



Dental Technology Entry-to-Practice Assessment

Candidate Remediation Guide

Canadian Alliance of Dental Technology Regulators (July 2024)

WEBSITE: www.cadtr-acortd.com | EMAIL: cas@cadtr-acortd.com



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Disclaimer

The Canadian Alliance of Dental Technology Regulators (CADTR) provides credentialing and competency assessment on behalf of provincial dental technology regulators and plays no role in their registration decisions.

Candidates are responsible for ensuring that they understand the registration, regulations and policies associated with their intended practice jurisdiction. This includes whether completing the Knowledge-Based Assessment (KBA) and the Performance-Based Assessment (PBA) through CADTR is required by the provincial regulator where the candidate intends to practice.

This remediation guide is for candidates who have been unsuccessful after a second attempt at the Dental Technology Entry-to-Practice Assessment (DTETPA). Candidates are required to complete remediation before being permitted a third and final attempt.

Visit the CADTR website for the complete list of [assessment policies](#). CADTR reserves all rights to review and update its policies.

We remind you to regularly check the CADTR website (www.cadtr-acortd.com) for new updates and changes and seek assistance when required.

Acronyms

CADTR – Canadian Alliance of Dental Technology Regulators

CAS – Credential and Assessment Services

DTETPA – Dental Technology Entry-to-Practice Assessment

KBA – Knowledge-Based Assessment

PBA – Performance-Based Assessment

Success Plan – Self-Reflection & Success Plan

Contents

Disclaimer 2

Acronyms 2

GENERAL INFORMATION 4

 Our Role 4

 Dental Technology Entry-to-Practice Assessment (DTETPA) 4

 Contact Information 4

REMEDICATION GUIDELINES..... 5

 Eligibility..... 5

 Mentor Eligibility..... 5

 Remediation Guidelines..... 5

APPENDICES 8

 Appendix 1 – Self-Reflection & Success Plan 8

 Appendix 2 – Reference Texts for DTETPA 10

 Appendix 3 – KBA Master Blueprint 13

 Appendix 4 – PBA Master Blueprint 18

GENERAL INFORMATION

Our Role

CADTR will evaluate credentials and administer the DTETPA on behalf of the following participating regulatory jurisdictions: Alberta, British Columbia, Nova Scotia, New Brunswick, Ontario, and Quebec.

Before applying for registration as a dental technology professional (i.e., dental technologist or dental technician) in Canada, applicants are responsible for ensuring that they understand the regulations and policies associated with their intended practice jurisdiction.

CADTR plays no role in the registration/licensure decisions of provincial regulators. For more information about CADTR, please visit the website: www.cadtr-acordt.com

Dental Technology Entry-to-Practice Assessment (DTETPA)

The DTETPA measures the Canadian competencies required for candidates who will be entering the practice of dental technology in Canada as a new registrant. These competencies can be found here: [National Essential Entry-to-Practice Competencies](#). The purpose of the DTETPA is to protect the public by confirming that persons entering the dental technology profession possess the knowledge, skills, and judgement necessary to perform their dental technology duties safely and effectively.

Contact Information

To contact the CADTR CAS Manager

Email: cas@cadtr-acordt.com

Phone: 416-438-5003, Ext. 221

Toll-Free: 1-877-391-2386, Ext. 221

REMEDIATION GUIDELINES

Eligibility

All candidates are permitted to a maximum of three (3) attempts to successfully complete both the KBA and the PBA components of the DTETPA. If not successful on the second attempt, candidates are required to undertake remedial activities (e.g., coursework or practice hours) before their third attempt.

See the [3.1 Number of Assessment Attempts Policy](#) for more details.

- First-time candidates must attempt **both** components, the KBA and PBA, at the first assessment sitting.
- Candidates who are unsuccessful at their first attempt must complete their second assessment attempt within **15 months** of the previous unsuccessful attempt.

Candidates who falsify documents will not be allowed to complete the KBA or PBA. If falsification is discovered after the KBA or PBA has been taken, the results will be invalidated. See the [2.8 Fraudulent, Irregular Documents and Cheating Policy](#) for more details.

Mentor Eligibility

The candidate must complete remediation under the supervision of one or more mentors. A candidate may have more than one mentor depending on their personal circumstances and goals (e.g., an additional mentor for a specific area of expertise).

Mentor Eligibility Requirements:

- Licensed/registered with the dental technology regulator in the province you reside and work in.
- In good standing with the dental technology regulator.
- Be able to follow through with mentorship.
- Sign off on the candidate's Success Plan.

