



The Bright Future STEM Program and your organisation

What is the Bright Future STEM program?

The Bright Future STEM program is a national primary school initiative coordinated by the Australian Resources and Energy Association (AREEA).

The program engages students in Years 5-6 in Science, Technology, Engineering and Mathematics (STEM) activities and promotes the diverse and rewarding career opportunities presented in these fields.

Students are inspired by learning about the career journey of STEM professional role models, particularly females, and engaging in fun, hands-on and interactive STEM-based activities.

Why primary schools?

Research demonstrates that the number of students choosing to pursue STEM-related subjects beyond the standard Australian Curriculum is in decline, particularly among girls.

This is a significant concern for many industries, including the resource and energy sector, who require the next generation of STEM-skilled workers to meet forecasted growth over the coming decades.

Many STEM programs are focused on students in high school and tertiary education; however, this is often too late as they have already decided what subjects they enjoy and selected pathways to pursue.

Industries must work to engage the next generation, particularly females, by piquing their interests from an early age and showcasing the wide range of future career opportunities available from the study of STEM-related subjects.

The Bright Future STEM Program has been designed to provide the necessary access and exposure by presenting STEM professionals as role models and a range of STEM activities including robotics, coding, virtual reality, electronics and engineering challenges.

Role models are sourced from industry companies and work in a variety of vital STEM-skilled careers, including Geologists, Engineers, Technologists and various other trade professionals.

The program introduces female role models to assist in breaking down the stereotypes of many STEM-skilled industries and career pathways that are traditionally male-dominated.



Bright Future STEM Program objectives

The key objectives of the Bright Future STEM Program:

- Delivery of a STEM focused program in Primary schools across Australia.
- Promote females in STEM-based occupations as role models to young students and change perceptions of male-dominated STEM industries.
- Engage students, teachers, and parents/guardians in the increasing importance of STEM and showcase the career opportunities available through the study of STEM related subjects.
- Encourage an interest in STEM by utilising a variety of hands-on, age-appropriate, activities relatable to the real world, and aligned to the Australian National curriculum.
- Inform students of the range of careers and opportunities available through pursuing STEM.
- Increase visibility of female role models in traditionally male-dominated industries and careers, breaking down gender stereotypes and helping industries and organisations realise diversity in their future workforce.

Program Structure and Design

Locations

Bright Future STEM is a national primary school program hosted in rural, region and capital city locations across Australia. The program aims to expose as many students as possible to STEM and careers in the resources and energy sector.

Program format and content

- Each event runs for two hours with up to 100 students attending each session (or in line with participant COVID-safe plans).
- STEM professional role models, particularly females, will present on their personal journey into their STEM career.
- Students participate in hands-on STEM based activities which are aligned with the Australian National Curriculum. Activities range from robotics to virtual reality and engineering, all encouraging critical thinking, problem solving and communication.
- Teachers in hosting schools will be provided with access to a dedicated school page on the Bright Future STEM website, which provides resources and lesson plans to support STEM subjects back in the classroom.
- Information is provided to parents, directing them to a dedicated STEM landing page on the Bright Future STEM website. Here they can learn more about the increasing importance of STEM skills and opportunities related to these subjects in the future.



What the Bright Future STEM team do

- Coordinate key stakeholders in schools and industry.
- Manage all logistics related to each program event.
- Coordinate nominated STEM professionals as industry role models with participating employers.
- Coordinate the experiential STEM activity program with the participating schools.
- Administer the design, implementation, coordination, facilitation, and evaluation of the program.
- Social Media posts relating to the event.
- Advertise the program to schools.
- Auditing and reporting.

Organisational requirements

Below are the ways in which your organisation can contribute to the Bright Future STEM program:

- Providing inspiring industry STEM professionals, particularly females, to present their stories and act as a role model to the next generation.
- Providing additional team members to support STEM activity coaching and further expose students to industry STEM professionals.
- Supplying an experiential STEM activity, if relevant (optional).
- Nominating regions of interest for organisational engagement.

Organisational benefits

- Links to local communities positively showcasing the organisation's engagement and contribution.
- Boost your organisation's profile and engagement with schools, teachers, parents, and students that will become the next-generation workforce.
- Promote your organisation's diverse and rewarding STEM careers pathways and the employment opportunities available in the future.
- Positive branding demonstrating a commitment to supporting both gender diversity in STEM related career opportunities, and the future workforce.
- Professional development opportunity for current employees who will attend as role models and/or activity coaches.
- Recognition and publicity through the program, highlighting participating organisations as being employers of choice, subsequently attracting new talent.
- Recognition gained through the program allowing employers to ensure that candidates in the current labour market see the organisation is committed and invested in engaging with the community and promoting diversity in their organisation.
- Corporate social responsibility.
- Inspiring the future workforce!



How to get involved

The Bright Future STEM program is delivered by the Australian Resources and Energy Employer Association (AREEA)

If you are an AREEA member organisation there are several options for accessing the benefits of this program. If you have any questions regarding the level of membership, feel free to send an email to membership@areea.com.au and we will be able to provide information.

If your organisation is not a member of AREEA, but you are an employer or supplier to the Resources and Energy industry, then membership may be of benefit to your organisation.

You can find out more about what other programs and initiatives we offer by visiting our website – www.areea.com.au. Our friendly membership team are also available to assist with any enquiries.

If you are an organisation or an industry that is looking to increase STEM engagement for the future workforce, there are a number of ways to partner or sponsor the Bright Future STEM program. Drop the team an email via brightfuture@areea.com.au or call us on (07) 3210 0313.

We look forward to working with you!