



STEM EXCELLENCE

NORTHERN BEACHES STATE HIGH SCHOOL

# STEM Excellence Program

## Why STEM?

The Australian Government regards high-quality science, technology, engineering and mathematics (STEM) education as critically important for our current and future productivity. STEM allows for informed personal decision making and effective community, national and global citizenship.



The global economy is changing. Current jobs are disappearing due to automation and new jobs are emerging every day as a result of technological advances. The continual advances in technology are changing the way students learn and communicate every day. Skills developed by students through STEM provide them with the foundation to succeed at school and beyond.

Employer demand for STEM qualifications and skills is high, and will continue to increase in the future. Currently, 75 per cent of jobs in the fastest growing industries require workers with STEM skills. To be competitive, the Australian workforce needs people who can adapt to a changing workplace. STEM empowers individuals with the skills to succeed and adapt to this changing world.





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The *iXL* STEM Excellence Program is a program that is offered to Year 7–10 students. Entry into this program is by application or invitation only.

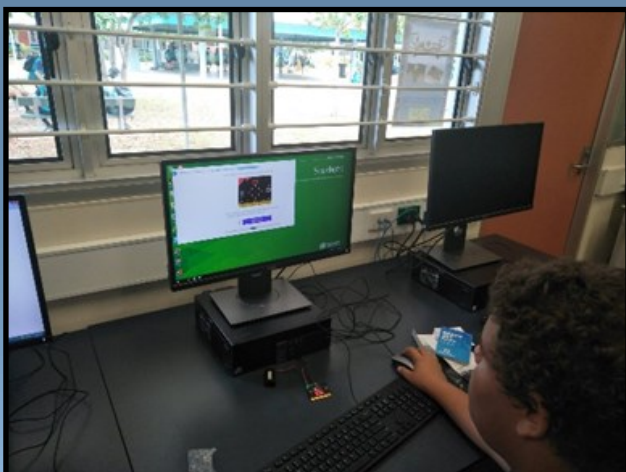
Twelve students from each of the Year 7 and 8 cohorts will be selected to take part in a 70 minute lesson, run once per week during session 4 Wednesday. This weekly lesson will provide students with the opportunity to express their talents in science, technology, engineering and mathematics through project based inquiry challenges and externally offered, real world competitions.

STEM Excellence classes are offered to the Year 9 and 10 cohorts. These classes are speciality classes and form part of the students' standard timetable. They will explore potential career opportunities in STEM industries through visits to key research facilities in the Townsville area and interact with guest speakers who work professionally in these fields. Selection into these Excellence classes will prepare students for senior studies and future career pathways in the field of STEM.

Entry into the *iXL* STEM Excellence Program requires students to meet eligibility criteria. Students applying must have achieved at least a B standard across two or more of the key learning areas during the last reporting period (Science, Digital Technologies, Industrial Technology & Design, or Maths). Please ensure all current and outstanding Resource Hire Scheme payments are paid and uphold a high standard of effort and behaviour.

Students must also have met the National Minimum Standard for Literacy & Numeracy in their previous NAPLAN results.

*iXL* positions are awarded annually, with successful applicants being offered a position for one year. Current *iXL* program participants will be continually reviewed throughout the year. Recipients may be withdrawn if students do not meet the high expectations of the Excellence Program.



**Student Name:**

**Current Year Level:**

**Date:**

Please describe how you have demonstrated your ability to think critically and creatively, work in teams, overcome challenges, communicate your ideas effectively and / or how you have demonstrated your interest in STEM subjects and projects.

**Parent/Guardian Name:**

**Parent/Guardian Signature:**

**Date:**



Return this form to the Administration Office between the hours of 8.00am and 3.00pm, Monday to Friday.

iXL STEM Excellence HoD approval      Yes / No

Principal approval      Yes / No

Letter sent: