



## Year 12 Mathematics Specialist Units 3 and 4 Assessment Outline

| Assessment weightings | Tasks                                       | Week             | Task weighting | Task content descriptions  |
|-----------------------|---|------------------|----------------|--|
| <b>Unit 3</b>         |   |                  |                |  |
| Response<br>20%       | Test 1A: Complex numbers                    | Wk 9 term 4 2017 | 4%             | Remainder & factor theorem<br>Complex numbers polar form.                                  |
|                       | Test 1B: Complex numbers, functions         | Wk 3 term 1      | 6%             | Remainder & factor theorem<br>Complex numbers polar form.<br>Function-composition/inverse. |
|                       | Test 2: Functions, vectors.                 | Wk 2 term 2      | 10%            | Functions-rational, absolute value.<br>Vectors 2D & 3D.                                    |
| Investigation<br>14%  | Investigation 1: Radian measure.            | Wk 4 term1       | 7%             | Limits, radian measure, problem solving.   |
|                       | Investigation 2: Hyperbolic functions.      | Wk 9 term1       | 7%             | Algebra and calculus of hyperbolic functions.  |
| Examination 15%       | Examination 1                               | Wk 5/6 term 2    | 15%            | Unit 3 content   |
|                       | Semester 1 total                            |                  | 49%            |  |
| <b>Unit 4</b>         |   |                  |                |  |
| Response<br>20%       | Test 3: Calculus                            | Wk 2 term 3      | 10%            | Differentiation & Integration.   |
|                       | Test 4: Calculus applications and sampling. | Wk 7 term 3      | 10%            | Differential equations, SHM and sampling.  |
| Investigation<br>6%   | Investigation 3: Integration techniques.    | Wk 3 term 3      | 6%             | Partial fractions and Integration.   |
| Examination 25%       | Examination 2                               | Wk 10 Term 3     | 25%            | Unit 3 and 4 content   |
|                       | Semester 2 total                            |                  | 51%            |  |
|                       | Year total                                  |                  | 100%           |  |