

Westfield Academy - Curriculum Information

Building on their Year 12 Pure Mathematics studies, your child will develop and refine their understanding of advanced mathematical concepts through the continued study of Pure Mathematics at A Level. They will extend their knowledge of trigonometry through radians, trigonometric functions and mathematical modelling, and explore parametric equations as a method of representing curves.

Students will further develop their calculus skills through advanced differentiation and integration, alongside numerical methods for approximating solutions to equations. They will strengthen their ability to apply mathematical techniques to complex and unfamiliar problems, developing fluency, accuracy and logical reasoning throughout. Regular exam paper practice and mock examinations will support consolidation of learning, build exam confidence, and prepare students for final A Level assessments and progression beyond sixth form, including UCAS applications.

Maths

Head of Department	C. Okemadu	
Head of Department email	cho@westfield.academy	
Lessons per 2 week cycle	7	
Specification/Board details/Key stage	Edexcel	

Term by term

Autumn 1	Autumn 2	Spring 1
Radians Trigonometric Functions Trigonometry and Modelling Parametric Equations	Differentiation Numeric Methods Integration Review Exam Paper Practice	Mock Exam Exam Paper Practice
Spring 2	Summer 1	Summer 2
Exam Paper Practice		
Key Skills developed		
Useful Websites	https://my.integralmaths.org/integral/core/login/index.php https://corbettmaths.com/ https://mathsgenie.co.uk/	

	https://www.mathslinks.co.uk/
Reading/Literacy requirements /Key Words	Radians Proof Modelling Cartesian Parametric Exponentials Logarithms
Homework requirements	Four times times a week
Personal Development Links	https://www.mathslinks.co.uk/
Trips/Visits (If applicable)	<p>Robotic Project: The mission is to develop future Space scientists and AI Engineers. We joined the National Robotics & STEM Project, organised by First Tech Challenge UK and Ireland (https://firstuk.org/), designed to equip our students with hands-on experience in engineering, coding, problem-solving, teamwork, and innovation.</p> <p>UKMT Challenge: The mission is to develop confident, high-level mathematical thinkers through participation in the nationally recognised UK Mathematics Trust Challenge. This prestigious national competition attracts students from schools across the UK, providing an opportunity to compete at a recognised national standard.</p> <p>Students tackle rigorous, non-routine problems that strengthen logical reasoning, precision, and resilience under timed conditions, raising aspirations and celebrating mathematical excellence.</p>