**STAGE 1 MATHEMATICS**

**PROGRAM 1 OVERVIEW: TWO SEMESTER PRE-MATHEMATICAL METHODS**

This program provides the overview of a two semester course for a cohort of students intending to continue to Mathematical Methods at Stage 2.

**Topics listed in the teaching order outlined in program 1**

**Semester 1**

Topic 1: Functions and Graphs – subtopics 1.1, 1.2, 1.3 and 1.4

Topic 2: Polynomials – subtopics 2.1 and 2.2

Topic 3: Trigonometry – subtopics 3.1, 3.2 and 3.3

**Semester 2**

Topic 4: Counting – subtopics 4.1, 4.2, 4.3 and 4.4

Topic 6: Introductory Calculus – subtopics 6.1, 6.2, 6.3, 6.4 and 6.5

Topic 5: Growth and Decay – subtopics 5.1, 5.2, and 5.3

**Pre-approved learning and assessment plans**

See Learning and Assessment Plans > Pre-approved LAPs

LAP 1 (3 or 4 tasks)

LAP 2 (3 or 4 tasks)

**Mathematical investigations**

Polynomials turning points and points of inflection

Calculus cake tin – optimisation