

# Comparison of Regulations for Award of Chartered Geologist and Chartered Scientist by Geological Society of London

**February 2011**

The Geological Society offers both CGeol and CSci professional qualifications and the Regulations and Guidances covering applications for each of these are published elsewhere on this web site. Many Fellows are eligible to apply for both qualifications and may apply for them at the same time or separately. A separate application is required for each, however much of the information provided in the Professional Report and supporting documentation is applicable to, and may be used for, both. In order to clarify the different requirements of each the table below has been prepared to map across the various competences to show where material unique to one or the other is required.

Fellows applying for both at the same time will have a single interview with Scrutineers qualified with both CGeol and CSci. Those applying retrospectively up to one year after achieving one or other qualification will be able to be assessed without further interview. They should submit their application based on the documentation for the first qualification and enclosing material covering the differences in the criteria between that and the new qualification, This will include information on CPD undertaken in the intervening period along with any further training, skills and experience gained.

		Current Regulations	
		CSci	CGeol
<b>General Requirements</b>	<ul style="list-style-type: none"> <li>i be a Fellow of the Society (see Section 4.2 below);</li> <li>ii hold a recognised degree or equivalent qualification in science at M-level; or have post-graduation experience to demonstrate M-level attainment; (see Section 4.3 below);</li> <li>iii have relevant, postgraduation experience in the profession and practice of science and demonstrate the competencies defined in Section 4.4 of this Regulation (see Section 4.4 below);</li> <li>iv be supported by two Fellows who have been validated as Chartered Scientists (see Section 5.2 below);</li> <li>v have submitted a complete application, comprising an application form (see Section 5.3 below), professional report (see Section 5.4 below), supporting documents (see Section 5.5 below) and sponsors' statements(see Section 5.8 below);</li> </ul>	<ul style="list-style-type: none"> <li>i be a Fellow of the Society (see Section 4.2 below);</li> <li>ii hold a recognised degree or equivalent qualification in geology or a cognate subject (see Section 4.3 below);</li> <li>iii have relevant, postgraduation experience in the profession and practice of geology and demonstrate the competencies defined in Section 4.4 of this Regulation (see Section 4.4 below);</li> <li>iv be supported by two Fellows acting as Sponsors who have been validated as Chartered Geologists (see Section 5.8 below);</li> <li>v have submitted a complete application as defined Section 5.1 below;</li> <li>vi have satisfied the Society that they meet the above requirements for validation through a professional interview (see Section 4.5 below); and</li> </ul>	

		<b>Current Regulations</b>	
		<b>CSci</b>	<b>CGeol</b>
		vi have satisfied the Society that they meet the above requirements for validation. through a professional interview (see Section 4.5 below); and vii have paid the required application fee.	vii have paid the required application fee.
	<b>Recognised Degree</b>	Applicants for validation as a Chartered Scientist shall hold a degree at Master's (M) level or Doctorate (D) level awarded by a university or institution of higher education. Council will accept applications for Chartered Scientist from Fellows who hold an Honours (H) level degree and can demonstrate that they have attained M-level through training and experience.	Applicants for validation as a Chartered Geologist shall hold a degree at Honours (H) level, Master's (M) level or Doctorate (D) level awarded by a university or institution of higher education.

		Current Regulations	
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<b>Required Competencies</b>			
<b>Note:</b> The current competencies as defined in the existing Regulations differ somewhat, in that the CSci document focuses on “what” competencies need to be demonstrated, whereas the CGeol one focuses on “how” those competencies are likely to be demonstrated.			
<b>A</b>	<b>Deal with complex scientific issues, both systematically and creatively, make sound judgements in the absence of complete data and communicate their conclusions clearly to specialist and non specialist audiences.</b>	<b>Understanding of the complexities of geology and of geological processes in space and time in relation to the applicant’s speciality.</b>	
<b>A1</b>	<b>Use a combination of general and experimental knowledge, understanding and skills to be able to optimize and engage in the application of existing and emerging science and technology.</b>	<b>Demonstrate competence in the recognition and determination of basic geological processes in three and four dimensions, diagnosis of geological conditions, fundamentals of the Earth’s history, understanding of geological problems and their interpretation, creation and interpretation of geological maps and cross sections, compilation and testing of ground models.</b>	
	<p><b>Typically this will include the ability and commitment to:</b></p> <ul style="list-style-type: none"> <li>Identify potential projects and opportunities through a knowledge of the field of practice and current market needs;</li> <li>Conduct appropriate research to enable the design and development of scientific projects/processes;</li> <li>Know and manage personal strengths and weaknesses;</li> <li>Identify the limits of own personal knowledge and skills; and</li> <li>Be confident and flexible in dealing with new and changing situations.</li> </ul>	<p><b>Supporting evidence could include:</b></p> <ul style="list-style-type: none"> <li>examples of the applicant’s work illustrating the maintenance of a sound theoretical approach to the application of geology in practice;</li> <li>the use of a sound evidence-based approach to problem solving;</li> <li>the identification and selection of procedures and methods to undertake geological tasks;</li> <li>conducting or engaging in appropriate study and research to improve technical practices and solutions; and</li> <li>evaluating the effectiveness and relevance of approaches and solutions in use in the applicant’s area of specialism.</li> </ul>	

