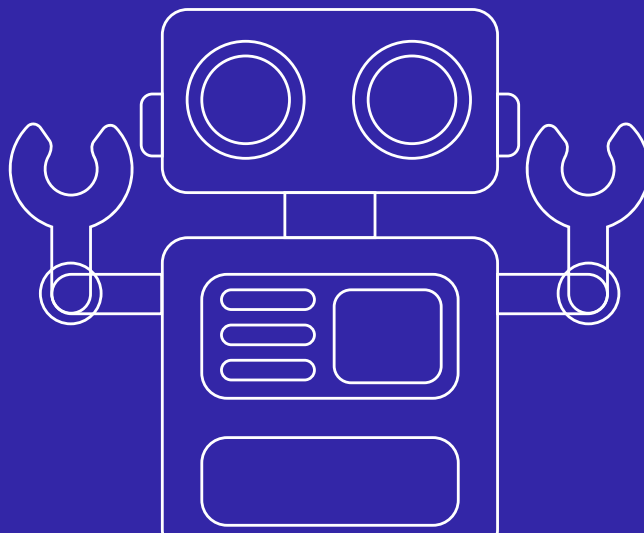
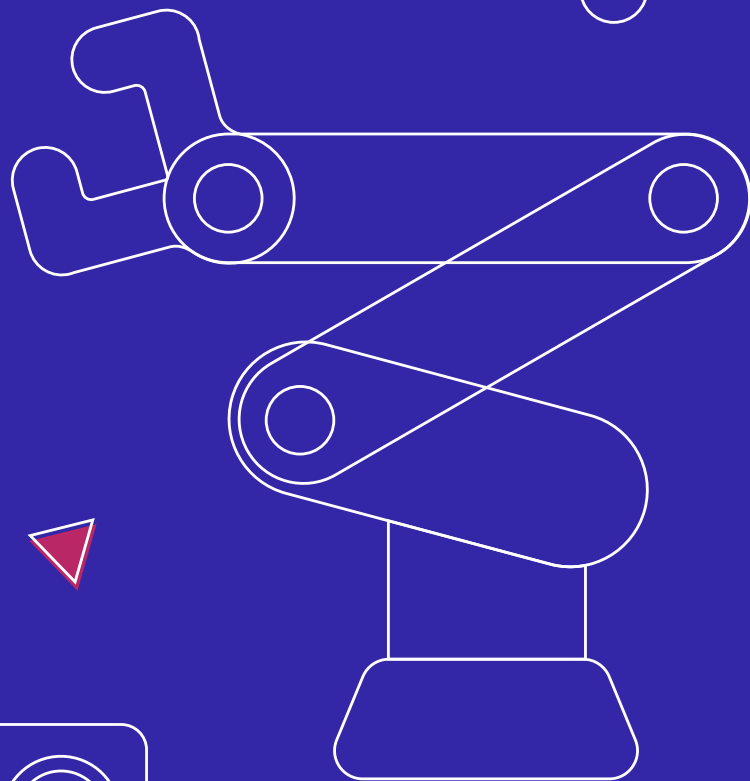
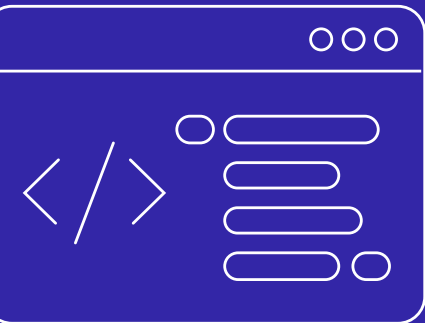


scitech

STEM CLUB

Information Pack





Program Summary

STEM Club is an eight-week, after school, intensive course run by Scitech. It is run for groups of 15-20 student in years 4-6. The program uses collaborative and student centred learning to develop 21st century skills and further students' STEM knowledge. The Aim of STEM Club is to provide a safe and supportive environment where students can work collaboratively, and feel comfortable in making mistakes as they test, troubleshoot and refine their designs. There are two content streams available, including Robotics and Technology, and Tinker and Create.

Thanks to the support of Woodside, STEM Club is free over the course of a term for select schools. Schools are selected based on ICSEA, NAPLAN and the school's alignment with the program. It is available for delivery to primary schools in the Perth metro region. Due to the popularity of the program, a \$500 deposit per eight-week STEM Club booking is required by schools, and is refunded with an average attendance of 15 students per session.

Regardless of the content stream and modules chosen, a showcase is held in the last session, and parents/guardians are encouraged to attend to celebrate their child's achievements and hard work.

Content

There are two different content streams in STEM Club, Tinker and Create, and Robotics and Technology.

Tinker and Create:

Schools can choose either *Electrifying Circuits* or *Motion and Energy* and *Take to the Skies*.

Electrifying circuits sees students learn the principles of electrical circuits, then using their knowledge to create a light-up LED artwork. Students plan their circuit diagram in their workbooks, before using a needle and electrically conductive thread to sew their circuit onto aida fabric.

