



STEM



STEM at Modbury High School aims to engage and inspire students in the early years, whilst preparing them for senior Sciences, Mathematics and Technology; ultimately supporting their career pathways.





“In 2019, students at Modbury High School will be learning about Science, Technology and Mathematics in the ‘state-of-the-art’ STEM centre.”

The STEM centre includes a fabrication laboratory, robotics and electronics laboratories, multipurpose wet/dry laboratories, a flexible maker space, break-out tutorial rooms and a multi-tiered presentation room.

Teaching a 21st Century STEM curriculum provides students with opportunities to apply their knowledge to solve real world problems.

Students use equipment such as 3D printers, laser cutters, DAD/CAM, drones, coding and robotics. An example of a project is using cutting edge technologies to design disaster relief Tiny Homes, incorporating energy efficient and ecofriendly designing and using scaled diagrams.

Students will take these designs and 3D, model them on Fusion 360 (CAD), print the designs using 3D printers, demonstrate their understanding of specialised cells and create 3D replicas. They will also be provided with the opportunity to partner with industry experts to consider the economic potential and social/environmental implications.

Students will be able to access school drones (DJI Mavic Pro and DJI Spark) complete mock surveys, analyse core samples, evaluate profit/loss statements and pitch to leading experts in our new tiered presentation area.

This innovative pedagogy aims to engage, inspire and prepare the next generation of STEM professionals. Our aim is to assist students to develop content knowledge and application, industry skills in leadership, collaboration, communication, critical and creative thinking and problem solving.

Students are able to enrol in specialty courses for example, Innovative Learning (F1 in schools and Drone Racing), CAD and Coding.

As students progress from middle school to senior school they have the opportunities to extend themselves into Advanced Maths and disciplined based science subjects; Biology, Chemistry, Physics and Psychology.

Modbury High School has a proud tradition of successfully preparing students for Science/Maths based pathways and celebrating excellent academic achievement.



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