

COURSE INFORMATION

SPECIALIST ENGINEERING	SHTEN	2026	TECHNOLOGY
HE AHA TE WHAKAMAARAMATANGA O TEENEI MARAU? - WHAT IS THIS COURSE ABOUT?			
<p>Have you ever wondered what goes into creating the objects around us? This engineering course offers a hands-on journey into the world of making, where you'll explore the fascinating processes behind design and fabrication. You'll develop practical skills in machining and welding, learning to shape resistant materials into functional and impressive products. If you're curious about how things are built and enjoy the challenge of bringing ideas to life, this course provides a unique opportunity to develop valuable craft skills and a deeper understanding of engineering.</p>			
HE AHA TAAKU E AKO AI? - WHAT TYPES OF LEARNING ACTIVITIES WILL I DO?			
<p>This course will develop your practical engineering skills and understanding of manufacturing processes as you engage in a range of different individual and project-based learning activities such as:</p> <ul style="list-style-type: none">You will learn to safely operate manual mills and lathes, understanding how these machines work and how to control them.You'll develop essential measuring skills and learn about machining concepts like cutting speed, feed speed, and the properties of different materials.You'll explore metal fabrication techniques. This will involve learning about different cutting methods for metal, how to safely prepare metal for joining, and the basics of various welding processes.You'll learn to interpret job specifications and select appropriate techniques to achieve finished outcomes. You'll also develop your ability to plan and sequence machining and fabrication steps, considering the best construction methods.Throughout the course, you'll learn and apply good work practices, including essential health and safety procedures, ensuring a safe working environment.			
EOTC OPPORTUNITIES & COMMUNITY CONNECTION	PATHWAYS		COURSE REQUIREMENTS (IF APPLICABLE)
Not at this time	<p>PREFERRED PRIOR LEARNING: Previous Materials Technology experience would be beneficial, but not necessary.</p> <p>LEADS ON TO (FURTHER STUDY): Specialist Engineering Year 2, Specialist Building and Construction or Mastery Hard Materials</p>		

ASSESSMENT OPPORTUNITIES

STANDARD(S)												
ESTIMATED DUE DATE	STANDARD & VERSION	NCEA SUBJECT	LEVEL	STANDARD TITLE	CREDIT TOTAL	LIT	NUM	UER	UEW	I/E	ASSESSMENT MODE	FURTHER ASSESSMENT OPPORTUNITY
Completed in blocks through the year	32053 v1	Mechanical Engineering	2	Demonstrate knowledge of and apply good work practices when performing machining operations in MaPS environment	7					I	Workbook & Observation	N
End of Term 3	91344 v4	Construction and Mechanical Technologies	2	Implement advanced procedures using resistant materials to make a specified product with special features	6					I	Portfolio	N
SUBJECT ENDORSEMENT NOT AVAILABLE				SUBJECT CREDIT TOTAL	13							

FREQUENTLY ASKED QUESTIONS

- What happens if I am struggling to meet a deadline?
 - If you have a legitimate reason, you can apply for an extension. More information and the extension form can be found [here](#).
- Can I use AI in my assignments?
 - Usually not for assessed work, but on occasion yes, depending on what stage of the assignment you are at. Using AI can often result in a [breach of NCEA rules](#). Please read [the Authenticity section](#) on Te Hinaki carefully and ask your teacher for guidance before you use AI.
- Can I get a resubmission on assessments?
 - Resubmissions may be offered if, in the opinion of the teacher assessing it, you are close to the Achieved grade boundary. More information about this can be found [here](#).
 - If you think there has been a mistake with how your assignment has been graded, there is an appeals process you can follow. Go [here](#) for more information.
- What’s the difference between a RESUBMISSION and a FURTHER ASSESSMENT OPPORTUNITY?
 - A **resubmission** may be offered by your teacher after an assessment has been marked if, at the teacher’s discretion, your work was given NOT ACHIEVED but is close to the ACHIEVED boundary. A resubmission will allow you to do extra work for a short period of time (usually about an hour), without any further teaching, to bring the grade from a NOT ACHIEVED to an ACHIEVED. No higher grade than this is possible for a resubmission.
 - A **further assessment opportunity** is a brand new assessment task for a Standard that is offered to students after further teaching has occurred. This is offered to all students in the course, although not everyone is obliged to take it up. The higher of the two grades will be reported to NZQA. Because further assessment opportunities require extra teaching time and extra time to complete the assessment it is often not feasible for further assessment opportunities to be offered.