<b>Current Regulations</b>		
	<b>CSci</b>	<b>CGeol</b>
<b>A2</b>	<b>Use theoretical and practical methods in the analysis and solution of problems.</b>	<b>Critical evaluation of geoscience information to generate predictive models.</b>
	<p>Typically this will include the ability and commitment to:</p> <ul style="list-style-type: none"> <li>• Carry out experimental work and/or advise on and manage the work of others; and</li> <li>• Collect, analyse and evaluate relevant data and offer solutions.</li> </ul>	<p>Demonstrate competence in the acquisition, observation and description of geological data, appreciation of the limitations of and conditions under which the data were collected or how they arrived in their present state, and an assessment of certainty/ uncertainty. The geological data may be acquired in or from the field in one or more of the following ways: at outcrop, by intrusive investigations (boreholes, pits, etc), by geophysical/geochemical surveys or other remote sensing. It may also consist of experimental data (including laboratory-based investigations or computer modelling).</p> <p>Supporting evidence could include:</p> <ul style="list-style-type: none"> <li>• examples of work carried out and interpretations made, including the reasoning used;</li> <li>• contribution to the development of solutions;</li> <li>• the level of decisions undertaken in the workplace;</li> <li>• output reports and publications; and</li> <li>• contribution to evaluation of the outputs.</li> </ul>
<b>A3</b>	<b>Communicate effectively</b>	<b>Effective communication in writing and orally</b>
	<p>Typically this will include the ability and commitment to:</p> <ul style="list-style-type: none"> <li>• Present solutions to technical and non scientific audiences;</li> <li>• Communicate with colleagues at all levels;</li> <li>• Exchange information and give advice to scientific and non-scientific audiences;</li> <li>• Prepare and deliver appropriate presentations; and</li> <li>• Prepare letters, reports and proposals.</li> </ul>	<p>Applicants meeting this criterion will be able to demonstrate competence through the material presented in the professional report and documents accompanying the application together with the impact that the applicant makes at interview.</p> <p>Supporting evidence could include:</p> <ul style="list-style-type: none"> <li>• materials which demonstrate communication skills both within the workplace and also socially and outside the workplace.</li> </ul> <p>Assessment of this criterion will be based on the whole of the application for validation as a Chartered Geologist, including supporting documents prepared by the applicant such as reports, correspondence and presentations (including any feedback).</p>

		Current Regulations	
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<b>B</b>	<b>Exercise self-direction and originality in solving problems, and exercise substantial personal autonomy in planning and implementing tasks at a professional level.</b>		<b>Competence in his/her area of expertise</b>
<b>B1</b>	<b>Plan and organize projects effectively.</b>		<b>Demonstrate competence in their claimed areas of professional practice at the level appropriate to their level of seniority.</b>
	<p>Typically this will include the ability and commitment to:</p> <ul style="list-style-type: none"> <li>Identify potential projects and opportunities through a knowledge of the field of practice and current market needs;</li> <li>Identify factors affecting project implementation;</li> <li>Ensure necessary resources are in place for effective project implementation; and</li> <li>Gather and evaluate feedback, acting where appropriate.</li> </ul>		<p>Supporting evidence of satisfactory attainment could include:</p> <ul style="list-style-type: none"> <li>relevant sections from job description and written examples of contributions to key tasks;</li> <li>examples of the applicant's role in project planning, organisation of tasks, use of people and resources, managing changing technical and project needs;</li> <li>written examples of personal contributions to key tasks;</li> <li>examples of preparing and implementing quality-related processes and</li> <li>Examples of projects for which they had responsibility for design, Implementation, interpretation of data collected and presentation of conclusions.</li> </ul>
<b>B2</b>	<b>Work effectively in a team.</b>		Work effectively in a team (Not explicitly stated in CGeol Regulations but is implicit in them)
	<p>Typically this will include the ability and commitment to:</p> <ul style="list-style-type: none"> <li>Organise and lead work teams, coordinating project activities;</li> <li>Identify, agree and work towards collective goals;</li> <li>Create, maintain and enhance productive working relationships; and</li> <li>Be aware of the needs and concerns of others.</li> </ul>		Assessed under criterion vii

