

The study of numbers, shapes, and patterns, and how they are related to the real world

The Maths department at Salford City Academy aims to provide students with a secure understanding of mathematical knowledge. The curriculum is categorised according to the following areas: number, algebra, geometry, ratio and proportion, probability, and statistics, and carefully mapped to meet the needs of the National Curriculum at KS3 and KS4. The focus of the curriculum is to foster a love of Maths through the development of fundamental procedural knowledge which students can build on to both problem-solve and reason mathematically.

In Maths, our aim is to secure retention of knowledge and a depth of learning, resulting in students who are confident and excited to take their studies to the next level, whether that be further qualifications, higher education or into the workplace. We are committed to providing an inclusive curriculum, celebrating, and championing diversity and individuality in Mathematics.

We have developed and created a curriculum where consistent lesson structures allow for distributed practice to improve recall, retention of prior knowledge and to inform and adapt future planning. Teachers are skilled in identifying and addressing gaps in knowledge.

Curriculum Principles:

At Salford City Academy, we focus on teaching in a sequence that is carefully designed to continuously interleave content. The Maths Curriculum promotes and emphasises the need for mathematical fluency; all students will study the content outlined in the scheme of learning, which has been constructed based on the following principles:

Entitlement: All students in Maths learn the knowledge and skills detailed in our curriculum, which are categorised into the strands of number, algebra, geometry, ratio and proportion, probability, and statistics. This ensures that all students can access all areas of Maths and develop their abilities to solve increasingly complex problems and reason mathematically.

Coherence: Our curriculum is a progression model that ensures knowledge is revisited and built upon each year. Sequencing allows pupils to make links with prior learning and across strands and is constructed in a way that classic misconceptions between topic areas are avoided. Our curriculum overviews clearly identify key knowledge and skills, misconceptions, formative assessment opportunities, and summative end-point assessments.

Mastery: Mathematical concepts are taught in small steps, using visual representations where appropriate to build a depth of understanding. Students demonstrate their knowledge in their independent practice through reasoning and non-standard questions. Key skills are continually revisited through careful interleaving of content into future teaching and starter grids. Homework is linked to current and prior learning to build retrieval practice. Students who have been identified as excelling in Maths will access an advanced curriculum that extends the core Maths curriculum with a focus on providing a greater depth of understanding.

Adaptability: Teachers adapt the curriculum for their individual classes and students to enable all students to make progress and achieve. The curriculum identifies components of each topic and maps out the lesson sequence, which teachers adapt to meet the needs of their class. Guidance is provided on adapting for the individual needs of students in the curriculum overview. Students who are identified as needing extra support during KS3 will also benefit from a bespoke 'Fundamentals' curriculum stream, which is designed to support students to develop their foundational

mathematical knowledge and skills and allows them to successfully access the rest of the curriculum.

Representation: Maths is universal, providing all students with a logical way of viewing the world. The diverse community of Mathematicians is celebrated in our common lesson slide at the beginning of each lesson. We believe that a secure understanding of Maths is an essential starting point for all young people. Our curriculum ensures that students are exposed to a wider context outside of their immediate experiences.

Education with Character: Our curriculum supports students to build logical reasoning, critical thinking, and is mentally rigorous. We provide extra-curricular clubs in mathematics to ensure our students have access to a high-quality Maths curriculum that is both challenging and enjoyable. This includes the Axiom Maths provision at KS3 and the opportunity to study Further Maths at KS4. We provide our students with a variety of mathematical opportunities, which will enable them to make the connections in learning needed to enjoy greater depth in learning. We ensure students are confident mathematicians who are not afraid to take risks. We fully develop independent students with inquisitive minds who have secure mathematical foundations and an interest in self-improvement.