

STEM Learning Challenge

Year-Level Mathematics + Logic Mission Challenge + STEM Awards

The STEM Challenge is a structured online learning journey that runs throughout the entire competition period. Every registered student receives access to grade-appropriate courses on the MRT eLearning platform (elearning.mrtrobotics.com). Students strengthen their mathematical thinking, coding logic, and problem-solving skills week by week.

What's Included

Mathematics (Grade-Level)

Year-level maths courses matched to the student's school year (K-Year 12). Covers number, algebra, measurement, geometry, and data through structured lessons and exercises. All content is curriculum-aligned to Australian Curriculum V9.0.

Logic Mission Challenge

The official STEM preparation course. Students solve coding logic problems using loops, conditions, variables, patterns, and algorithmic thinking. These computational thinking puzzles build problem-solving and logical reasoning skills that connect maths to coding.

Robotics Courses (Optional)

Students preparing for the Robotics Challenge can also access robotics learning courses, including the official 451 AI Motion Rescue competition prep course.

What Students Learn

- Mathematical reasoning and number sense at their year level
- Pattern recognition and logical sequencing
- Computational thinking through coding logic puzzles
- Problem decomposition and algorithmic design
- Connection between maths concepts and coding

Students don't just get the right answer — they learn why the process works through coding.

STEM Award Criteria

The STEM Award is given to students who faithfully complete both:

- **Mathematics Course** — Complete the grade-level maths course on the eLearning platform
- **Logic Mission Challenge** — Complete the Logic Mission Challenge course

Awards are issued as Gold, Silver, or Bronze based on completion and performance.

Evaluation Method

The STEM Challenge does NOT require any video, project, or file submission. Progress is tracked automatically by the eLearning platform. Teachers can view each student's progress on the Teacher Dashboard.

Key Information

- **Year Levels:** K - Year 12
- **Format:** Online, self-paced through the eLearning platform
- **Coding:** No coding required for the STEM Challenge itself
- **Deadline:** 25 September 2026
- **Curriculum:** Digital Technologies, Mathematics, Science, HASS

- **Cost:** \$20/student (School Group) or \$30 (Individual)

Australian Curriculum Connections ☐☐

Aligned with Australian Curriculum V9.0:

- **Mathematics:** Number, Algebra, Measurement, Geometry, Statistics
- **Digital Technologies:** Computational thinking, algorithms, data representation
- **Science:** Inquiry skills, problem-solving

Register: roboticscodingchallenge.org/register-hub

Challenge Details: roboticscodingchallenge.org/current

eLearning: elearning.mrtrobotics.com · info@roboticscodingchallenge.org

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