Name of Course	**International Advanced Level (IAL) Mathematics from 2018**
Examining board	**Edexcel**
Link to specification	https://qualifications.pearson.com/en/qualifications/edexcel-international-advanced-levels/mathematics-2018.html
Course entry requirements	**To study Mathematics at A level students should have at least Grade 7 or Grade A at GCSE or IGCSE or equivalent.**
Why Mathematics?	**Mathematics is a versatile qualification, well-respected by employers and are both facilitating subjects for entry to higher education. The mathematical skills learned at A level Mathematics are of great benefit in other A level subjects such as physics, chemistry, biology, computing, geography, psychology, economics and business studies. Employers highly value mathematics qualifications as Mathematicians demonstrate the ability to think logically and analytically through solving problems.** **There are many opportunities for further study which could lead to higher education and a range of careers including accountancy, banking, chemistry, physics, Actuarial Science, medicine, computing, engineering and teaching.**
Course content (Year 12 and 13 - AS and A Level)	**Pure Mathematics 1, 2, 3 & 4** **• This comprises two thirds of the total content of the course. It focuses on Algebra and Functions, Coordinate Geometry, Sequences and Series, Differentiation, Integration, Exponentials and Logarithms, Vectors, Proofs and Problem Solving** **Statistics, Mechanics, Decision** **This comprises one third of the total content of the course. Students will study two out of the three applied options from:** **• Statistics- Sampling , Presentation of Data, Correlation; Probability; Statistical Distributions and Hypothesis Testing.** **• Mechanics- Modelling in Mechanics; Kinematics; Forces and Newton Laws; Moments; Variable acceleration** **• Decision - Algorithms; algorithms on graphs; the route inspection problem; critical path analysis; linear programming; matchings**
Exam structure	**All papers carry equal weighting. Students will sit P1, P2 and one applied unit at the end of Year 12. Students will sit P3, P4 and the second applied unit at the end of Year 13.**
Summer Work	**All students will be assessed on entry on basic GCSE mathematical skills needed for the course. A link to these can be found here. There are also books that may be purchased to work through over the summer, "Bridging GCSE and A Level Maths Student Book (Collins A Level Maths)" is widely available and recommended.**