



A division of St. Francis Methodist School

## **Curriculum Description for Australian Matriculation (Tertiary Entrance Examinations)**

### **E502 DISCRETE MATHEMATICS**

Discrete Mathematics and other Year 12 TES subjects in Mathematics must fulfil a variety of needs. They should be both a satisfying culmination of the work of earlier years and an adequate preparation for tertiary studies. To do this these subjects must present mathematics as an organised body of useful knowledge and provide students with the skills and confidence necessary to apply this knowledge in practical situations.

Discrete Mathematics meets these demands by offering studies in a range of topics in modern mathematics. These topics have the potential for useful application and are within the capabilities of the more mathematically able students of this age group. Students graduating from secondary school with a knowledge of these areas will appreciate the power of mathematics to provide a systematic way of understanding and interpreting the world around them. However, this subject does not include calculus, nor does it provide the probabilistic foundation for future studies of statistical inference.

Discrete Mathematics is intended, therefore, for students who wish to study mathematics in their final years at school, and who may be preparing for entry to tertiary subjects which do not have a strong mathematical requirement.

### **Recommended Background**

This subject is intended for students who have successfully completed Foundations of Mathematics.

### **Examination Details**

The examination will consist of one written paper of three hours duration.

The written paper will consist of a mixture of short routine questions and more challenging non-routine questions reflecting the syllabus content weightings in Table 1 of the Assessment structure. There will be no choice of questions.