



STEM Digital Technology Program

A program designed to support teachers and schools in the teaching of Digital Technologies from Reception to Year 10.

Introduction

The program provides South Australian students with authentic learning activities co-designed by industry and technical experts, that demonstrate practical applications of Automation and Data Science uses within the mining and energy sector, including careers and entry pathways.

Designed by the Chamber of Minerals and Energy in Western Australia, the program creates authentic, engaging, and challenging activities to support students as they learn the Australian Curriculum (V9) Digital Technologies.

The program consists of eight Challenge components (see below): five Automation (coding) and three Data Science. All challenges are fully supported with comprehensive documentation and a wealth of online content designed to guide students and teachers.

How it works

Detailed instructions, tutorials, and problem-solving examples are provided, ensuring students have access to clear and accessible resources. An interactive online platform hosts a variety of problems and tasks, allowing students to work at their own pace to explore concepts in-depth, and revisit materials as needed.

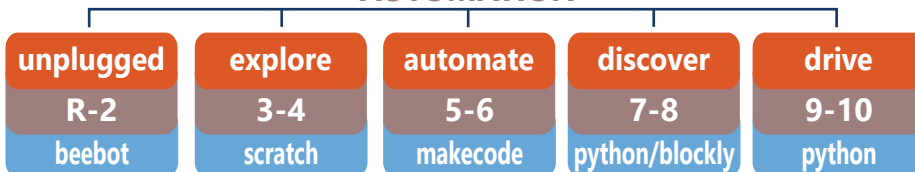
Personalised approach

These resources are designed to offer varying levels of complexity to cater to diverse skill levels and learning styles. This approach empowers students to take ownership of their learning, build confidence, and progress at a pace that suits their individual needs, fostering both independence and mastery of STEM concepts.

“Students feel a great sense of accomplishment when they complete a difficult challenge.”

8 CHALLENGE COMPONENTS

AUTOMATION



DATA SCIENCE



Teachers and schools receive extensive support during implementation, including a face-to-face workshop, school and teacher curriculum planning, lesson plan creation, online assistance, and a year-long ongoing support to address any queries.