

Science and Technology Faculty

The Faculty encompasses Science, Social Sciences and Technology and builds upon the expertise within individual subject areas to ensure that Monmouth Comprehensive School develops as a beacon for STEM Education on a national level.

STEM subjects are integral to the UK's success. Our vision is that students' learning at Monmouth Comprehensive School will benefit hugely from a collaboration of subject areas and that this will prepare many of them for rich and varied career pathways within STEM subjects. Our students will have the STEM knowledge and skills they need to be an informed citizen in an increasingly scientific and technological society.

Science Department



We are an innovative and supportive Department of fifteen teachers including a Subject Leader and one further TLR post, with strong teams in all three Science disciplines. The Department is expertly supported by a team of two full time lab technicians, servicing nine laboratories. We have access to a large number of wireless laptops across the Faculty and every classroom is equipped with a docking station and projector.

At Key Stage 3, students are taught by one teacher in broad ability groupings. We have developed exciting schemes which build upon KS2 and teach the key Science skills and concepts needed for Key Stage 3 and beyond, with learning skills at the very heart of how students develop understanding in Science. We have embraced teacher assessment at the end of the Key Stage, with over 95% of students achieving level 5 or above last year.

At GCSE, we offer the new 'all Wales' WJEC GCSE suite of qualifications including Separate Sciences, Double Award Science and Single Award Applied Science. Approximately a third of our Key Stage 4 cohort selects the separate sciences pathway.

We are a very successful Department at A Level having strong numbers in all three subjects. Each subject follows the WJEC A level course. At A Level, we invariably achieve outstanding value added results and many of our students go on to take Science related courses at the best Universities, including Oxford and Cambridge.

Design & Technology Department



The Design & Technology Department consists of eight well-equipped wireless teaching rooms comprising workshops, catering and textiles facilities, multi-media studios and specialist suites along with a CAD/CAM facility Laser Cutter and a 3d Printer which is utilized by all aspects of the subject. The Department team is made up of six full and two part time members of staff including the Subject Leader and one further TLR post, who are supported by two Design and Technology Technicians. The overall structure of the Design & Technology Department enables staff to work within a whole team approach, with a variety of component subject areas contributing to a common end.

A skills based Technology course was introduced across Year 7 in September 2013. Years 8 and 9 are taught Food and Textile Technology and Design Technology in common mixed ability groups. Learning activities respond to the wide variety of interests that students have while acquiring knowledge of design methods.

Students experience a wide range of materials and techniques within Key Stage 3 and gain an awareness of a broad base of technological concepts.

The Department offers a wide range of pathways at Key Stage 4. A BTEC L2 Certificate in Engineering is available and provides a popular alternative assessment route. Via work related scenarios, this course allows students to acquire knowledge, understanding and practical skills in engineering related topics that reflect the needs of employers and further education courses. GCSE design courses are also offered in Textiles, Resistant Materials and Graphic Products along with a course in GCSE Hospitality & Catering. All Key Stage 4 programmes are taught in specialist facilities.

At post 16 'AS' and 'A' Level Design & Technology (Product Design) is taught and a Level 3 Engineering course is well established. Students achieve well in both pathways with many students progressing to university within these specialist area. In collaboration with the Science Department, teams of engineers, product designers and physicists enter the nationally recognised annual ESSW awards with support from local engineering companies in our locality.

Social Science Department

The Subject Leader for Social Sciences leads a team of three teachers delivering a range of courses across Key Stages 4 and 5. The team work together across the key stages to teach Child Development and Health and Social Care GCSEs which offer pathways to Level 3 Health and Social Care; a qualification that may be studied discreetly or alongside other A Levels. Each of these courses has a strong vocational element and assessment is weighted towards coursework. The popularity and success of GCSE Psychology as part of the Science pathways in Year 11 has now secured this qualification as an option in Year 9 with 46 students opting to study from September 2016. The department has a long-standing history of success in A Level Psychology and the current teachers have written the textbooks for the new WJEC specification. New to the Department for September 2016 is involvement in the Level 3 Public Services BTEC qualification, which will give us the opportunity to share our experience and work alongside staff from other departments in the school.

The Social Science Department has a suite of classrooms within the Science and Social Science Faculty with each having a projector and whiteboard. A number of dedicated laptops are also available to support the development of independent study and controlled assessment. As part of the STEM Faculty, the Department has shared approaches to teaching, learning and relationships.