



Level 1 Mechanical Engineering : (L1MEC)

NCEA Level:	Level 1
Primary Qualification:	NCEA / Trades Standards
Primary Learning Area:	Technology
Date:	2020
Teacher:	To be confirmed



Standards on Offer

NCEA Level	Standard Number	Standard Descriptor	Credits	Assessment	Literacy	Numeracy	Vocational Pathways
2	US 17676 04	Carry out a pre-drive vehicle check on a light motor vehicle	3	Internal	No	No	N/A
1	US 22923 03	Demonstrate basic engineering workshop skills under close supervision	12	Internal	No	No	C&I, M&T, PI
1	US 22924 03	Develop a simple product using engineering materials	10	Internal	No	No	C&I, M&T, PI
1	US 22926 03	Demonstrate knowledge of safety procedures in a specific engineering workshop	2	Internal	No	No	C&I, M&T, PI
Total Available Credits			27				

*Note: Courses are subject to change with the review of courses at the end of each year. Course is **NOT** endorsable.*

Course Outline

Term 1 3 February - 9 April 2020 (10 weeks)	Term 2 28 April - 3 July 2020 (10 weeks)	Term 3 20 July - 25 September 2020 (10 weeks)	Term 4 12 October - early November 2020 (4 weeks)
Course Introduction US 22926 Safety US 22923 Skills	US 22923 Skills US 22924 Develop a product	US 22924 Develop a product	US 17676 Pre-drive vehicle check Course evaluation
KEY DATES Week 3: Safety	KEY DATES: Week 7: Skills	KEY DATES: Week 10: Develop a product	KEY DATES: Week 3: Pre-drive vehicle check

What will I learn and how will I learn?

Mechanical engineers make things! They use a variety of materials and manufacturing processes to design and build machinery, products and other cool stuff. It's mechanical engineers who make motorbikes, cars, tools, cell phone towers, aluminium boats, wrought iron products and so much more.

The Engineering Industry Training Organisation (Competenz) offers schools the National Certificate in Mechanical Engineering Level 1. This qualification prepares students for real jobs in the engineering industry by developing all kinds of relevant skills and knowledge. Students develop confidence using a variety of hand and machine tools, measuring and welding equipment. This empowers them to work more and more independently and with increasing skill. Students learn to communicate ideas through drawings and plans. This enables them to reproduce products to a high standard or to design and develop their own ideas and share them efficiently with others.

Students are taught safe practices in preparation for industry. Caring for our excellent facilities make students part of a long tradition of quality students who can be recommended by Kaitaia College staff to future employers.

Year 11 students complete two major projects: a toolmaker's clamp and a personalised product based on a different theme each year.

Entry Criteria

Entry into this subject is dependent on the satisfactory completion of Year 10 Metal Technology, or by approval from Ms Michelle Green (Head of Learning Area). For safety reasons, there are limited spaces on this course.

Authenticity

All students are expected to follow the policy outlined in the Kaitaia College NZQA Student Handbook. Failure to comply will result in a "Not Achieved" grade for the affected assessment/s.

Conditions for Assessment

Most assessment will be completed with a mixture of in class and out of class time. However, some standards require work only to be completed in class time. This is to ensure authenticity, ie, all work that students submit is their own. It is important that they understand the conditions of assessment for these standards and that they direct any questions about when and how they are able to work on them to their teacher.

Submitting Internal Assessments

It is important that students take note of the due dates for their internal assessments. All internal assessments must be submitted on or prior to the due date, unless prior approval has been granted for special circumstances (refer to their NCEA guidelines or talk to their teacher about this). Assessments that are submitted after the due date, without prior approval, will receive a Not Achieved.

Resubmissions and Reassessments

Currently, there will be no opportunity in this subject for resubmissions or reassessments.

Acknowledgement of Effort

It is expected that all students will work to the very best of their ability. All students may be eligible to earn in-house Motivational Certificates for Merit or Excellence.