



SCIENCE AND  
INDUSTRY  
ENDOWMENT  
FUND



# STEM Community Partnerships Program

## Canterbury Bankstown local scenario

### Jobs of the future

Manufacturing is an important industry in the City of Canterbury Bankstown, with many of the leading NSW manufacturing companies located in the area. In 2020, the manufacturing industry had the largest number of businesses employing 20 to 199 people in the area, which accounted for 21.6% of all businesses.

Many of these businesses are struggling to find workers, as demand for people with the relevant skills is ever increasing and the pipeline of people choosing the more traditional trades is not keeping up with demand. While jobs in traditional manufacturing were thought to be under threat due to automation and the adoption of Industry 4.0, jobs in manufacturing are not disappearing but evolving, especially as a result of COVID-19. Industry 4.0 is the digitisation of traditional manufacturing and industrial practices and the integration across the entire production chain.

Many roles in manufacturing still rely on traditional skills such as plumbing, welding, electrical, mechanical and sheet metal. By helping people understand the importance of these core technical skills and that the knowledge and skills to work with emerging technologies can be developed in existing roles, they will be better informed to make career decisions.

Exposing young people to a range of jobs and matching students with employers is a challenge for local Council, as it aims to build its local workforce and ensure that people who live in the City of Canterbury Bankstown work and enjoy it to its full potential.

How your Council tackles the complexity of this issue impacts you and your community, now and in the future.



Lab22 creates value for Australia's manufacturing industry, February 2020

### Your task

Your task is to use the information above and resources provided below as a start to identify a local problem and design a STEM-focussed solution.

(Question, Design, Explore, Communicate)

## Resources

### CSIRO research

- Small satellites could lead to new future jobs  
<https://digitalcareers.csiro.au/en/News/Dec2018Jan2019/NanoSatellites>
- Business Innovation Challenge sparks new collaboration  
<https://www.mq.edu.au/newsroom/2020/10/02/business-innovation-challenge-sparks-new-collaboration/>

### Reports

- Connective City 2036  
<https://storymaps.arcgis.com/stories/cc273aa8bdd5471c83a35034dd931082>

### Articles and other resources

- Aerotropolis takes a Quickstep towards being an advanced manufacturing leader, 14 August 2020 <https://wpc.a.sydney/aerotropolis-takes-quickstep-towards-being-advanced-manufacturing-leader>
- Australia's manufacturing pivot in a post-coronavirus world as COVID-19 creates 'new era' for the economy, ABC News, April 2020 <https://www.abc.net.au/news/2020-04-19/scott-morrison-government-coronavirus-covid19-manufacturing/12153568>
- Make it Happen: The Australian Government's Modern Manufacturing Strategy <https://www.industry.gov.au/data-and-publications/make-it-happen-the-australian-governments-modern-manufacturing-strategy/our-modern-manufacturing-strategy>
- Automation to transform manufacturing employment landscape by 2034 <https://www.manmonthly.com.au/news/automation-transform-manufacturing-employment-2034-according-accs-report/>
- Businesses by industry in the Canterbury Bankstown area <https://economy.id.com.au/canterbury-bankstown/number-of-businesses-by-industry?BType=400>
- Traditional skills in trades needed for new jobs in advanced manufacturing, Sydney Morning Herald, May 2020 <https://www.smh.com.au/business/workplace/traditional-skills-in-trades-needed-for-new-jobs-in-advanced-manufacturing-20200504-p54pqx.html>