

GIRLS LEADING IN ADVANCED MANUFACTURING

General Information

Every day, you benefit from many of the thousands of products that are designed & manufactured, or are made from raw materials produced in Geelong. From the power and fabrics in your home, food products, plastics and transport components, manufacturing impacts positively on your life by supplying many of the products you use every day.

To make all these products requires engineers, designers, product developers, researchers, process workers, tradespeople and other skilled workers from a diverse range of trades and disciplines.

'Advanced manufacturing' is a major growth area within the manufacturing industry. Manufacturing no longer involves a heavy focus on assembly line workers. The manufacturing industry now needs more highly skilled employees with varied qualifications.

A career in manufacturing can offer things like travel, high salary, and exciting and stimulating work in a dynamic and world competitive industry

Girls Learning about Advanced Manufacturing (GLAM); hosted by GRVEC, supported by the State Government funded *Skilling the Bay* initiative.

GLAM is an educational program introducing Years 9 and 10 female students to the exciting world of advanced manufacturing.

GLAM encourages girls to explore the breadth of careers associated with advanced manufacturing, and STEM (science, technology, engineering, maths) in a fun, creative, problem-solving environment.

What do you do as part of this program?

The program will commence in April 2017 and run through until Oct 2017. Up to 20 girls across Geelong secondary schools will have the opportunity to participate in 6 program events. As a participant you will be involved in a number of activities which will enable you to:

- ❖ Hear from female industry professionals in advanced technologies, design, innovative manufacturing & engineering
- ❖ Tour industry sites
- ❖ Interact in hands-on activities to utilise creativity and problem-solving skills
- ❖ Participate in a leadership workshop
- ❖ Develop presentation and communication skills
- ❖ Have the opportunity to shadow mentors in industry
- ❖ Explore university and TAFE options

At a Glance;

- ❖ Tour industry sites such as VIVA, CaronLab, CSIRO, Ford Proving Ground, AECOM, Telstra and Deakin University's CADET facility
- ❖ Experience a Virtual Reality lab, explore Lean principles in manufacturing, learn communication & leadership skills, develop innovative solutions to an engineering challenge

Am I eligible to apply?

- You must be a Year 9 or 10 student in the Geelong region.
- If you are potentially interested in pursuing a professional pathway or trade into any aspect of advanced technology, design, engineering or innovative manufacturing.
- If you have a strong interest in a math/science pathway we encourage you to apply

How do I get involved?

Complete the application form and provide answers to all six questions. Make sure you and your parent/guardian signs the application & that your school careers teacher receives it by Friday 31 March.

We will be notifying all students of the outcome of their application over the April school holidays.

What previous participants have said about the program:

"I thought it was a well-planned program, I can't think of a thing we didn't do!"

"I believe the program was very beneficial and helped out a lot with my views on the manufacturing industry. It has given me a lot of life skills as well."

"It was a lot of fun seeing new places and work environments and also meeting lots of new people from all different schools."

"Being in the program has helped me choose school subjects for my future career"

Facts and Stats on Manufacturing in Geelong *

- Geelong's manufacturing sector employs 10,200 people across 400 companies
- Geelong is home to important education and research facilities such as: CSIRO Manufacturing, CSIRO Australian Animal Health Laboratory, Deakin University's 'Geelong Technology Precinct', Deakin University's CADET facility (Centre for Advanced Design in Engineering Training), Deakin University's carbon fibre hub (Carbon Revolution, Quickstep, Carbon Nexus), The Gordon Institute of TAFE and the Geelong Technical Education Centre.
- Geelong is home to important education and research facilities such as: CSIRO Manufacturing, CSIRO Australian Animal Health Laboratory, Deakin University, including Institute for Frontier Materials (IFM); The Gordon Institute of TAFE and the Geelong Technical Education Centre.
- The manufacturing sector generates \$900 million in salaries and wages for the Geelong community <http://www.economicprofile.com.au/geelong/economy/wages-salaries>
- The sector generates \$9.6 billion of the region's total economic output (which is 37% of the total).
- Geelong has a diverse manufacturing and processing sector with representation across food, automotive (manufacturing design & research), textiles, petroleum, cement, chemicals, timber and engineering
- Deakin University's 'Geelong Technology Precinct' (GTP) is at the forefront of global research in the fields of advanced materials, nanotechnology, intelligent systems, biotechnology & the environment.

* Information obtained from the Geelong Manufacturing Council