



Mathematical Sciences HE Curriculum Innovation Project Update

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On the web: You can get updates from this project by visiting <http://mathstore.ac.uk/hestem>, by reading Peter Rowlett's blog at <http://mathshe.wordpress.com> or by listening to audio updates, including project leaders speaking about their projects, via a podcast at <http://feeds.feedburner.com/mathshe>



By the time you read this we will have held the review panel for projects in the Third Call for Funding from the Mathematical Sciences HE Curriculum Innovation Fund. This funding looks to address the priorities for curriculum development identified at the HE Mathematics Curriculum Summit in January (the report of the Summit can now be downloaded from www.mathstore.ac.uk/hestem). This funding call was widely publicised between March and May and promoted via meetings in each of the six regions in England and Wales of the National HE STEM Programme. I am very pleased with the response of the community to this call, with around one third of those universities in England and Wales offering degrees in mathematics being involved in bids.

Also promoted via workshops in the HE STEM regions was a tour to launch the booklet *Developing Graduate Skills in HE Mathematics Programmes*, produced as one of the two projects from the first Mathematical Sciences HE Curriculum Innovation funding call which I highlight this time as relevant to graduate impact.

Developing Graduate Skills in HE Mathematics Programmes

Project Leader: Dr. Jeff Waldock, Sheffield Hallam University

There are significant barriers involved when seeking to modify Mathematics programmes to encourage the development of graduate skills. One barrier is the practical difficulty of finding space for graduate skill development in a crowded curriculum. This can be addressed, at least in part, through different approaches toward learning, teaching and assessment that allow skill development to take place alongside the development of the mathematical skills, and by encouraging students to take part in extra-curricular activities. A series of short case studies have been collected, each focused on specific graduate skills, providing examples of ways in which these have been successfully developed through curricular initiatives. There is a wide variety of work reported, both in terms of the skills developed as well as the type of courses and institutions involved. The hope and expectation is, therefore, that there will be something of interest and relevance to everyone who has a desire to make curricular changes aimed at improving the 'graduate' skill levels of their students. The booklet can be downloaded from <http://maths.shu.ac.uk/msor/graduateskills/>

Assessing student teams developing mathematical models applied to business and industrial mathematics

Project Leader: Dr. Edmund Chadwick, University of Salford

Seminars from guest speakers on a spectrum of mathematical applications used in industry were presented to the undergraduate mathematics cohort. This involved eight speakers in total from a range of business and industry backgrounds. Case studies requiring the development of a mathematical model were completed by student teams. Each student had a specific role within the group that arranged meetings themselves and also with an academic adviser. In general the students enjoy the opportunity to be proactive that this module encourages rather than the passive nature of more traditional modules. A variety of assessments and methods were used to assess business-like team-focussed attributes, including presentation to employer representatives. A case study based on this project appears in the booklet mentioned above.