NCEA Technology CMT / Processing Remote Learning and Assessment

NZQA has considered the impacts of the Covid-19 virus on teaching, learning and assessment programmes for NCEA Technology CMT/Processing.

This document includes guidance for both internal and external Technology CMT/Processing Achievement Standards.

General Guidance

If students have an internet connection, there are a number of options for collaborative working available to them. For example, they may be able to use video conferencing or the facilities of a cloud-based platform, or a Learning Management System.

Care must be taken when students are interacting online to ensure their safety.

There may be issues around access and equity for some students, which you will need to consider in your programme planning.

For standards that have a practical component, students will need access to specialist equipment or tools and materials. Most learners are unlikely to have this access.

Implement standards require assessors to judge independence and accuracy for Merit, and economy for Excellence. Evidence of health and safety is required for Achieved.

Supporting evidence

Evidence for these standards could be collected in a number of ways:

- Using cameras to capture or record what the learners were saying.
- Annotations of images. Take photos, then print them or annotate digitally.
- Video with voiceover using programs such as screen casting software.
- Using e-portfolio platforms to collate digital evidence.
- Written portfolios.

Technology CMT/Processing Matrix

***KEY**: A colour-coding system to categorise standards according to the advice in this document.*

Green	These standards are suitable for remote teaching, learning and assessment.
Blue	Teachers can facilitate assessment against these standards by remote learning with guidance (refer to General Guidance above).
Red	These standards present significant challenges for remote teaching, learning and assessment.

Domain	Level 1	Level 2	Level 3
Construction & Mechanical Technologies	**AS 91057** **1.20** **Implement basic procedures using resistant materials to make a specified product** As this standard requires specialist equipment and materials, it is suggested that this standard be assessed once students have safe access to materials/resources/specialist equipment. 6 credits Internal	**AS 91344** **2.20** **Implement advanced procedures using resistant materials to make a specified product with special features** Learners may be able to research suitable alternative techniques to achieve special features and develop the order of construction. As this standard requires specialist equipment and materials, it is suggested that this standard be assessed once students have safe access to materials/resources/specialist equipment. 6 credits Internal	**AS 91620** **3.20** **Implement complex procedures to integrate parts using resistant materials to make a specified product** For version 3 learners may be able to research suitable complex procedures and develop the order of construction. Version 4 requires trialling. Research may help to inform the trialling of complex procedures and the developing the order of construction. This may enable the learner to do focused trialling on return to the classroom As this standard requires specialist equipment and materials, it is suggested that this standard be assessed once students have safe access to materials/resources/specialist equipment. 6 credits Internal

Domain	Level 1	Level 2	Level 3
	AS 91058 **1.21** **Implement basic procedures using textile material to make a specified product** As this standard requires specialist equipment and materials, it is suggested that this standard be assessed once students have safe access to materials/resources/specialist equipment. 6 credits Internal	**AS 91345** **2.21** **Implement advanced procedures using textile materials to make a specified product with special features** Learners may be able to research suitable alternative techniques to achieve special features and develop the order of construction. As this standard requires specialist equipment and materials, it is suggested that this standard be assessed once students have safe access to materials/resources/specialist equipment. 6 credits Internal	**AS 91621** **3.21** **Implement complex procedures using textile materials to make a specified product** Research may help to inform the trialling and selection of techniques and developing the order of construction. This may enable the learner to do focused trialling on return to the classroom. As this standard requires specialist equipment and materials, it is suggested that this standard be assessed once students have safe access to materials/resources/specialist equipment. 6 credits Internal
	AS 91059 **1.22** **Demonstrate understanding of basic concepts used to make products from resistant materials** Where learners have access to research materials, this standard is suitable for distance learning and assessment on digital platforms, such as learning management systems, video conferencing or online documents. 4 credits Internal	**AS 91347** **2.22** **Demonstrate understanding of advanced concepts used to make products** Where learners have access to research materials, this standard is suitable for distance learning and assessment on digital platforms, such as learning management systems, video conferencing or online documents. 4 credits Internal	**AS 91622** **3.22** **Implement complex procedures to make a specified product using a Computer Numerical Controlled (CNC) machine** As this standard requires specialist equipment and materials, it is suggested that this standard be assessed once students have safe access to materials/resources/specialist equipment. 4 credits Internal

