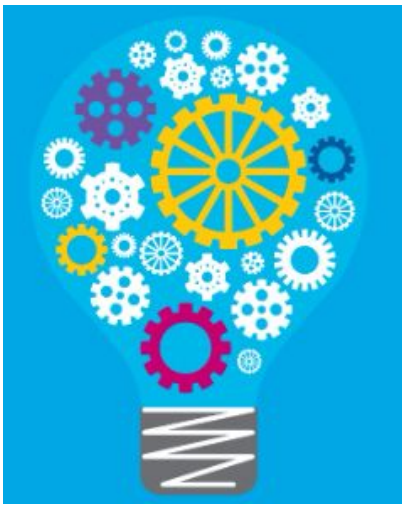
STEM @ ST THOMAS



According to the Department of Employment, STEM occupations are growing at 17%, while other occupations are growing at 9.8%. STEM degree holders have a higher income even in non-STEM careers. Science, technology, engineering and mathematics workers play a key role in the sustained growth and stability of the economy, and are a critical component to helping to build our future. STEM education creates critical thinkers, increases science literacy, and enables the next generation of innovators. Innovation leads to new products and processes that sustain our economy. This innovation and science literacy depends on a solid knowledge base in the STEM areas. It is clear that most jobs of the future will require a basic understanding of math and science. Despite these compelling facts, mathematics and science scores on average among Australian students are lagging behind other developing countries.

What is STEM?

STEM is an approach to learning and development that integrates the areas of science, technology, engineering and mathematics. Through STEM, students develop key skills including:

- problem solving
- creativity
- critical analysis
- teamwork
- independent thinking
- initiative
- communication
- digital literacy.

STEM
SCIENCE ⚙ TECHNOLOGY ⚙ ENGINEERING ⚙ MATH

STEM stands for science, technology, engineering, and mathematics. STEM is important because it pervades every part of our lives. Science is everywhere in the world around us. Technology is continuously expanding into every aspect of our lives. Engineering is the basic designs of roads and bridges, but also tackles the challenges of changing global weather and environmentally friendly changes to our home. Mathematics is in every occupation, every activity we do in our lives. By exposing students to STEM and giving them opportunities to explore STEM-related concepts, they will develop a passion for it and hopefully pursue a job in a STEM field. A curriculum that is STEM-based has real-life situations to help students learn.

How do we teach STEM at St Thomas?

Each year level completes a Science, Technology, Engineering and Mathematics based inquiry unit of work. These are problem-based learning opportunities for our students to design and create solutions independently or in team situations.

Students from Years 3 to 6 are all exposed to practical and hands on problem solving through our Stephanie Alexander Kitchen Garden Program.

STEM activities provide hands-on and minds-on lessons for the student. Making math and science both fun and interesting helps the student to do much more than just learn.