

## 2017 Course Outline Mechanical Engineering Year 2

## **Curriculum Goals:**

To provide the student with the opportunity to experience the work of a mechanical engineer 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. In addition, the student will get the opportunity to build a grass kart as their practical project.

Vocational Pathway: Manufacturing and Technology

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

- 1. Produce simple engineering component drawings using CAD software
- 2. Produce components by performing basic engineering turning operations
- 3. Decide if they wish to pursue a career in the mechanical engineering industry

Unit Standards					
Unit No	Title	Level	Credits	Version	SR/R
2433	Produce simple engineering component drawings using CAD software	2	6	7	SR
11662	Produce components by performing basic engineering turning operations	2	12	4	
	Total NZQF Credits		18		

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	Requirement for Successful Completion:			
Four forms of assessment will be used:	To successfully complete the course, the student must:			
<ol> <li>Group project Produce a 3D CAD drawing</li> <li>Simulated practical tests</li> <li>Practical demonstrations</li> <li>Group project – grass kart build</li> </ol>	Meet all learning outcomes for this course by successfully completing all assessment requirements.			