

Young Engineers – STEM, Lego Engineering & Robotics classes

Every Friday 2 February – 22 March for Term 1 2024

3 weeks trial option available. Limited spaces available!



[For Prep - Year1 - Lego Bricks Challenge – Friday 3:30pm-5:00pm](#)



Students will learn:

- Engineering and Mechanics
- Problem solving and team work
- Electronics and 3D Design thinking
- Introduction to high school physics
- To build motorised Lego models using gears, pulleys, beams & more!
- Cost \$190 for 8 classes (\$75 trial option available for 3 weeks)
- Classes run on ground floor. We collect kids after bell.

[For Year2 - Year 6: Lego Robotics – Friday 3:30pm-5:00pm](#)



Students will learn:

- 7 steps of software engineering
- Designing and coding mechanical robots
- Algorithmic and logical thinking skills
- Electronics and 3d Design thinking
- To use sensors and motors so robots move and interact.
- Cost \$190 for 8 classes (\$75 trial option available for 3 weeks)
- Classes run on ground floor. We collect kids after bell.

Will your child become the next Young Engineer?

When today's primary school age children enter careers 15-20 years down the line, one can only imagine the professions that will exist. Flying car mechanic, robo-cop technician – perhaps something completely different! With a rapidly evolving technology landscape, supercomputers in everyone's pockets, Internet of Things, and smart devices that 'talk' to each other – society and workplaces are changing too. Children need different skills to succeed in this brave new world!

What is STEM?

STEM refers to - Science, Technology, Engineering and Maths. These subjects are taught in an integrated manner, leading to authentic problem solving and design thinking experiences for children. There is no theoretical formula solving – instead these subjects are taught in a hands-on, practical manner with a focus on developing:

- Critical thinking
- Problem solving
- Data analysis
- In-depth understanding of physics and mechanics
- 3-dimensional design thinking
- Innovation and imagination, grounded in reality

What happens in our classes?

Junior – Bricks Challenge – Children from Prep to Year 1 build motorised models that work and experiment with their machines. For example, children build a Lego washing machine, learn about centrifugal force and then watch the force in action by spinning wet cotton balls dry. They build cranes to learn about levers and pulleys, rescue helicopters to learn about flow mechanics, electric drills to learn about gear transmission!

Robo Bricks– Children from Year 2 to Year 6 can try their hand at Robotics. They will build a machine, identify programming objectives, design algorithms and learn how to communicate with the machine using sensors – so that it does what they want it to do! They will experience 7 steps of software engineering each week. For example, children build a Lego monkey robot and program it to automatically sense a banana and get excited to grab it.

Enrol at: <https://melbsouth.young-engineers.com.au/registration>

Contact: 0478-534-693

Email : melbsouth@young-engineers.com.au