

2025 Course Outline **Aeronautical Engineering**



Curriculum Goals:

To provide students with the opportunity to explore and experience the work of an aeronautical engineer, exposing them to the varied opportunities in aeronautical engineering and to assist them in making an informed decision for further study and/or employment. This course is practical and experiential. The student will be given the opportunity to learn through engaging in realistic and authentic tasks.

Vocational Pathway: Manufacturing and Technology

Learner Goals and Outcomes: On completion of this course, the student will be able to:

- 1. Demonstrate knowledge of the principles of aircraft flight.
- 2. Discuss standard aircraft maintenance practices.
- 3. Discuss the history of Aviation and the development of aircraft.
- 4. Identify aviation support structures, aircraft types and operations in New Zealand.
- 5. Demonstrate knowledge of aviation career and training options.

Unit Standards					
Unit No	Title	Level	Credits	Version	SR/R
19585	Describe the development of aviation from pre- World War 1 through to current times	2	8	4	
20677	Demonstrate knowledge of the principles of aircraft flight	2	2	3	
20676	Demonstrate knowledge of aviation career and training options	2	3	4	
19586	Identify aviation support structures, aircraft types and operations in New Zealand	2	3	4	
27731	Demonstrate knowledge of working within an aeronautical engineering workplace	3	4	4	
	Total DAS Credits		20		

Vocational Pathways: SR = Sector Related; R = recommended

To receive a Vocational Pathways Award, students must gain NCEA Level 2. Within the 80 credits required to achieve NCEA Level 2, 60 of these Level 2 credits must be from the recommended standards in one or more pathways, including 20 Level 2 credits from sector related standards.

Methods of Assessment: Four forms of assessment will be used:

- 1. Written assessment
- 2. Practical activities and observations
- 3. Practical demonstrations
- 4. Group project