



## Year 12 Topics covered

Name of Exam Board

**EDEXCEL**

Link to specification

<https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/mathematics-2017.html>

Term	Pure	Applied
Autumn 1	Drawing and sketching graphs Solving quadratic equations	Sampling and data representation (statistics)
Autumn 2	Indices, Surds and Logarithm laws	Trigonometry and solving inequalities
Spring 1	Circle geometry and transforming graphs	Forces (mechanics)
Spring 2	Differentiation	Binomial expansion, testing a hypothesis and distributions
Summer 1	Integration and factor theorem with division of polynomials	Vectors
Summer 2	Algebraic proof and exponentials with growth and decay	Kinematics and calculus

## Year 13 Topics covered

Term	Core 3 and 4	Applied (Mechanics)	or	Statistics (Mechanics)
Autumn 1	Review of differentiation Algebra – partial fractions	Velocity and acceleration, Force and motion, Vertical motion.		Representation of data (recap of GCSE stats – stem and leaf, histograms, cumulative freq.), Measures of location, Measures of spread.
Autumn 2	Integration Differential equations	Motion due to gravity, Resolving forces, Friction.		Probability, Perms and Combs, Probability distributions.
Spring 1	Trigonometry Numerical methods	Newton's third law, Momentum.		Binomial and Geometric distributions, Expectation and variance.
Spring 2	Functions Binomial expansions	Vectors, Combining and splitting forces/ Forces in equilibrium (these are almost identical topics), General motion in a straight line.		Vectors, Correlation, Regression.
Summer 1	Revision	Differentiation and parametric equations Revision		Differentiation and parametric equations Revision
Summer 2				

