemistry
- Process and chemical engineering
- In vivo sciences (clinical trials and animal testing)
- Bioinformatics
- bioscience and molecular biology
- analytical and physical chemistry
- biochemistry
- biotechnology/biopharmaceuticals
- geomics/proteomics/metabolomics
- synthetic organic chemistry/medicinal chemistry
- mathematics or statistics
- Nanotechnology
- Robotics

The Future

- The businesses are competitive and fast moving and there is pressure to protect new ideas and inventions as well as ensuring that products (such as medicines and medical devices) are safely tested and developed before being introduced for public use.
- The equipment and software that is being developed for the industry will require people with strong mathematical understanding.
- The area of bioinformatics has already been identified as an area where it is difficult to recruit people with the required experience and skills.
- Future science professionals will need to have even greater strengths in both IT and mathematical analysis, alongside their knowledge of biology and chemistry.
- Professional scientists, engineers and those with an understanding of the needs of the medical industry are likely to be needed in future to further improve and develop both the diagnostic and scanning equipment, as well as improve the materials and devices used in other medical applications.
- With scientific developments proceeding rapidly, employers will be looking for some highly specialist skills, which require specialist training and courses. These areas may include bio-processing and bio-manufacturing as the industry moves to the biological delivery of drugs and medicines.
- There is a need for multidisciplinary approaches covering genetics, molecular biology, biochemistry, IT, mathematics and statistics.