



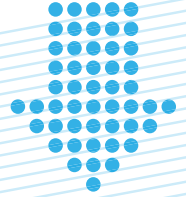
**LIVERPOOL  
CITY REGION**  
COMBINED AUTHORITY

**METROMAYOR**  
LIVERPOOL CITY REGION

So you're thinking of a career...



**Maths**



**The Apprenticeship Hub**  
Liverpool City Region



**European Union**  
European  
Social Fund



## What is the Maths sector 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.



**For individuals with a head for figures, pursuing a job related to or specialising in mathematics is a career option that can add up to a rewarding and lucrative career.**



## Mathematics

has a broader relevance and application



## Will there be 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.

### QUICK FACTS

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are a key requirement in  
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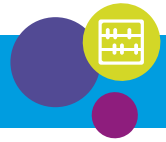
Mathematics  
underpins the  
technical and  
digital revolution

Maths teachers are in  
**high demand**  
in the Liverpool City  
Region





# 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.

Annual Pay  
**£47,320**

Hours/Week  
**38h**



## 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.

Annual Pay  
**£61,880**

Hours/Week  
**38h**



## 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.

Annual Pay  
**£26,000**

Hours/Week  
**37h**



## 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.

Annual Pay  
**£52,000**

Hours/Week  
**38h**



## Further education teaching professionals

Further education teaching professionals supervise and teach trade, technical, commercial, adult education, secondary and post-secondary courses to students beyond minimum school leaving age.

Annual Pay  
**£39,520**

Hours/Week  
**36h**

To search for further roles and salaries visit [www.lmiforall.org.uk/widget](http://www.lmiforall.org.uk/widget)



### 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.

Annual Pay  
**£41,600**

Hours/Week  
**34h**



### 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.

Annual Pay  
**£44,720**

Hours/Week  
**38h**



### 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.

Annual Pay  
**£46,280**

Hours/Week  
**41h**



### 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.

Annual Pay  
**£46,280**

Hours/Week  
**39h**



### 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.

Annual Pay  
**£33,800**

Hours/Week  
**40h**

All hours and salaries are averages taken from [www.lmiforall.org.uk/widget](http://www.lmiforall.org.uk/widget)

What types of jobs are available?





## How to get into the sector



### Useful core subjects include:

**Mathematics - GCSE**

**Mathematics - A Level**

**Further Mathematics - AS and A Level**

**Physics, Biology and Chemistry (1 at Grade C/4 and above for teachers in Secondary schools)**

**Teaching qualifications**

**PGCE or PGDE**

**Economics**

**Geography**

**Accountancy**

### Important skills to have:

**Numeracy**

**Literacy**

**Accuracy and attention to detail**

**Communication**

**Analytical, logical and critical thinking skills**

**Decision-making**

**Problem solving**

**Teamwork**

**Mentoring**

**Resilience**

**ICT/Digital**

**Time management/  
self-management**



To search for further roles and salaries visit [www.imiforall.org.uk/widget](http://www.imiforall.org.uk/widget)

With more than **100,000 students**, of which **30,000 graduate** each year, Liverpool City Region offers you direct access to some of the world's best resources:

<b>Apprenticeships and Traineeships</b>	<p>Apprenticeships combine a job with practical training and study.</p> <p>Apprentices:</p> <ul style="list-style-type: none"><li>• Work alongside experienced staff</li><li>• Gain job-specific skills</li><li>• Earn a wage and are entitled to holiday pay</li><li>• Get time off the job for study related to your role (usually one-day a week)</li></ul> <p>If you are a young person aged 16 to 24 and would like to secure an apprenticeship but don't yet have the appropriate skills or experience then choosing a Traineeship as an option may help you acquire the entry requirements needed.</p> <p>Further information available at: <a href="http://www.apprenticeshiphub.org.uk/become-an-apprentice">www.apprenticeshiphub.org.uk/become-an-apprentice</a></p>
<b>Training Providers</b>	<ul style="list-style-type: none"><li>• School Sixth Forms</li><li>• FE Colleges including VI Form Colleges</li><li>• Independent Training Providers</li><li>• Adult and Community Learning Providers</li><li>• University Technical Colleges (UTCs)</li><li>• Studio Schools</li></ul>
<b>Universities and Higher Education Institutions</b>	<ul style="list-style-type: none"><li>• University of Liverpool</li><li>• Liverpool John Moores University</li><li>• Liverpool Hope University</li><li>• Edge Hill University</li></ul>







Find out more...



Jobs and Salary Information  
[www.lmiforall.org.uk](http://www.lmiforall.org.uk)



LCR Apprenticeship Hub  
[www.apprenticeshiphub.org.uk](http://www.apprenticeshiphub.org.uk)



National Centre for Teaching Excellence In Maths  
[www.ncetm.org.uk](http://www.ncetm.org.uk)



Mathematical Education on Merseyside (MEM)  
[www.mathsmerseyside.org.uk](http://www.mathsmerseyside.org.uk)



Careers in Mathematics  
[www.mathscareers.org.uk](http://www.mathscareers.org.uk)



Teaching Careers  
[www.getintoteaching.education.gov.uk](http://www.getintoteaching.education.gov.uk)



STEM Learning  
[www.stem.org.uk](http://www.stem.org.uk)