If one or more mentors cannot complete the full duration of remediation, it is the candidate's duty to inform CADTR of the situation with a written explanation of the circumstances. It is the candidate's responsibility to find a suitable replacement(s) before submission.

Remediation Guidelines

This guide is for candidates that have failed the **Knowledge-Based Assessment (KBA)**, **Practice-Based Assessment (PBA)**, or **both**. A candidate must have failed either the KBA or PBA **twice** before they are required to complete remediation, as it is their last chance to attempt the DTETPA. Failed attempts include any forfeited assessment attempts.

Remediation is mandatory for candidates that wish to take their assessments for a third time. CADTR will review the completed Success Plan created by the candidate. A Success Plan will be considered complete by CADTR when the candidate and mentor show that this remediation reasonably addressed the areas of concern documented in the Success Plan. CADTR's acceptance of the completed Success Plan does not guarantee or imply that the candidate will be successful on their third attempt. It is the candidate's sole responsibility to adequately prepare for their third attempt. The candidate confirms their readiness by signing and submitting the completed Success Plan which must be signed by each mentor to be valid. Completed Success Plans must be submitted to CADTR by email a minimum of 30 days prior to the deadline to apply for the Knowledge-Based Assessment (KBA) and a minimum of 60 days prior to the deadline to apply for the Performance-Based Assessment (PBA). If CADTR deems a Success Plan incomplete, the candidate will not be permitted a third attempt until they submit a complete and acceptable Success Plan to CADTR.

The candidate must be under the supervision of a mentor; a person who is licensed/registered with the dental technology regulator in the province where you reside and work and who is in good standing with the dental technology regulator. See the [Mentor Eligibility](#) for more details. Through feedback from their mentor and self-reflection, the candidate must undergo the training or education necessary for their situation. The candidate must identify their learning gaps and learning barriers.

On the following pages, there will be three mandatory tasks for the candidate to complete.

1) Self-Reflection

- a. Identify **areas of study** that you have struggled with for each competency (e.g., apply knowledge of oral structures, tooth morphology, and oral pathology to dental technology).
- b. Identify **why** you have struggled (e.g., Limited time to study, require testing accommodation).

2) Success Plan

- a. Create a thorough plan to resolve the areas you have struggled with. These should be the first areas that you target in your Success Plan.
- b. Establish learning goals based on your self-reflection.
- c. Create a study schedule which includes a proposed date for completion.
- d. List the tools and resources you have used to resolve these areas of struggle.

3) Sign-off

- a. You must personally sign off on both the self-reflection and Success Plan.
- b. Your mentor(s) must also sign and attest to you fulfilling your Success Plan. Complete a separate declaration page (sign-off page) for each mentor.

TIPS:

Your Success Plan should be specific, actionable, and designed to enhance your understanding and ability to practice dental technology.

Here are some tips when preparing and completing your Success Plan:

- Find a mentor: think about work colleagues or someone you went to school with and who are registered dental technologists/technicians. Use the public register in your province to find a registered dental technologist/technician who is in good standing with the dental technology regulator.
- As you plan your remediation activities consider what your preferred learning method is. Is it seeing, doing, listening, or a combination of these methods? This will help you identify the study techniques and resources that work best for you.
- Perhaps you need a new study approach. Consider what you have done in the past to prepare for the assessment(s). Identify what is or is not working for you.
- Identify reading materials: textbooks (see [Appendix 2](#) and/or use other available resources related to the competencies) and classroom notes.
- Refresher courses/distance education courses. Contact the education program where you completed your dental technology training for ideas on how to refresh your learning.
- KBA Candidates: Learn more about strategies for taking multiple choice and written examinations.
- PBA Candidates: Obtain more practical experience for areas that you have identified as areas of weakness or may not have practiced since graduation. Consider volunteering in a laboratory that specializes in the area(s) you wish to improve.
- Reference available [CADTR resources](#): KBA Handbook, [KBA Practice Tool](#), KBA Master Blueprint, PBA Handbook, PBA Master Blueprint.
- Keep on track - Monitor your progress set out in your study schedule.
- Be sure to review your progress with your mentor(s).
- Record your progress using the Self-Reflection & Success Plan chart.

4) Submit Completed Remediation

Please submit your completed Success Plan to CADTR by email to: cas@cadtr-acortd.com. Completed and signed plans must be received by CADTR at least 30 days before the deadline to apply for the Knowledge-Based Assessment or 60 days before the deadline to apply for the Problem-Based Assessment.

If you have more than one mentor, complete one declaration page for each mentor.

Contact CADTR, if you have any questions at: cas@cadtr-acortd.com.

