Further Maths

At KS5, The Palmer Catholic Academy Maths department offers an environment where students are nurtured and challenged to achieve their best grade possible.

Students follow the Edexcel linear two-year A level course and have 5 lessons per fortnight. The Further Maths course is taught alongside the A Level maths course. Core (2) and Further Mechanics modules are taught in year13 by highly qualified Maths teachers.

Our KS5 A level Further Maths curriculum is structured to allow progression of topics and to build on prior knowledge from GCSE and Additional Mathematics. The modules taught empower students to develop and apply their problem-solving skills by focusing on modelling questions based on various topics. At KS5, students are given the opportunity to communicate mathematically by noticing, making connections, explaining, justifying and proving concepts in different contexts.

	Autumn Term	Spring Term	Summer Term
Year 12	**D1/M1 Teacher** D1 Chapter 1- Algorithms and Graphs: D1 Chapter 2 - Graphs and Network D1 Chapter 3 - Algorithms for Network D1 Chapter 4 - Route Inspection: D1 Chapter 6 - Linear programming D1 Chapter 8 - Precedence Tables **Core 1 Teacher** Chapter 6- Matrices Chapter 7- Linear Transformations Chapter 3 (*start*) - Series Chapter 1&2 - Complex Numbers:	**D1/M1 Teacher** D1 Chapter 2-Graphs and Networks: D1 Chapter 4-Route Inspection: D1 Chapter 5- The Travelling Salesman Problem D1 Chapter 7- The Simplex Algorithm: D1 Chapter 1- Algorithms and Graphs: **Core 1 Teacher** Chapter 2 - Complex Numbers Chapter 4- Polynomials Chapter 8- Series Chapter 5- Calculus Chapter 9-Vectors	**D1/M1 Teacher** D1 Revision Block of exam papers A2 Pure Differentiation & Integration **Core 1 Teacher** Chapter 9- Vectors: A2 Pure Differentiation & Integration
Impact	Topic Timed questions 30 - 40 mins Nov/ Dec Mock Feb/March Mock	Feb/March Mock	End of Year Mock

	AUTUMN TERM	SPRING TERM	SUMMER TERM
Year 13	**FMI Teacher** Chapter 1. - Momentum and Impulse Chapter 4. - Elastic Collisions Chapter 2. - Work, Energy and Power . **Core 2 Teacher** Chapter 2 - Series Chapter 1 - Complex Numbers Chapter 6 - Hyperbolic Functions Chapter 5 - Polar Coordinates	**FMI Teacher** Chapter 3 - Elastic strings and springs Chapter 5 - Elastic collisions in two dimensions **Core 2 Teacher** Chapter 4 - Volumes of revolution: Chapter 7 - Methods in Differential Equations: Chapter 8 - Modelling with differential equations:	**FMI Teacher** Block of exam papers **Core 2 Teacher** Chapter **3: Methods in calculus**: Block of exam papers
Impact	Topic Timed questions 30mins Nov/ Dec Mock	Feb/March Mock	