

Introduction to Industry – Programme Overview

Year 7 &8 Newcastle

The programme is all about self-discovery and how you can use this knowledge to better understand how you fit into the world of industry in Newcastle. Through looking at renewable energy innovation in your community, you will get an understanding of how the world is moving from fossil fuels to renewables.

We believe that experiencing things first hand is the best way to learn, so we will be taking you to the CSIRO Energy Centre in Mayfield so you can see for yourself how renewable energy can be stored and captured. You will also be putting your new found knowledge to practice with an actual construction of a small solar oven! Will your group's oven be the most powerful and efficient model? You will soon find out!

Sessions 1-3	Students will be introduced to the program and their industry mentors. They will use the “Who I am” program, part of King’s Trust Australia Achieve framework to explore their identities. They will participate in an activity designed to help them identify how their interests and passions can be applied to careers in particular industries, but also across different industries.
Sessions 4-6	<p>This very hands-on block of sessions will involve the students developing their STEM inquiry skills. They will solve a scientific mystery using their powers of observation and learn how to design controlled experiments to isolate variables.</p> <p>Another highlight within this block will involve the students doing experiments to learn about energy conversion and how some can be lost during the process. They will then go on an excursion to the CSIRO Energy Centre in West Mayfield to see how renewable energy can be captured and stored.</p>
Sessions 7-8	During these sessions the students will be able to put all their newly acquired skills to the test. They will form groups to complete an inquiry project into renewable energy. The students will research solar oven designs. Once chosen they will construct their ovens and compete with other groups to make the most powerful and energy efficient model.
Sessions 9-10	<p>The students have had the opportunity to gain insights into how their passions and interests could translate into careers in their local community. They have also seen the impact of emerging technologies on the businesses in their local communities. This is an opportunity to reflect on these learnings as well as the incredible experiences they have had in the program.</p> <p>The showcase will provide them with the opportunity to use their recently acquired confidence and presentation skills to display the inquiry projects, into which they have put so much hard work.</p>