

## WARMAN DESIGN AND BUILD COMPETITION

Engineers Australia's annual Warman Design and Build Competition has been running since 1988. In that time, almost 50,000 first and second-year mechanical engineering students from across the Asia-Pacific region have participated.

The competition asks students to save the fictional planet of Gondwana, whose people this year faced a food and water crisis. For help, they called on some of engineering's top young minds for innovative solutions to save their water pumps.

Gondwana might be fictional, but the issues that are being addressed through the students' projects – and the vital lessons in teamwork and problem-solving – are very real. In 2018:

- **2,000** students took part from **19** universities

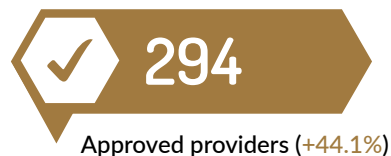
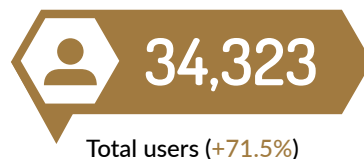
Since the competition started:

- **32 years** saving the planet of Gondwana
- **52,000** participating students

## STARPORTAL IMPROVEMENTS

STARportal – Australia's largest searchable database of STEM activities – has recently been upgraded so users can receive automatic updates when relevant events arise. Launched in 2017, STARportal is owned and managed by Engineers Australia on behalf of the Office of the Chief Scientist. The most-searched term on STARportal is currently "engineering".

## STARPORTAL STATS



## NEW STEM STRATEGY

After broad consultation with industry, Engineers Australia launched a new National STEM strategy 2019-2023. The strategy aims to sharpen the focus, scale and effectiveness of existing efforts to promote STEM from primary school up, overcome stereotypes, highlight the profession's contribution to our communities and promote retention.

As part of our STEM strategy, Engineers Australia will in 2019-20 undertake a full review of STEM activities to consolidate our efforts nationally, as well as seek feedback on the strategy from members and industry.

## ENGINEERING STUDIES TEACHER PROGRAM

In an effort to support STEM educators, Engineers Australia created a series of presentations and resources aimed at helping teachers contextualise engineering theories and practice, better explain the Engineering Studies syllabus, and integrate science and mathematics disciplines.

Over the past few years, Engineers Australia has worked with teachers in the Newcastle area to better understand what they need to effectively deliver the Engineering Studies curriculum.

**As a result, Engineers Australia developed an eight-module education series to help develop and improve teachers' understanding and appreciation of the field of engineering.**

Year 11 modules include Engineering Fundamentals, Engineered Products and Biomedical Engineering, while Year 12 modules include Civil Structures, Personal and Public Transport, Telecommunications Engineering and Aeronautical Engineering.

In the three years since the Engineering Studies Program began, the content has been continuously updated and improved, and the number of schools engaged with the program has grown from six to 70. Now that the course has been endorsed by the New South Wales Education Standards Authority, we will start to deliver the program across the state.