Australian Government

HLTDET016 Design digital dental restorations and appliances using computer-aided design (CAD)

Release: 1

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Modification History

Not applicable.

Application

This unit of competency describes the skills and knowledge required to design dental restorations and appliances using computer-aided design (CAD) technologies.

This unit applies to dental technicians working in dental laboratories.

The skills in this unit must be applied in accordance with Commonwealth and State/Territory legislation, Australian/New Zealand Standards and industry codes of practice.

Pre-requisite Unit

Nil

Competency Field

Dental

Unit Sector

Dental technology

Elements and Performance Criteria

Elements describe the essential outcomes	*Performance criteria describe the performance needed to demonstrate achievement of the element.*
1. Determine restoration or appliance requirements.	1.1 Access and interpret work order.
	1.2 Apply standard infection control precautions when receiving, handling and working on dental materials.
	1.3 Ensure accuracy of work order and seek additional information as required.
	1.4 Assess quality of impression, model or intraoral scan and seek any required adjustments.
	1.5 Scan physical impression, model or download intraoral scan and create digital representation of impression.
	1.6 Identify technologies and computer-aided design (CAD) software required to complete digital design of restoration or appliance, and ensure availability.

2. Design restoration or appliance using computer-aided design (CAD).	2.1 Access required technologies and computer-aided design (CAD) software.
	2.2 Follow workplace policies and procedures to access and import digital impression files into computer-aided design (CAD) software.
	2.3 Create 3-D images by manipulating 3-D shapes.
	2.4 Establish coordinate system and orientation according to work order.
	2.5 Manipulate computer-aided design (CAD) software features and functions to create digital design of restoration or appliance.
	2.6 Apply rendering techniques to digital design of restoration or appliance.
3. Finalise digital design for manufacturing.	3.1 Ensure digital design of restoration or appliance accurately reflects requirements of work order.
	3.2 Make any final adjustments to ensure integrity and accuracy of digital design.
	3.3 Ensure digital design is available in format required for manufacturing.
	3.4 Finalise digital design for production and store according to workplace requirements.

Foundation Skills

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below.

SKILLS	DESCRIPTION
Reading skills to:	• interpret technical language within various texts.
Oral communications skills to:	• pronounce complex words correctly and use them in the correct context.
Self-management skills to:	• work within parameters of own scope of practice.

Unit Mapping Information

No equivalent unit.

Links

Companion Volume Implementation Guide -
https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ced1390f-48d9-4ab0-bd50-b015e5485705