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	AS 91060 **1.23** **Demonstrate understanding of basic concepts used to make products from textile materials** Where learners have access to research materials, this standard is suitable for distance learning and assessment on digital platforms, such as learning management systems, video conferencing or online documents. 4 credits Internal	**AS 91346** **2.23** **Demonstrate understanding of advanced concepts used to make textile products** Where learners have access to research materials, this standard is suitable for distance learning and assessment on digital platforms, such as learning management systems, video conferencing or online documents. 4 credits Internal	**AS 91623** **3.23** **Implement complex procedures to create an applied design for a specified product** Learners may be able to develop the complex design and research suitable alternative techniques, to apply the design. Note: these techniques do need to be trialled. The research could inform the trialling, once the learner returns to school. As this standard requires specialist equipment and materials, it is suggested that this standard be assessed once students have safe access to materials/resources/specialist equipment. 4 credits Internal
	AS 91061 **1.24** **Demonstrate understanding of basic concepts related to structures** Where learners have access to research materials, this standard is suitable for distance learning and assessment on digital platforms, such as learning management systems, video conferencing or online documents. 3 credits Internal	**AS 91348** **2.24** **Demonstrate understanding of advanced concepts related to structural frameworks** Where learners have access to research materials, this standard is suitable for distance learning and assessment on digital platforms, such as learning management systems, video conferencing or online documents. 3 credits Internal	**AS 91624** **3.24** **Demonstrate understanding of a structural system** Where learners have access to research materials, this standard is suitable for distance learning and assessment on digital platforms, such as learning management systems, video conferencing or online documents. 3 credits Internal

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	AS 91062 **1.25** **Demonstrate understanding of basic concepts related to machines** Where students have access to research materials, this standard is suitable for distance learning and assessment on digital platforms, such as learning management systems, video conferencing or online documents. 3 credits Internal	**AS 91349** **2.25** **Demonstrate understanding of advanced concepts related to machines** Where students have access to research materials, this standard is suitable for distance learning and assessment on digital platforms, such as learning management systems, video conferencing or online documents. 3 credits Internal	**AS 91625** **3.25** **Demonstrate understanding of a complex machine** Where students have access to research materials, this standard is suitable for distance learning and assessment on digital platforms such as learning management systems, video conferencing or online documents. 3 credits Internal
	AS 91096 **1.26** **Make basic adaptations to a pattern to enable a design to fit a person or item** As this standard requires specialist equipment and materials, it is suggested that this standard be assessed once students have safe access to materials/resources/specialist equipment. 4 credits Internal	**AS 91350** **2.26** **Make advanced adaptations to a pattern to change the structural and style features of a design** As this standard requires specialist equipment and materials, it is suggested that this standard be assessed once students have safe access to materials/resources/specialist equipment. 4 credits Internal	**AS 91626** **3.26** **Draft a pattern to interpret a design for a garment** As this standard requires specialist equipment and materials, it is suggested that this standard be assessed once students have safe access to materials/resources/specialist equipment. 6 credits Internal

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Processing Technologies	**AS 91082** **1.60** **Implement basic procedures to process a specified product** As this standard requires specialist equipment and materials, it is suggested that this standard be assessed once students have safe access to materials/resources/specialist equipment. 4 credits Internal	**AS 91351** **2.60** **Implement advanced procedures to process a specified product** As this standard requires specialist equipment and materials, it is suggested that this standard be assessed once students have safe access to materials/resources/specialist equipment. 4 credits Internal	**AS 91643** **3.60** **Implement complex procedures to process a specified product** As this standard requires specialist equipment and materials, it is suggested that this standard be assessed once students have safe access to materials/resources/specialist equipment. 6 credits Internal
	AS 91083 **1.61** **Demonstrate understanding of basic concepts used in processing** Where students have access to research materials, this standard is suitable for distance learning and assessment on digital platforms, such as learning management systems, video conferencing or online documents. 4 credits Internal	**AS 91352** **2.61** **Demonstrate understanding of advanced concepts used in processing** Where students have access to research materials, this standard is suitable for distance learning and assessment on digital platforms, such as learning management systems, video conferencing or online documents. 4 credits Internal	

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	AS 91084 **1.62** **Demonstrate understanding of basic concepts used in preservation and packaging techniques for product storage** Where students have access to research materials, this standard is suitable for distance learning and assessment on digital platforms, such as learning management systems, video conferencing or online documents. 4 credits Internal	**AS 91353** **2.62** **Demonstrate understanding of advanced concepts used in preservation and packaging for product storage** Where students have access to research materials, this standard is suitable for distance learning and assessment on digital platforms, such as learning management systems, video conferencing or online documents. 4 credits Internal	**AS 91644** **3.62** **Demonstrate understanding of combined preservation mechanisms used to maintain product integrity** Where students have access to research materials, this standard is suitable for distance learning and assessment on digital platforms, such as learning management systems, video conferencing or online documents. 4 credits Internal