# Mathematics Advanced 11–12 Syllabus (2024): Stage 6 (Year 11) Australian Curriculum mapping

The Australian Curriculum codes are listed under each syllabus focus area and its associated content groups.

| Working with functions | Trigonometry and measure of angles | Trigonometric identities and equations | Introduction to differentiation | Exponential and logarithmic functions | Graph transformations | Probability and data |
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| **Algebraic techniques**  ACMMM008  ACMMM010  ACMMM061  ACMMM062 | **Trigonometry with acute angles**  ACMGM037  ACMMM028 | **Trigonometric identities and equations**  ACMMM043  ACMSM045  ACMSM046 | **Estimating change**  ACMMM077  ACMMM087  ACMMM094 | **Exponential functions**  ACMMM064  ACMMM098  ACMMM099  ACMMM100 | **Graph transformations**  ACMMM017  ACMMM020  ACMMM025  ACMMM026  ACMMM065  ACMMM156 | **Sets and set notation**  ACMMM049  ACMMM050  ACMMM051 |
| **Introduction to functions and relations**  ACMMM022  ACMMM023  ACMMM024  ACMMM027 | **Trigonometry with angles of any magnitude**  ACMMM029  ACMMM031 |  | **The derivative**  ACMMM081  ACMMM082  ACMMM084  ACMMM085 | **Logarithmic functions**  ACMMM151  ACMMM152  ACMMM153  ACMMM155  ACMMM156  ACMMM157  ACMMM159  ACMMM160 |  | **Probability**  ACMMM054 |
| **Linear functions**  ACMGM040  ACMGM041  ACMMM003  ACMMM004  ACMNA236 | **Radians**  ACMMM032  ACMMM033  ACMMM034  ACMMM035  ACMMM036 |  | **Calculations with the derivative**  ACMMM030  ACMMM090  ACMMM091  ACMMM093  ACMMM104  ACMMM105 |  |  | **Conditional probability**  ACMMM056  ACMMM057  ACMMM058 |
| **Quadratic and cubic functions**  ACMMM007  ACMMM009  ACMMM010  ACMMM011  ACMMM017 |  |  | **Graphical applications of the derivative**  No associated ACARA code |  |  | **Data**  ACMMM055 |
| **Reciprocal functions**  ACMMM013 |  |  | **The derivative as a rate of change**  ACMMM084 |  |  |  |
| **Constructing and using functions**  ACMGM043  ACMGM045  ACMMM005  ACMMM006  ACMMM023 |  |  |  |  |  |  |
| **Direct and inverse variation**  ACMMM002  ACMMM012  ACMMM013 |  |  |  |  |  |  |
| **Circles and semicircles**  ACMMM020 |  |  |  |  |  |  |
| **Properties of functions, relations and graphs**  ACMMM023  ACMMM027  ACMSM093 |  |  |  |  |  |  |
| **Piecewise-defined functions**  ACMGM046 |  |  |  |  |  |  |
| **Absolute value functions**  ACMSM098 |  |  |  |  |  |  |

# Mathematics Advanced 11–12 Syllabus (2024): Stage 6 (Year 12) Australian Curriculum mapping

The Australian Curriculum codes are listed under each syllabus focus area and its associated content groups.

| Further graph transformations and modelling | Sequences and series | Differential calculus | Integral calculus | Applications of calculus | Random variables | Financial mathematics |
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| **Transformations of trigonometric functions**  ACMMM039  ACMMM042  ACMMM043  ACMSM043 | **Sequences and series**  No associated ACARA code | **Differentiation with exponential functions**  ACMMM117 | **Primitive functions**  ACMMM114  ACMMM122 | **Turning points, inflections and curve-sketching**  ACMMM108  ACMMM110  ACMMM111  ACMMM112 | **Discrete random variables**  ACMMM137  ACMMM138  ACMMM139  ACMMM140  ACMMM141  ACMMM142 | **Reducing balance loans**  ACMGM097  ACMGM098 |
| **Modelling with functions**  ACMMM042  ACMMM066  ACMMM158 | **Arithmetic sequences and series**  ACMMM069  ACMMM070  ACMMM071 | **Differentiation with logarithmic functions**  ACMMM161 | **The definite integral** ACMMM124  ACMMM125  ACMMM126 | **Optimisation**  ACMMM096  ACMMM113 | **Continuous random variables**  ACMMM164  ACMMM165  ACMMM166 | **Annuities**  ACMGM099  ACMGM100 |
|  | **Geometric sequences and series**  ACMMM073  ACMMM074  ACMMM075  ACMMM076 | **Differentiation with trigonometric functions**  ACMMM102 | **The Fundamental Theorem of Calculus** ACMMM129  ACMMM131 | **Rates of change**  ACMMM101  ACMMM103  ACMMM109  ACMMM123  ACMMM133  ACMMM135 | **The normal distribution**  ACMMM168  ACMMM169  ACMMM170 |  |
|  |  | **Using derivatives**  ACMMM093  ACMMM106 | **Indefinite integrals**  ACMMM115  ACMMM116  ACMMM119 |  |  |  |
|  |  |  | **Integration with exponential functions**  ACMMM117  ACMSM118 |  |  |  |
|  |  |  | **Integration with logarithmic functions**  ACMMM162 |  |  |  |
|  |  |  | **Integration with trigonometric functions**  ACMMM118  ACMMM120 |  |  |  |
|  |  |  | **Areas and the definite integral**  ACMMM127  ACMMM128  ACMMM132  ACMSM126 |  |  |  |