APPENDICES

Appendix 1 – Self-Reflection & Success Plan

Self-Reflection & Success Plan				
Date/Time	Areas of Weakness	Self-Reflection	Learning Resources Used	Learning Activity
<i>Example:</i> May 1, 2023	<i>Section 1.2 of the KBA blueprint: Apply knowledge of oral structures, tooth morphology, and oral pathology to dental technology.</i>	<i>Lack of studying time.</i>	<ul style="list-style-type: none"> • <i>KBA handbook</i> • <i>Mentor</i> • <i>College professor</i> • <i>Air Force Pamphlet, Chapter 3— ANATOMY OF FACIAL AND ORAL STRUCTURES</i> 	<i>Learning exercises with my mentor, including flash cards and active recall.</i>

Self-Reflection & Success Plan

Candidate Declarations:

I, _____, solemnly declare that:

CANDIDATE'S FULL LEGAL NAME

- I certify that all information provided is complete, true, and correct to the best of my knowledge and belief.
- I understand that a false or misleading statement may result in being disqualified from taking the Canadian Alliance of Dental Technology Regulators' Dental Technology Entry-to-Practice Assessment, invalidating any credential and/or assessment results and may affect my application for registration with a Dental Technology Regulator.
- I understand that the information collected on this form will be used by the Canadian Alliance of Dental Technology Regulators and may be shared with dental technology regulators or as permitted by law.
- I have read and understood [assessment policies 3.1, 3.2 and 3.3](#).

Date: _____ Candidate's Signature: _____

Mentor Declarations:

I, _____, solemnly declare that:

MENTOR'S FULL LEGAL NAME

- I certify that all information provided is complete, true, and correct to the best of my knowledge and belief.
- I understand that a false or misleading statement may result in the above-named candidate being disqualified from taking the Canadian Alliance of Dental Technology Regulators' Dental Technology Entry-to-Practice Assessment, invalidating any credential and/or assessment results and may affect their application for registration with a Dental Technology Regulator.
- I understand that a false or misleading statement(s) may constitute professional misconduct and result in the Canadian Alliance of Dental Technology Regulators reporting the misconduct to my regulatory authority.
- I understand that the information collected on this form will be used by the Canadian Alliance of Dental Technology Regulators and may be shared with dental technology regulators or as permitted by law.
- I have read and understood [assessment policies 3.1, 3.2 and 3.3](#).

Date: _____ Mentor's Signature: _____

Mentor's Registration/License #: _____

Mentor's Email: _____ Mentor's Phone Number: _____

Page ___ of ___

Appendix 2 – Reference Texts for DTETPA

Unit 1: Foundational Knowledge

Carr, Alan, and Brown, David. *McCracken's Removable Partial Prosthodontics*. 13th ed., Mosby, 3 Nov. 2015. eBook ISBN: 9780323339926. eBook ISBN: 9780323339919. eBook ISBN: 9780323339940. Hardcover ISBN: 9780323339902. <https://www.elsevier.com/books/mccrackens-removable-partial-prosthodontics/carr/978-0-323-33990-2>

Dental Laboratory Technology - Basic Sciences, Removable Prosthodontics, and Orthodontics. Air Force Pamphlet, 47-103. V.1, 3 Feb. 2012. <https://static.e-publishing.af.mil/etc/afpam47-103v1.pdf>

Dental Laboratory Technology - Fixed and Special Prosthodontics. Air Force Pamphlet, 47-103. V.2, 3 Feb. 2012. <https://static.e-publishing.af.mil/etc/afpam47-103v2.pdf>

Driscoll, Carl, et al. The Glossary of Prosthodontic Terms. *The Journal of Prosthetic Dentistry*, edited by Keith Ferro et al, 9th ed., Elsevier, May 2017. <https://www.thejpd.org/action/showPdf?pii=S0022-3913%2816%2930683-7>

Fujimoto, Junhei, et al. *Contemporary Fixed Prosthodontics*, edited by Stephen Rosenstiel and Martin Land, 5th ed., Mosby, 28 July 2015. ISBN: 9780323080118. <https://www.elsevier.com/books/contemporary-fixed-prosthodontics/rosenstiel/978-0-323-08011-8>

Hobkirk, John, et al. *Introducing Dental Implants*. 1st ed., Churchill Livingstone, 2003. eBook ISBN: 9780702059339. <https://www.elsevier.com/books/introducing-dental-implants/unknown/978-0-443-07185-0>

