# 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 |
| --- | --- | --- | --- | --- | --- | --- |
| **Algebraic techniques**ACMMM008ACMMM010ACMMM061 ACMMM062  | **Trigonometry with acute angles**ACMGM037ACMMM028 | **Trigonometric identities and equations** ACMMM043ACMSM045ACMSM046 | **Estimating change**ACMMM077ACMMM087ACMMM094 | **Exponential functions**ACMMM064 ACMMM098ACMMM099ACMMM100 | **Graph transformations**ACMMM017ACMMM020ACMMM025ACMMM026ACMMM065ACMMM156 | **Sets and set notation**ACMMM049ACMMM050 ACMMM051 |
| **Introduction to functions and relations**ACMMM022ACMMM023ACMMM024ACMMM027 | **Trigonometry with angles of any magnitude**ACMMM029ACMMM031 |  | **The derivative**ACMMM081ACMMM082ACMMM084ACMMM085 | **Logarithmic functions**ACMMM151ACMMM152ACMMM153ACMMM155ACMMM156ACMMM157ACMMM159ACMMM160 |  | **Probability**ACMMM054 |
| **Linear functions**ACMGM040ACMGM041ACMMM003 ACMMM004ACMNA236  | **Radians**ACMMM032ACMMM033ACMMM034ACMMM035ACMMM036 |  | **Calculations with the derivative**ACMMM030ACMMM090ACMMM091ACMMM093ACMMM104ACMMM105 |  |  | **Conditional probability**ACMMM056 ACMMM057ACMMM058 |
| **Quadratic and cubic functions**ACMMM007 ACMMM009ACMMM010ACMMM011ACMMM017 |  |  | **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**ACMGM043ACMGM045ACMMM005 ACMMM006 ACMMM023 |  |  |  |  |  |  |
| **Direct and inverse variation**ACMMM002 ACMMM012ACMMM013 |  |  |  |  |  |  |
| **Circles and semicircles**ACMMM020 |  |  |  |  |  |  |
| **Properties of functions, relations and graphs**ACMMM023ACMMM027ACMSM093 |  |  |  |  |  |  |
| **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** ACMMM039ACMMM042ACMMM043ACMSM043 | **Sequences and series** No associated ACARA code | **Differentiation with exponential functions**ACMMM117 | **Primitive functions** ACMMM114ACMMM122 | **Turning points, inflections and curve-sketching** ACMMM108ACMMM110ACMMM111ACMMM112 | **Discrete random variables** ACMMM137ACMMM138ACMMM139ACMMM140ACMMM141ACMMM142 | **Reducing balance loans** ACMGM097ACMGM098 |
| **Modelling with functions**ACMMM042ACMMM066ACMMM158 | **Arithmetic sequences and series**ACMMM069ACMMM070ACMMM071 | **Differentiation with logarithmic functions**ACMMM161 | **The definite integral** ACMMM124ACMMM125ACMMM126 | **Optimisation** ACMMM096ACMMM113 | **Continuous random variables** ACMMM164ACMMM165ACMMM166 | **Annuities** ACMGM099ACMGM100 |
|  | **Geometric sequences and series**ACMMM073ACMMM074ACMMM075ACMMM076 | **Differentiation with trigonometric functions**ACMMM102 | **The Fundamental Theorem of Calculus** ACMMM129ACMMM131 | **Rates of change** ACMMM101ACMMM103ACMMM109ACMMM123ACMMM133ACMMM135 | **The normal distribution** ACMMM168ACMMM169ACMMM170 |  |
|  |  | **Using derivatives** ACMMM093ACMMM106 | **Indefinite integrals**ACMMM115ACMMM116ACMMM119 |  |  |  |
|  |  |  | **Integration with exponential functions**ACMMM117ACMSM118 |  |  |  |
|  |  |  | **Integration with logarithmic functions**ACMMM162 |  |  |  |
|  |  |  | **Integration with trigonometric functions**ACMMM118ACMMM120 |  |  |  |
|  |  |  | **Areas and the definite integral**ACMMM127ACMMM128ACMMM132ACMSM126 |  |  |  |