



# ACE



## Math and Science Excellence

Our ACE Math and Science Excellence class has been designed to meet the needs of students who have demonstrated a very high level of capability in the areas of Mathematics and Science.

Jobs QLD's 5-year projection highlights that Design, Engineering, Science, ICT and Health professionals will be some of our fastest growing industries. This connects with our first class teaching and industry connections to ensure our students learn from experienced and passionate leaders in these subjects from Year 7 through to Year 10 and then onto senior pathways. Our classes are designed to challenge, engage, and connect passionate learners in their areas of talent. Combining enrichment and extension experiences in both scientific and mathematical theory and practice, the program offers an array of opportunities for students to excel and develop their passion and skills for future pathways in STEM areas.

### Why ACE Math and Science?

The Math and Science Excellence program offers exceptional challenges to develop students into innovative, creative, and problem-solving experts. Science and Math form the foundation that our students need to be critical and creative citizens in a global environment. Students are given opportunities to be extended through challenging projects and engaging learning activities through the Australian Curriculum that is designed to spark intellectual curiosity. Math and Science Excellence also incorporates broad-ranging enrichment and acceleration activities, exposing students to pathways which are mathematically and science oriented.

### Enrolment requirements

- Primary School academic reports
- ACE Academic Exam results
- NAPLAN test results
- Primary school recommendation

### Class Organisation

Through the provision of a separate extension enrichment class for Science and Math, the teacher and students can work through the Australian Curriculum at a faster pace and study its content at higher levels of complexity.

Students in the ACE Program will follow the same timetable structure and have the same elective choices as their peers. Student progress is still measured against the achievement standards of the Australian Curriculum.

### Co-Curricular and Extra-Curricular Activities

- Spaghetti Bridge Building Challenge
- Wonders of Science
- CSIRO CREST
- STEM Girl Project
- Science and Engineering Challenge
- National Science Week activities
- Mind-Set Challenge
- Australian Mathematics Competition
- International Chemistry Quiz
- Mayors Innovation Award
- SPARQ-ED
- Aurecon Bridge building
- UQ Ambassador School
- CSIRO STEM Professional in Schools

### Course outline

<b>Year 7</b>	Students complete 3 lessons each of ACE Science and Math based on the Australian Curriculum alongside their other core subjects. Enrichment opportunities including extension projects to occur throughout the year. Variety of incursions and excursions including a local Fraser Coast excursion.			
<b>Year 8</b>	Students complete 3 lessons each of ACE Science and Math based on the Australian Curriculum alongside their other core subjects. Enrichment opportunities including extension projects to occur throughout the year. Variety of incursions and excursions including a regional excursion to the Sunshine Coast.			
<b>Year 9</b>	Students complete 3 lessons each of ACE Science and Math based on the Australian Curriculum alongside their other core subjects. Enrichment opportunities including extension projects to occur throughout the year. Variety of incursions and excursions including a metropolitan excursion to Brisbane.			
<b>Year 10</b>	Students complete 3 lessons of Extension Science and 3 lessons of Advanced Mathematics based on the Australian Curriculum alongside their core subjects. Enrichment opportunities include connections to local industry including Advanced Manufacturing and linking to challenging extension learning projects. Variety of incursions and excursions including a possible interstate excursion to highlight the skills learnt over their time in the ACE program.			
<b>Year 11/12</b>	Students complete Math Methods and a Science of their choice (Biology, Chemistry, Physics, Marine Science, Psychology)			
	University Subject – Math or Science			
	<table border="0"> <tr> <td><b>Elective Mathematics Subject</b></td> <td><b>Elective Science Subject</b></td> </tr> <tr> <td>Years 11 and 12 Specialist Mathematics</td> <td>Biology, Chemistry, Physics, Marine Science, Psychology</td> </tr> </table>	<b>Elective Mathematics Subject</b>	<b>Elective Science Subject</b>	Years 11 and 12 Specialist Mathematics
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The ACE program helps foster not just academic skills, but also meaningful connections with staff and fellow students, making it a unique and fulfilling educational experience.

With a focus on developing new skills, we have the freedom to explore and excel in a positive, engaging classroom environment. Teachers understand each of our learning styles, offering support while also nurturing relationships built on trust. This creates an extended learning experience, where we can pursue our goals while enjoying strong, supportive friendships with peers who share similar goals. The program provides extension opportunities that encourage independence and self-directed work, allowing students to remain engaged and excited about their learning.

*Yvette*

ACE Student



Scan here to enrol and access more information!

