



## Academy Unit 3 Overview

Welcome to Unit 3! In this unit you will complete a more complex engineering design challenge and explore various engineering education and career pathways. The Unit 3 themes are:

- Critical thinking
- Creativity
- Goal setting

### Schedule

These are the three types of activities you will spend time on in Academy:

- Engineering Design Challenges ● Employability Skills ● Pathways Planning

**Unit 3 Engineering Design Challenge:** \_\_\_\_\_

Activity	Description	Date
<b>Unit 3 Introduction</b>	Review the schedule, themes, and general expectations	
<b>Pathways Planning sessions</b>	Small group time	
<b>Life Map</b>	Reflect on your achievements and plan for the future	
Engineering Design Challenge: <b>Introductory Activity</b>	Explore the problem and understand the criteria and constraints of the design challenge	
Engineering Design Challenge: <b>Identify and Define the Problem</b>	Research the problem and the impact it has on people around the world	
Engineering Design Challenge: <b>Gather Information</b>	Gather information to explore your design ideas	
<b>Find Your Fit in Postsecondary Education</b>	Learn about the different postsecondary education options available to you	
<b>Understanding the Admissions Process</b>	Hear from an admissions advisor about the postsecondary application process	
Engineering Design Challenge: <b>Generate Possible Solutions</b>	Sketch your different ideas and select one idea to test	
Engineering Design Challenge: <b>Create a Prototype</b>	Build the first prototype of your design	



Engineering Design Challenge: <b>Test and Evaluate the Prototype</b>	Test your design and collect data to make improvements	
Engineering Design Challenge: <b>Refine and/or Redesign the Solution</b>	Refine your prototype	
Engineering Design Challenge: <b>Present the Solution: Prepare</b>	Prepare to present your design	
<b>Engineering Career Panel</b> <b>Interview an Engineer</b>	Hear directly from engineering professionals about their career journey	
<b>Engineering Design Presentations</b>	Demonstrate and present your design	
<b>Student Reflection</b>	Reflect on your experiences in Unit 3	
<b>Engineering Development Survey</b>	Complete a survey about your growth as an engineer	