Motion and Energy explores potential and kinetic energy, and how we can harness the potential energy stored in elastic bands to make catapults, helicopters and cars. Students will spend two weeks exploring catapults and helicopters, testing and refining their constructs, before designing their elastic-band car and constructing their project.

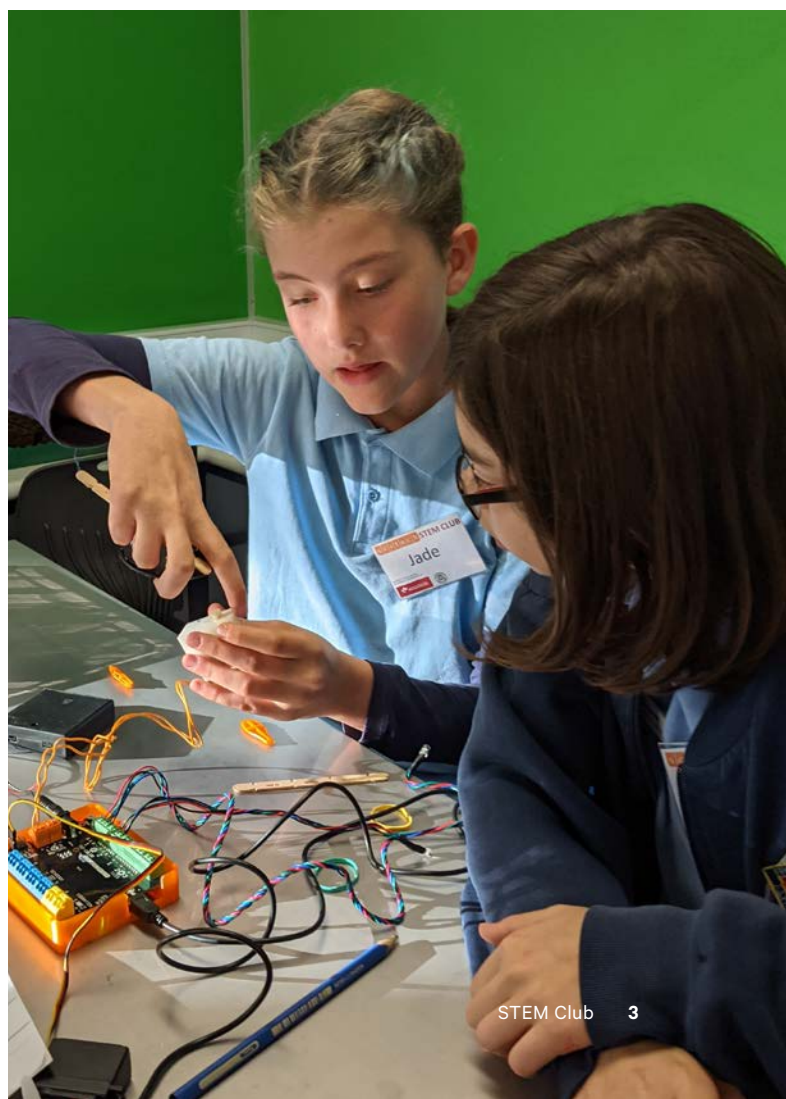
Take to the Skies investigates the fundamental forces of flight through a variety of flying machines. Students will explore these forces through rockets and paper planes before designing and constructing a balsa wood glider. Students will improve their designs through testing and refining.

