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Discussions with a number of mathematicians in SCB resulted in the following view of SCB requirements for University mathematics to 2020.

The fundamental requirement is for pure mathematics which can be applied to real problems. The domain is abstract mathematics for information security processing.

Specific topics include:
    Coding theory
    Stochastic processes
    Combinatorics
    Algebraic geometry
    Computational algebra
    Complexity theory
    Computational complexity of algorithms
    Number theory
    Quantum Information Processing
    Cryptography
    Statistics
    Data mining
    Evolutionary algorithms
    Machine learning
    Optimisation
    Operations research and operations analysis

On the issue of the way in which mathematics is taught, it was considered that there should be increased emphasis on the use of computers for mathematical teaching, *e.g.* MAPLE, MAGMA. Also emphasized should be the use of 'experimental mathematics' to teach students how to approach real-world problems, and the motivation for the development and use of theorems, rather than courses that consist of a series of 'Theorem-Proof'.
As part of this philosophy, the use of real data was considered essential. Courses should use examples to show how and why mathematics should be applied. An example of this approach would be to define a difficult domain to work in and then derive theorems to make operations in that domain feasible.

The courses should naturally build links from Pure to Applied maths and then to Engineering applications. It was stressed that in the real world there is a need for both pure and applied mathematics.

General comments and/or questions:
- At a meeting of the Australian Mathematical Society in Perth in September 2005, there were very few attendees who were less that 50 years old. What is the age distribution in Australia?
- The National Security Agency in the United States is considered to be the largest single employer of mathematicians in the USA. What is the case in Australia?
- How are we addressing the National goal of National Security?
- The value of research and knowledge in all areas cannot be underestimated. Knowledge, as part of information exchanges with our Allies, is one of the few commodities that can be traded for political leverage.