



Fire-Ed Up DESIGN CHALLENGE

Fire-Ed Up Design Challenge

Join the educational challenge to explore the world of bushfires through STEM! Delve deep into their impacts, learn how STEM aids in mitigation, and be inspired for a future in bushfire management.

Understand bushfire consequences.

Develop STEM skills.

Discover careers in bushfire management.

Engage with the community & raise awareness.

Win prizes for your school.

Be part of this transformative experience!



About the Fire-Ed Up Design Challenge

Students will have 6-weeks to complete a STEM-based design sprint focused on challenges posed by bushfires and the Australian bushfire management sector. Teams will select from a set of three scenarios and design a solution presented either as a 90-second video pitch or poster. A number of Stage 5 teams will then be selected to pitch their ideas at the Young Space Explorers event in December in Sydney!

Scenarios

- New technologies driving bushfire innovations.
- Strategies to protect human life & property.
- Safeguarding our precious fauna & flora.

Important Dates

- **Design Sprint Start:** October 9, 2023
- **Entries close:** November 24th, 2023
- **Stage 5 Pitching Competition (On-line):** November 30th, 2023
- **Winners announced:** November 30th, 2023



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Webinars

The Fire-Ed Up Design Challenge will be supported by a series of informative webinars, led by experts in the field, designed to provide participants with essential knowledge, insights, and tools to better understand bushfire management and to aid them in their challenge tasks.

- **Oct 12:** Program Launch, the Science of Fire with Fizzics Education
- **Oct 20:** Unravel the Bushfire Rating System.
- **Oct 26:** Dive into technologies for bushfire prevention.
- **Nov 2:** Discover how to protect fauna and flora from fires.

Mission Schedule

The Fire-Ed Up Challenge missions will be delivered by subject matter experts and will provide relevant information for the team to complete the challenge in a systematic way using the [iSTEM Engineering Design Process](#) as a guide.

Step-by-Step Schedule

Mission 1: Introduction and Webinar

Mission 2: Define

Mission 3: Identify

Mission 4: Brainstorm

Mission 5: Design

Mission 6: Prototype

Mission 7: Evaluate

Mission 8: Iterate

Mission 9: Communicate

Run these missions at your own pace. Use as little or as much of the Fire-Ed Up resources as needed.



Age Divisions

Fire-Ed Up Challenge is open to all students from Year 7 to Year 10. There are three age divisions for judging:

- Stage 3 - Years 5 and 6
- Stage 4 - Years 7 and 8
- Stage 5 - Years 9 and 10



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Competition Objectives

- Educate you about the effects of bushfires.
- Provide hands-on STEM activities for real-world understanding.
- Spark your interest in STEM careers in bushfire management and environmental sustainability.

How to Register for the Fire-Ed Up Design Challenge

Excited to be part of the Fire-Ed Up Design Challenge? Here's how to secure your spot:

1. Click on the [Registration Link](#) and it will give you access to the introductory Webinar.
2. Fill in your details on the registration page.
3. After registration, you'll receive a confirmation email with information about joining the challenge.
4. Stay tuned for updates and resources to kickstart your design journey!

Get ready to immerse yourself in a unique experience and be a part of solutions for bushfire challenges!

Prizes - All

- Everyone receives a certificate of participation, (template provided to teachers)
- Certificates will be provided to the division winners.
- Each Division winning team will receive a \$200 gift card

Prizes - NSW Schools

- Stage 4 winners will receive a Fire-Ed Up 2024 curriculum pack including class sets of equipment and a Fizzics Education Fire-Ed Up Experience (Total value \$2400)
- Stage 5 winners will receive a Fire-Ed Up hardware and software pack (Total Value \$1000)



Stage 5 - Pitching Competition

Stage 5 students working on the Fire-Ed Up Challenge will also compete in an online pitching competition that will be judged by leaders in the field.

NSW SCHOOLS BUSHFIRE STEM – POSTER COMPETITION

Stage 4 and 5 students can also enter their posters to the NSW School Bushfire STEM - Poster Competition, for the chance to win event more prizes. **Note: Closing date is November 10th**

Related Websites

- [Fire-Ed Up Stage 4 - 5 Website](#)
- [Fire-Ed Up Stage 3 Website](#)
- [NSW Schools Bushfire STEM Poster Competition Website](#)

