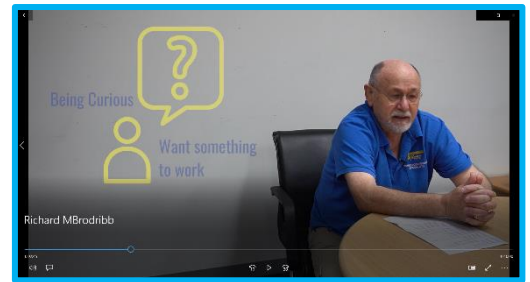
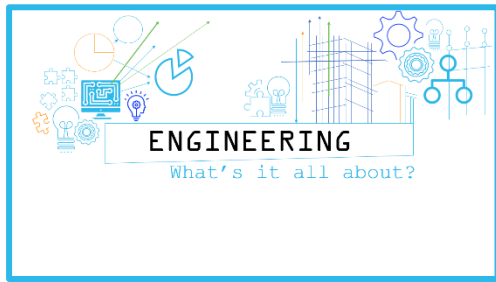


Industry Exploration – Electrical Engineering



Overview

The Accreditation Board for Engineering and Technology (ABET) defines engineering as "that profession in which knowledge of the mathematical and natural sciences gained by study, experience, and practice is applied with judgment to develop ways to utilize, economically, the materials and forces of nature for the benefit of mankind."

But do young people really know what engineering entails? This Industry Exploration on Engineering defines what engineering really is, the different types of engineering roles and provides a firsthand insight into a local engineering business.

Resources provided

Resource 1.

PowerPoint exploring Engineering including:

- Defining Engineering
- Exploring the roles of engineers and what they do within their work
- Identifying the different types of work that encompass engineering
- Distinguishing between facts and myth about engineering
- Exploring different people who are now engineers

Resource 2.

7X videos of interviews of current employees in Engineering business M. Brodribb

Video 1: Richard Brodribb – Business Owner and Engineer (12:45 mins)

Video 2: Ari Pepe – Senior Engineer (10:00 mins)

Video 3: Maxwell Brodribb – Junior Engineer (Engineer Assistant) (11:48 mins)

Video 4: Luke Scheller – Electrician (12:40 mins)

Video 5: Andrew Stapledon – Apprentice Electrician (11:00 mins)

Video 6: Diane Bretes – Printed Circuit Board Assembler (5:40 mins)

Video 7: Gerry Sambrana – Coil Winder (6:44 mins)

Resource 3.

Virtual Tour of a local engineering business (LENGTH)

Video of each interviewee in action completing tasks in the workshop (LENGTH)

Learning Objectives

- Understand the careers associated with the Electrical Engineering Industry
- Identify the types of skills that are needed for specific roles
- Identify the types of skills that are useful across many roles
- Understand and explore the different pathways that can lead to a career in Engineering Industry
- Identify and explore ways to become work ready from an employers perspective

Program Level	Duration	Learning Areas	
Years 10-12	2 – 3 lessons	Work Related Skills	Communication
		Interpersonal Skills	Literacy
		Critical Thinking	Personal Reflection

Required Resources

- Computer
- Interactive Whiteboard to present workshop
- Laptop access by students if possible

VCAL Learning Areas

Work Related Skills Foundation Unit 1 Learning outcome 4.1

- Research and identify different employment opportunities within a selected workplace

Work Related Skills Foundation Unit 1 Learning outcome 4.3

- Interview an individual currently employed in the selected workplace and describe career opportunities, qualifications, and conditions of employment

Work Related Skills Intermediate Unit 1 Learning outcome 4.1

- Research and identify a variety of employment opportunities in a selected workplace, using appropriate technology

Work Related Skills Intermediate Unit 1 Learning outcome 4.3

- Interview an individual who represents workers from the selected workplace, focusing on current workplace issues, agreements and roles and responsibilities of employers and employees

Work Related Skills Senior Unit 1 Learning outcome 4.1

- Describe and analyse current employment opportunities for a selected industry

Work Related Skills Senior Unit 1 Learning outcome 4.2

- Investigate the knowledge, skills and attributes required for employment in the selected industry