

## Competence Levels Chartered Mathematician

### Definitions

NA Not applicable to my career

0 I have no knowledge yet

Appreciation 1 I appreciate its importance

Knowledge 2 I have a basic knowledge/ability

Experience 3 I have supervised experience

Practitioner 4 I am competent

Applying Mathematical Skills		Target	Notes
M1	General skills learned in degree	4	Demonstrate the application of mathematical skills gained during a degree course. A mathematician seeking Chartered Mathematician status will need to demonstrate employment experience requiring the application of mathematical skills gained during a degree course. For some this will involve advancing mathematics through fundamental research but for most, this involvement will be in applying mathematical skills to the development and provision of products, processes and services.
M2	Skills specific to employment	3	Demonstrate an understanding of the applications of mathematics in your employer's area of business. Most mathematical employment will be based on the application of a subset of knowledge gained in a degree course. This knowledge may require enhancement and an understanding of its applications in the employer's areas of business. Effective use of mathematics may require an understanding and some training in these business areas.
M3	Practical problem solving (creative ideas)	4	Demonstrate your skills of problem definition, analysis and solution. Use theoretical and practical methods in the analysis and solution of problems.
Generic			
G1	Oral communication (technical)	4	Demonstrate sound judgements over complex issues, and communicate conclusions clearly to specialists and non-specialists orally and through presentations. Put yourself in their position as non-specialists and provide explanations in language they can understand.
G2	Written communication and report writing	4	Communicate effectively in writing through letters, reports and proposals.

<b>G3</b>	<b>Project planning and management</b>	<b>2</b>	<b>Use project management methodology to plan and organise projects effectively. Ideally, this should include quality control and time management. Develop the necessary skills to manage projects to meet agreed standards, objectives and targets.</b>
<b>G4</b>	<b>Team working</b>	<b>3</b>	<b>Work effectively in a team. Demonstrate constructive working relationships with colleagues and others.</b>
<b>G5</b>	<b>Team leadership</b>	<b>2</b>	<b>Work effectively in a team, including the ability to provide leadership as appropriate.</b>
<b>G6</b>	<b>Staff appraisal</b>	<b>2</b>	<b>Have an appreciation of personnel/ staff assessment and appraisal procedures.</b>
<b>G7</b>	<b>Negotiating with 'customers' or regulators</b>	<b>2</b>	<b>Demonstrate constructive working relationships with others affected by your work (e.g. fund holders, suppliers, regulators, clients), including your influencing and negotiating skills.</b>
<b>G8</b>	<b>Handling budgets and estimating</b>	<b>2</b>	<b>Demonstrate reliable estimating skills, including budgets and programmes.</b>
<b>G9</b>	<b>Contractual obligations</b>	<b>3</b>	<b>Including intellectual property rights.</b>
<b>G10</b>	<b>Information management and IT skills</b>	<b>4</b>	<b>Using your knowledge of information management, develop and extend your general and specific IT skills.</b>
<b>G11</b>	<b>Health &amp; safety requirements/risk management</b>	<b>2</b>	<b>Using your knowledge of current health &amp; safety legislation, demonstrate a commitment to health, safety and risk management in the workplace.</b>
<b>G12</b>	<b>Ethics (e.g. IMA Code of Conduct)</b>	<b>4</b>	<b>Comply with the IMA Code of Conduct and behave with integrity and in an ethical manner.</b>
<b>G13</b>	<b>Continuing Professional Development</b>	<b>4</b>	<b>Demonstrate a commitment to Continuing Professional Development. This is included on the IPD form because a potential CMath holder must demonstrate a commitment to Continuing Professional Development.</b>

## Sector Specific

	HE Research	Target	Notes
R1	Publishing papers in academic journals	4	Conduct research on your own initiative and in collaboration with others.
R2	Presenting at conferences and symposia	4	

	HE Lecturers	Target	Notes
L1	Presentation and tutorial skills	4	Carry out lecturing and tutorial activities.
L2	Course development	3	Contribute to the development of undergraduate and postgraduate courses.
L3	Academic research	3	Conduct research and research activities similar to those carried out by research fellows.
L4	Academic administration	3	Contribute to admissions, examinations and other departmental activities.
L5	Inter-disciplinary working & communication	3	Work with colleagues in other disciplines.
L6	Demonstrate an empathy with students	4	
	School & FE teaching & lecturing		Hold a post of special responsibility for mathematics and/or teaching to post-GCSE standard.
S1	Presentation and tutorial skills	4	Teach classes
S2	Curricular development	3	Contribute to curricula development and extra-curricular mathematical activities.
S3	Develop extra-curricular maths activities	3	
S4	Apply the national curriculum	3	Demonstrate a knowledge and understanding of national curriculum issues and other government initiatives.
S5	Relate effectively with students	4	Demonstrate an empathy with students and young people.
S6	Advise students on career opportunities	2	Demonstrate an awareness of opportunities for mathematics students in higher education and employment.

**Business, Commerce & Industry etc.**

<b>B1</b>	<b>Professional mathematical standing</b>	<b>4</b>	<b>Hold a position of professional standing within your organisation.</b>
<b>B2</b>	<b>Business/commercial awareness/innovation</b>	<b>4</b>	<b>Demonstrate the implementation of a project related to your employment involving the application of mathematics. Demonstrate relevant commercial, communication and management expertise.</b>

**Sector specific**

Specify any competences particular to your career that you have not covered elsewhere.