The A.B. Paterson College and Griffith University STEM Challenge
24 – 25 November 2016

STEM is an abbreviation for Science, Technology, Engineering and Mathematics.

*The A.B. Paterson College and Griffith University STEM Challenge* is a two day event that focuses on solving real world science and engineering problems, using mathematical tools and strategies.

Student participation is capped to a maximum of 200 students. In previous years, the challenge has been oversubscribed, thus early entry is advised to secure a place.

THE CHALLENGE (24 & 25 November)

Past challenges have required students to design rockets and landing modules capable of delivering a payload and traversing the surface of Mars; undertake an investigation into the design of sporting stadiums and lighting systems for specific events; investigate the design implications of theme park thrill rides; and, more recently, undertake an investigation and analysis of the forensic evidence in various crime scenes and articulate the implications for prosecution.

The events and challenges are staged for various year groups, with students being required to draw on their knowledge of science, technology, engineering and mathematics to solve real problems. Students are not only engaged in the problem presented to them, but must develop ways of thinking and communicating by utilising appropriate tools to assist them in solving the problems.

The challenge provides the opportunity for interested students to work with students from other schools from across Australia.

The STEM Challenge is hosted at Griffith University, Gold Coast Campus, and both days will be mentored by experienced teachers and lecturers.

Morning tea and lunch is supplied on both days. Students/Schools will need to be able to provide their own transport to Griffith University.

This year’s STEM Challenge will take place over two days:

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<th>Day One</th>
<th>Day Two</th>
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<td>• Introduction</td>
<td>• Refining models</td>
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<tr>
<td>• Workshops to gain an understanding of the problems set</td>
<td>• Testing of models</td>
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<td>• Teamwork to develop solutions</td>
<td>• Lecture by a university lecturer</td>
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<td>• Collecting of data</td>
<td>• Science show</td>
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<td>• Analysing data</td>
<td>• Presentation and prizes</td>
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REGISTRATION

Individual registrations must be made online via the link on the College website. Where Schools wish to make a multiple student registration, please return the registration form attached. A.B. Paterson College students are to register via their mathematics or science teacher.

To register, please follow the link: https://www.abpat.qld.edu.au/page/stem-modelling-form and complete the online registration details.

Registrations will close, unless fully subscribed earlier, on Friday, 2 September 2016.

OTHER INFORMATION

1. The STEM Challenge is open to students from Years 7 to 10.
2. Please note that there is a strict quota for students in the programme. Registrations will open Monday 18 July 2016 and will close, unless the event fills earlier, Friday, 2 September 2016. Registrations will be processed according to their arrival dates. Once we have reached the quota for each programme, the registration details will be removed from the website. Please note that we are expecting high interest so, to avoid disappointment, please ensure you register as early as possible.
3. Students, who currently have learning support in class, must be accompanied by a learning support person provided by your school, throughout the challenge. Please notify the event conveners, if this is the case.
4. If you have any questions, please do not hesitate to contact Rosa Reverte, rreverte@abpat.qld.edu.au or (07) 5561 4161;
5. We value your participation and want to ensure that your students have an exciting and rewarding experience.