

## Start here... Numeracy

Many GEES students in the U.K. are having problems with Numeracy. The transition from school to University seems to be especially difficult and problematic for both, students and tutors who are teaching basic mathematics to undergraduates and cannot find the appropriate resources and support they need. This resource links to very useful resources to provide support for you and your students, helping with numeracy skills and basic maths.

Computational Geology <http://www.nagt.org/nagt/jge/columns/compgeo.html>  
Computational Geology is a regular column in the Journal of Geoscience Education that aims to promote the use of mathematics in the undergraduate geoscience curriculum.

Graham Currell, G. and Dowman, A. 2009 *Essential Mathematics and Statistics for Science*, Blackwellpublishing

This book has been designed as a study text for students on a range of undergraduate science programmes and includes an accompanying web site:  
<http://www.blackwellpublishing.com/currellmaths2/>

Improving students' numeracy skills by Clive Agnew  
<http://www2.glos.ac.uk/gdn/guides/dfeepubl.htm>

This book is part of the Geography Discipline Network (GDN) Guides Series 'Key Skills in Geography in Higher Education' which aims to help HE geography teachers to develop a strategy for the learning and teaching of numerical skills. Available for a fee.

Interactivate <http://www.shodor.org/interactivate/>  
Interactivate is a generic site with a varied mixture of different materials, containing activities, quizzes, extracts from textbooks, and graphical illustrations of concepts.

Interactive Mathematics and Geoscience Education (IMAGE)  
<http://www.es.ucl.ac.uk/undergrad/geomaths/front.htm>  
IMAGE is a project developed in the Department of Geological Sciences at University College London and aims to develop essential skills applicable to geoscience education. The computer-aided learning package is made up of three sets of maths modules.

Just the Maths <http://www.coventry.ac.uk/ec/jtm/contents.htm>  
"Just the Maths" is a collection of separate teaching units intended to service foundation level and first year degree level courses.

Mathaid <http://www.plymouth.ac.uk/mathaid>  
A very comprehensive site from the School of Mathematics and Statistics at the University of Plymouth consisting of different interactive web based support packages.

Mathcentre <http://www.mathcentre.ac.uk/staff>  
An on-line mathematics support centre which provides resources to help students make the transition from school-level to university level mathematics. The web page contains different materials relevant to various subjects and resources for those who teach or support students.

Mathletics <http://people.brunel.ac.uk/~mastmmg/Downloads/entry.htm>  
A suite of software, collated by Martin Greenhow at Brunel University, that consists of a vast collection of mathematics and statistics questions.

Maths Solutions [http://skills.library.leeds.ac.uk/web\\_based\\_resources/mathssolutions/index.html](http://skills.library.leeds.ac.uk/web_based_resources/mathssolutions/index.html)  
Maths Solutions contains a series of maths problems which are presented as a series of short video clips displayed on the screen in a step-by-step format; in the same way as a teacher writing.

Mathtutor <http://www.mathtutor.ac.uk/>

Video tutorials, with diagnostics, summary text and exercises, take the learner through more than eighty topics

METRIC Maths <http://www3.imperial.ac.uk/engineering/teaching/learningtechnology/metric>  
METRIC Maths, developed by Imperial College London, aims to give students the chance to improve their skills and knowledge in their own time. The Metric Maths site consists of about 200 online activities; ranging from tools for plotting and calculation to exercises and notes for support.

National Numeracy Network <http://serc.carleton.edu/nnn/teaching/index.html>

This web site contains resources for teaching Quantitative Literacy at the secondary and post-secondary levels.

Skills@Library

[http://skills.library.leeds.ac.uk/web\\_based\\_resources/mathsquizzes/pages/basic\\_numeracy/basic\\_numeracy.html](http://skills.library.leeds.ac.uk/web_based_resources/mathsquizzes/pages/basic_numeracy/basic_numeracy.html)

Maths Quizzes from the Skills@Library features a collection of diagnostic tests in a range of Numeracy areas.

Statistics Glossary <http://www.stats.gla.ac.uk/steps/glossary/alphabet.html>

This glossary is ideal to have as an additional resource to use while you are learning statistics.

Teaching Quantitative Skills in the Geosciences <http://serc.carleton.edu/quantskills/index.html>

The website contains activities, teaching techniques and student resources to enhance quantitative skills.

That Quiz <http://www.thatquiz.org/>

This maths website by Andrew Lyczak contains a wide range of quizzes (arithmetic, time, money, measure, shapes etc).

The Math You Need, When You Need It <http://serc.carleton.edu/mathyouneed/>

WAMAP is a web based mathematics assessment and course management platform which is aimed at students in introductory geosciences. The tutorials are part of a series of student-centred web-based quantitative topics to support and promote students' quantitative learning.