

STEM Innovation Centre

In Semester 2 2018, we will open our new STEM Innovation Centre. This is a space designed to allow students to immerse themselves in hands-on inquiry based learning spanning the spheres of Science Technology Engineering and Mathematics.



The centre will incorporate purpose built, specialised labs for Chemistry, Physics, Biology, Digital Technologies and Systems Engineering as well as general purpose labs for Maths and Science subjects. A large open space will include areas to allow collaborative projects, research, presentation and robotics work as well as a MakerSpace allowing open investigation and exploration and will be available for use both in and out of class time.

Jobs of the future

The Victorian Government has identified that the jobs of the future will be in a number of priority sectors with the potential for remarkable economic growth:

- medical technology and pharmaceuticals
- new energy technologies
- transport, defence and construction technologies
- food technology/ security and innovative fabric and fibre technologies
- international education
- professional services.

In these sectors, Victorians will find high-skill, high-wage jobs, enabling them to compete on an international stage. Critically, STEM knowledge and skills are integral to most, if not all, priority sectors.



Visit our website:

<http://stemlyndalesc.weebly.com>

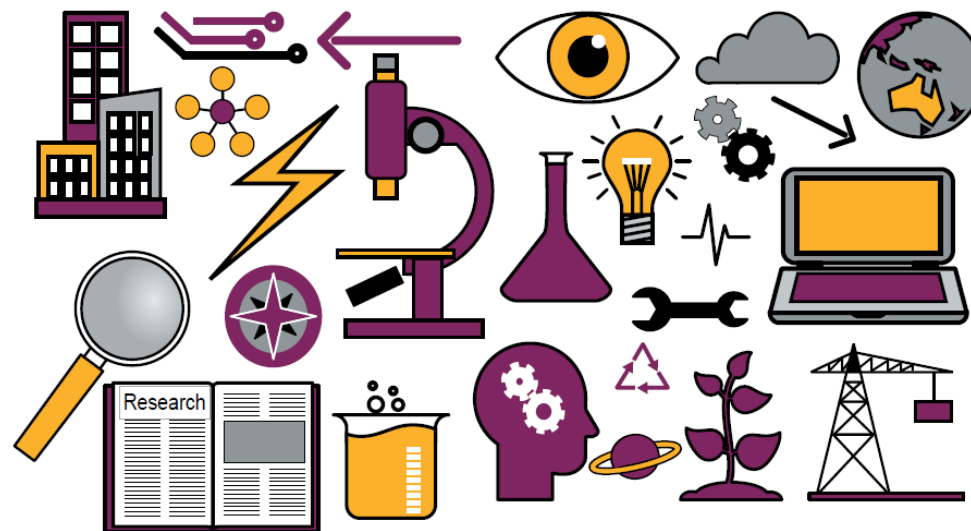


STEM Leadership Program Lyndale Secondary College



What does this program offer?

The STEM leadership program integrates the disciplines of Maths, Science, Digital Technologies and Design Technologies to offer authentic, real-world challenge and problem based learning experiences in a transdisciplinary manner. In 2019, there will be one class at year 7 participating in the program.



These students will be selected through an application process. Students will have timetabled classes in each of these subjects (as well as all of the other traditional subject areas) but will complete projects and assessment tasks which pull on the skills and understandings gained across the STEM subjects. They will be given opportunities to build their leadership potentials and will become ambassadors for STEM within the school and the wider community. They will also have opportunities to participate in STEM excursions, incursions and learning experiences that will enhance the classroom experience and present pathways available through our links with a variety of university and research facilities.

What is STEM?

STEM is an acronym for Science, Technology, Engineering and Maths. The jobs of the future will be very different from those we currently have, employees will be expected to hold a set of skills which will allow them to constantly adapt and change to face new challenges and problems. Technology changes at an increasing pace and in many cases, is highly disruptive to the *status quo*. The most successful employees will be expected to be great leaders, strong communicators, highly adaptive to change, problem solvers, creative and critical thinkers and life-long learners. As these changes take place there is a great blurring of traditional disciplines and a synergy of skills and thinking.



Traditional fields such as 'Chemistry' or 'Biology' become less defined when entering the workforce; instead jobs require a composite knowledge across a much greater sphere of science, incorporate mathematical skills such as problem solving, reasoning and algorithmic thinking. Technological advances require understanding of current digital technologies and an ability to change and keep up to date with the rapid development and advancements that occur. The mediums in which we work will also blur as new materials and technologies are discovered. Skills in the design process, innovative thinking and an ability to work and adapt to these new materials, often in an abstract or digital medium, will be the most highly desired.

STEM Leadership



At Lyndale, we are dedicated to building the leadership capacity of our students and this program will have a particular focus on this. Our 2018 cohort are beginning to experience this and will hopefully already be thinking about

running for a STEM captain position in 2019 or beyond. Our current STEM captains were amongst the first people to get to visit the new STEM innovation centre while it was still in construction.

How do I apply for this program?



Applications for this program will begin in Term 2, 2018. If you would like to register your interest, and to ensure that you receive information on the application process please e-mail STEM@lyndale.vic.edu.au with the following details:

Student's Full Name
Primary School
Guardian's Full Name
Contact Phone Number
E-mail Address