

So, you're thinking of a career in... MATHS

What is the Maths sectors all about?

Mathematical skills are a key requirement in every job although some jobs demand a broader and deeper knowledge of the subject more than others. Mathematics has a broader relevance and application in a number of subjects not least STEM related subjects. Mathematics enables medical staff, researchers, engineers, designers, scientists and many other job holders to obtain, analyse and interpret complex data sets and statistics - which in turn can help decisions about policy, products and services.

Will there be any opportunities and where are they?

The world of work and the modern labour market is increasingly influenced by technology and digitalisation: Artificial Intelligence; Machine learning and data analytics; Robotics and automation; and Virtual Reality and Augmented Reality - all are underpinned by mathematics. Across the Liverpool City Region, Maths skills of local residents are behind the national average and many employers struggle to fill job vacancies because applicants lack the standard of maths skills required to perform the job role effectively. A number of solutions to address these issues will be implemented not least in the area of teaching - where innovative approaches to the recruitment and retention of maths teaching staff will promote teaching as a quality and satisfying career option.

For individuals who develop their proficiency in Mathematics beyond GCSE through to A Level standard and above, many career opportunities open up beyond the obvious Maths dominated job roles. These include: CAD technician; Civil Service; Local Government; Private Education Tuition; Meteorologist; Software Tester; Game Designer/ developer; Insurance underwriter.

How to get into the sector?

Important skills to have:	Useful subjects to study:
Numeracy and literacy	Maths – all levels
Accuracy and attention to detail	English
Communication	Biology
Decision making	Chemistry
Problem solving	Teaching qualifications
Teamwork	PGCE or PGDE
Mentoring	Economics
Time management	Accountancy

What types of jobs are available?

Financial and accounting technicians: Financial and accounting technicians work alongside accountants and other financial professionals in managing the financial affairs of organisations.

Actuaries, economists and statisticians: Job holders in this group apply theoretical principles and practical techniques to assess risk and formulate probabilistic outcomes to inform economic and business policy, and to analyse and interpret data used to assist the formulation of financial, business and economic policies to maximise growth or improve business performance.

What types of jobs are available... continued

Bank and post office clerks: Bank and post office clerks deal with the payment and receipt of money, cheques and other routine financial transactions and open and close accounts. They advise upon financial products and services offered by banks, building societies and post offices.

IT business analysts, architects and systems designers: Workers 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.

Secondary education teaching professionals: Secondary (and middle school deemed secondary) education teaching professionals plan, organise and provide instruction in one or more subjects, including physical education and diversionary activities, within a prescribed curriculum in a secondary or secondary/ middle school.

Chartered and certified accountants: Job holders in this group provide accounting and auditing services, advise clients on financial matters, collect and analyse financial information and perform other accounting duties required by management for the planning and control of an establishment's income and expenditure.

Quantity surveyors: Quantity surveyors advise on financial and contractual matters relating to, and prepare bills of quantities for, construction projects and provide other support functions concerning the financing and materials required for building projects.

Programmers and software development professionals: Programmers and software development professionals design, develop, test, implement and maintain software systems in order to meet the specifications and business objectives of the information system; they also design and develop specialist software e.g. for computer games.

Social and humanities scientists: Social and humanities scientists study and analyse human behaviour and the origin, structure and characteristics of language; undertake research in sociology, economics, politics, archaeology, history, philosophy, literature, the arts; organise the collection of qualitative and quantitative information, and perform subsequent analyses.

Find out more...



National Centre for Teaching Excellence In Maths
www.ncetm.org.uk



Mathematical Education on Merseyside (MEM)
www.mathsmerseyside.org.uk



Careers in Mathematics
www.mathscareers.org.uk