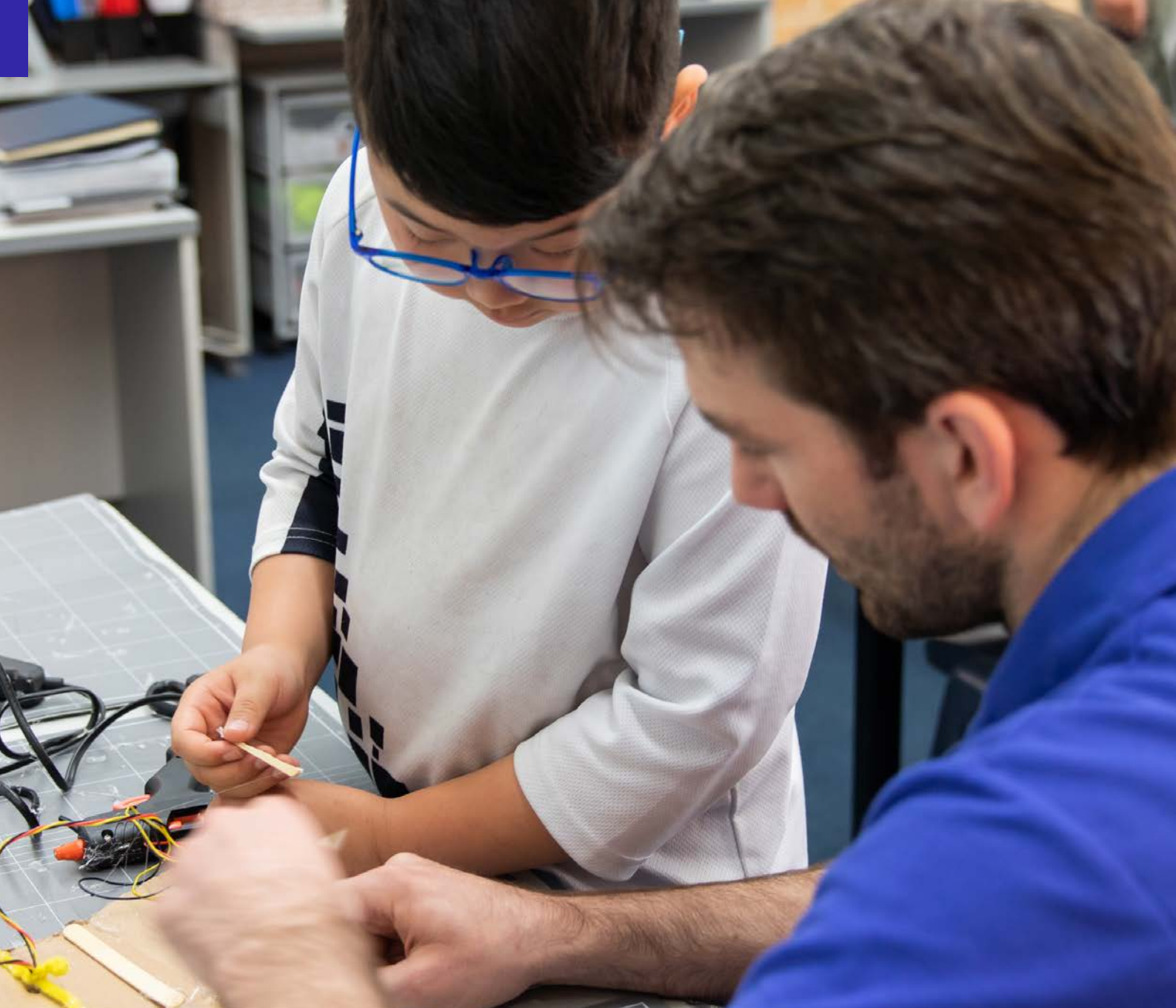
Robotics and Technology:

Schools can select one of the two following 8-week modules. *Animatronics*, and *mBots Coding*.

Animatronics lets students explore the functions of Hummingbird animatronics kits before coding their kit and incorporating it into a 3D construction of their design and making to create an animatronic sculpture. Students develop troubleshooting skills, and resilience in the face of unexpected challenges!

mBots Coding investigates the world of robotics through the versatile mBot robots. From the most basic of functions through to complex integration of sensors, outputs and logic statements, students will design a challenge or task for their robot and then program their robot to complete it.





Session times

STEM Club is delivered in 8-week blocks within a term, with 60 minute sessions each week.

A complementary afternoon tea of fruit and snacks is included all sessions, to give students (and hardworking teachers) a boost of energy after a long day.

Scitech has some ability to adjust afternoon tea to cater for allergies and dietary requirements. Please ensure all relevant information regarding food is communicated to Scitech.

What happens in a session?

A Scitech facilitator will arrive at the school one hour before the scheduled start time to sign into the school and set up equipment as necessary. The presenter will run each session, instructing students as necessary, and all equipment will be provided by Scitech. At the end of the scheduled session, the Scitech presenter will need approximately an hour to clean and pack up their equipment before leaving.

Scitech will provide a workbook and name-badge for each student for the 8-week STEM Club. These will stay at the school (preferably in the room being used), along with any projects the students are working on from week to week. Scitech will provide all equipment and materials needed for the workshops.



Requirements

STEM Club requires that a teacher be present at all sessions, at all times, to provide duty of care and assist in behaviour management. The teacher is required to enthusiastically support the program, and assist students in their projects as needed.

The school must provide A room with access to power, and the ability to display a PowerPoint presentation is also required.

Schools must ensure that students attend the STEM Club sessions. An average attendance of 15 students per session is required for the \$500 deposit to be refunded, however Scitech will be flexible when it comes to challenging circumstances such as COVID-19.

Teacher Checklist for an awesome STEM Club!

	Check when done
Submit Expression of Interest	<input type="checkbox"/>
Receive Email from Scitech's Bookings team	<input type="checkbox"/>
Book STEM Club <ul style="list-style-type: none">• Choose from the following: Tinker and Create, or Robotics and Technology• Choose your modules	<input type="checkbox"/>
Send Scitech any dietary requirements for afternoon tea	<input type="checkbox"/>
Send out forms for students to participate	<input type="checkbox"/>
Pay \$500 deposit to Scitech (to be refunded at the end of the term when an average of 15 students are in attendance each week)	<input type="checkbox"/>

On the day of each session	Check when done
Ensure room is clear and empty for presenter to set up	<input type="checkbox"/>
Meet, or arrange for another member of staff to meet the presenter 60 minutes before the session begins	<input type="checkbox"/>
Remain within the classroom to provide duty of care, behaviour management, and encouragement throughout the sessions	<input type="checkbox"/>
Allow the presenter up to an hour to pack down equipment and leave the school	<input type="checkbox"/>

Before the final session	Check when done
Make sure the parents/guardians have been invited to the showcase event	<input type="checkbox"/>

