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**Kelly E Matthews\*** ([k.matthews1@uq.edu.au](mailto:k.matthews1@uq.edu.au)), **Merrilyn Goos** and **Peter Adams**. *Building the mathematical and computational skills of science students: what we are doing, what students think, and how it is working.*

The University of Queensland in Brisbane, Australia is a large, research-intensive institution. A recent review of the Bachelor of Science (BSc) highlighted a deficit in the quantitative abilities of science students, which was supported by feedback from final year undergraduate and honours level science students. Thus, several strategies were developed to better instil science graduates with mathematical, statistical and computational skills in the BSc. This talk will focus on the development, implementation and initial evaluation of a new, first year course that embeds mathematics and computer programming across a range of real world scientific problems. As a "gateway" course into the BSc, the aim is for students to better understand the interdisciplinary nature of science, how mathematics underpins various scientific disciplines, and the role of computational modelling in scientific research. This will, in turn, allow for upper level courses to build on and incorporate quantitative skills within the context of specific disciplines. Initial evaluation results will be presented, along with some of the challenges of developing this course and the issues associated with embedding quantitative reasoning across all levels of the BSc. (Received September 16, 2008)