		<b>Current Regulations</b>	
		<b>CSci</b>	<b>CGeol</b>
<b>B3</b>	<b>Use effective influencing and negotiating skills.</b>		Use effective influencing and negotiating skills (no direct equivalent in the CGeol Regulations).
	Typically this will include the ability and commitment to: <ul style="list-style-type: none"> <li>• Conduct appropriate research to influence the design and development of scientific projects and processes; and</li> <li>• Have sound knowledge of project costs and the ability to negotiate appropriate project funding.</li> </ul>		Generally these aspects are considered under criterion vii (Competence in area of expertise).
<b>C</b>	<b>Continue to advance their knowledge, understanding and competence to a high level and demonstrate a commitment to Continuing Professional Development</b>		<b>Commitment to Continuing Professional Development throughout the applicant's professional career</b>
	Typically this will include the ability and commitment to: <ul style="list-style-type: none"> <li>• Extend own knowledge, understanding and scientific capability;</li> <li>• Broaden own knowledge base;</li> <li>• Undertake reviews of own development needs; and</li> <li>• Maintain evidence of professional competence development.</li> </ul>		Applicants meeting this criterion will be able to demonstrate that they are committed to a continuing and forward looking programme of development of technical and professional skills for the work they undertake in order to enhance the skills available in pursuance of their career. Applicants are required to submit one-year's CPD records as part of their application (see Section 5.7 of this Regulation). Supporting evidence of satisfactory attainment could include: <ul style="list-style-type: none"> <li>• records of CPD through a formal reporting scheme supported by evidence of analysis of scientific and professional development needs; and</li> <li>• actions taken to satisfy these needs, including critical review of how successful these actions were.</li> </ul>

		<b>Current Regulations</b>	
		<b>CSci</b>	<b>CGeol</b>
<b>D</b>	<b>Demonstrate an understanding and commitment to Health and Safety and environmental issues related to employment</b>		<b>Competency in the management of Health and Safety (H&amp;S) and Environmental issues and other statutory obligations applicable to the discipline or area of work.</b>
	<p>Typically this will include the ability and commitment to:</p> <ul style="list-style-type: none"> <li>Operate and act responsibly, taking account of statutory requirements, environmental and socio-economic factors.</li> </ul>	<p>Supporting evidence of satisfactory attainment could include:</p> <ul style="list-style-type: none"> <li>records showing how H&amp;S issues are managed as part of day to day work for the applicant and others;</li> <li>a summary of the applicant's H&amp;S responsibilities;</li> <li>examples of implementation of H&amp;S policies;</li> <li>responses to incidents (including near misses) and subsequent investigations and</li> <li>knowledge of Environmental legislation and environmental protection practice.</li> </ul> <p>The evidence should also demonstrate sound knowledge of sustainable development best practice and implementation and management of such practices</p>	
<b>E</b>	<b>Comply with the Geological Society's codes of conduct</b>		<b>Clear understanding of the meaning and needs of professionalism, including a clear understanding of the Code of Conduct and commitment to its implementation</b>
	<p>Typically this will include the ability and commitment to:</p> <ul style="list-style-type: none"> <li>Comply with the rules of professional conduct of the Geological Society;</li> <li>Work constructively within all relevant legislation and regulatory frameworks including social and employment legislation; and</li> <li>Apply professional work ethics.</li> </ul>	<p>Demonstrate an understanding of the need to behave professionally and ethically at all times in accordance with the Society's Code of Conduct. Fully understand the requirements of the Code and be able to give relevant examples of its application in their professional actions, activities and decisions.</p>	

(Note that the references to Sections in the above table are to Sections in the Regulations of the relevant qualification.).

Notes prepared by R Chaplow

