

## Section 1: Basics Facts

*Exam Board: Edexcel*

*Course code: 9FMA0*

*Course structure: 2 year linear, examined in summer of Year 13*

*Coursework: None*

*Examinations: Four 90-minute written papers covering entire content of the course*

*Paper 1: Core Pure Mathematics 1*

*Paper 2: Core Pure Mathematics 2*

*Paper 3: Further Pure Mathematics 1*

*Paper 4: Further Mechanics 1*

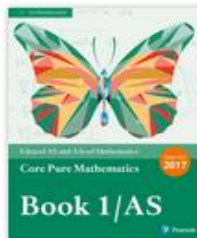
*Equipment: Students must have a Casio fx-991EX CLASSWIZ calculator*

*Lesson structure: 10 lessons over a fortnight in addition to the 10 normal maths lessons*

*Homework: one task per week for each member of staff*

*independent study of new material on daily basis*

*Course texts:*



Section 2: Year 12 Subject Content

*Pure mathematics*

*Matrices*

*Transformations*

*Complex numbers*

*Polynomials and their complex roots*

*Proof by induction*

*The parabola*

*The rectangular hyperbola*

*Summation results*

*Vectors in 3 dimensions*

*Vector equation of a line*

*Scalar and vector products*

*Equation of a plane*

*Area and volume in 3D space*

*Mechanics*

*Momentum and Impulse*

*Newton's law of restitution*

*Energy forms*

*Conservation of mechanical energy*

*Power*

*There is no statistics in the Further Mathematics A – Level*

### Section 3: Advice

*You must have studied GCGE Higher mathematics and attained at least grade 8*

*This course is designed for students for which mathematics is their passion and was their favourite subject at GCSE.*

*Further Mathematics is a huge advantage to students who wish to undertake a degree in Mathematics*

*Although the course builds on the A – Level in Mathematics, it runs independently of the standard Mathematics course. However students must also be take A – Level Mathematics*

*There are many formulae and concepts which must be committed to memory and rapidly recalled to tackle complex problems*

*You will more than likely attend at least 2, perhaps up to 4 maths lesson in a single day*

*There is overlap in subject content with A – Level Physics. Other subjects which lend themselves to this course are Chemistry, Biology and Computer Science*

## Section 4: What now?

*Consider whether you want / need to take A – Level Further Mathematics*

*Ask your teachers about the course*

*Ask other students in the sixth form about their thoughts on the course*