Science, Technology, Engineering and Mathematics (STEM) holiday activities

There are a number of activities that students interested in Science, Technology, Engineering and Mathematics (STEM) can get involved in over the school holidays and beyond.

Australia’s Chief Scientist describes STEM knowledge as crucial to Australia’s future. The following support the NSW curriculum study and provide opportunities for students to apply their knowledge beyond the classroom.

- The **STEM video games challenge** is an annual competition suitable for Year 5 students upwards to develop games. Viewing the [2015 winners](#) may encourage students to work towards the 2016 competition using the [linked resources](#).
- **Science by doing** has units of work for children from Year 3 that both entertain and educate students about Science and Engineering.
- Bridge design software, which includes simulated forces and costs, is available free from [Engineering Encounters](#). It is suitable for Year 5 students upwards, who can participate in an international online competition.
- **Engquest** is an Australian initiative to interest students from Year 4 to Year 8 in engineering. The site has a number of quizzes and challenges that provide good information and engaging practical activities.
- **Girl Code** will run computer programming activities for girls in Years 5 to 8 in early January in Sydney, Western Sydney and Wollongong.
- **Exhibition: Designing Your Future** at Sydney Olympic Park, which showcases the work of South Western Sydney Institute’s Lidcombe design students, runs from [Monday 5 December](#) to the end of January and is suitable for all students.
- [The Museum of Applied Arts and Sciences](#) (PowerHouse Museum) has hands on [workshops](#) for children available at different times and for varying age groups.
- The National Computer Science Summer School, is a wonderful opportunity to work with tech savvy students for teachers of all year groups, who are looking for a holiday activity.

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