McOrmond, Al. *Complete Denture Fabrication*. 1st ed., WD Publishing, 2018. ISBN: 9780968143063. https://www.amazon.ca/Complete-Denture-Fabrication-Introduction-Laboratory/dp/B086TwxRW6/ref=sr_1_1?dchild=1&keywords=complete+denture+fabrication+mccormond&qid=1620690922&sr=8-1

McOrmond, Al. *Orthodontic Laboratory Techniques*. 3rd ed., WD Publishing, 1 Jan. 2014. ISBN: 9780968143056. https://www.amazon.ca/Orthodontic-Laboratory-Techniques-K-McOrmond/dp/B086V4T7XS/ref=sr_1_1?dchild=1&keywords=orthodontic+laboratory+techniques&qid=1620691885&sr=8-1

Rahn, Arthur, et al. *Textbook of Complete Dentures*. 6th ed., 30 Sept. 2009. ISBN: 9781607950257. <https://www.amazon.com/Textbook-Complete-Dentures-Arthur-Rahn/dp/1607950251>

Sakaguchi, Ronald, et al. *Craig's Restorative Dental Materials*. 14th ed., Elsevier, 2019. ISBN: 9780323478212. <https://www.elsevier.ca/ca/product.jsp?isbn=9780323478212>

Sowter, John. *Removable Prosthodontic Techniques*, edited by Roger Barton, University of North Carolina Press, June 1986. ISBN: 9780807841662. <https://www.amazon.ca/Removable-Prosthodontic-Techniques-John-Sowter/dp/0807841668>

Unit 2: Environmental Safety and Use of Laboratory and Equipment

Dental Laboratory Technology - Basic Sciences, Removable Prosthodontics, and Orthodontics. Air Force Pamphlet, 47-103. V.1, 3 Feb. 2012. <https://static.e-publishing.af.mil/etc/afpam47-103v1.pdf>

Dental Laboratory Technology - Fixed and Special Prosthodontics. Air Force Pamphlet, 47-103. V.2, 3 Feb. 2012. <https://static.e-publishing.af.mil/etc/afpam47-103v2.pdf>

Grant, Gerald T., et al. "Glossary of Digital Dental Terms." *Journal of Prosthodontics*, 19 Sept. 2016. American College of Prosthodontics. <https://doi.org/10.1111/jopr.12532>

McOrmond, Al. *Complete Denture Fabrication*. 1st ed., WD Publishing, 2018. ISBN: 9780968143063. https://www.amazon.ca/Complete-Denture-Fabrication-Introduction-Laboratory/dp/B086TwxRW6/ref=sr_1_1?dchild=1&keywords=complete+denture+fabrication+mccormond&qid=1620690922&sr=8-1

McOrmond, Al. *Orthodontic Laboratory Techniques*. 3rd ed., WD Publishing, 1 Jan. 2014. ISBN: 9780968143056. https://www.amazon.ca/Orthodontic-Laboratory-Techniques-K-McOrmond/dp/B086V4T7XS/ref=sr_1_1?dchild=1&keywords=orthodontic+laboratory+techniques&qid=1620691885&sr=8-1

Rahn, Arthur, et al. *Textbook of Complete Dentures*. 6th ed., 30 Sept. 2009. ISBN: 9781607950257. <https://www.amazon.com/Textbook-Complete-Dentures-Arthur-Rahn/dp/1607950251>

Unit 3: Design, Fabrication, and Repair of Dental Technology Prostheses and Appliances

Brand, Richard, and Isselhard, Donald. *Anatomy of Orofacial Structures*. 8th ed., Mosby, 8 Dec. 2017. ISBN: 9780323480239. <https://www.elsevier.com/books/anatomy-of-orofacial-structures/brand/978-0-323-48023-9>

Carr, Alan, and Brown, David. *McCracken's Removable Partial Prosthodontics*. 13th ed., Mosby, 3 Nov. 2015. eBook ISBN: 9780323339926. eBook ISBN: 9780323339919. eBook ISBN: 9780323339940. Hardcover ISBN: 9780323339902. <https://www.elsevier.com/books/mccrackens-removable-partial-prosthodontics/carr/978-0-323-33990-2>

Dental Laboratory Technology - Basic Sciences, Removable Prosthodontics, and Orthodontics. Air Force Pamphlet, 47-103. V.1, 3 Feb. 2012. <https://static.e-publishing.af.mil/etc/afpam47-103v1.pdf>

Dental Laboratory Technology - Fixed and Special Prosthodontics. Air Force Pamphlet, 47-103. V.2, 3 Feb. 2012. <https://static.e-publishing.af.mil/etc/afpam47-103v2.pdf>

Fujimoto, Junhei, et al. *Contemporary Fixed Prosthodontics*, edited by Stephen Rosenstiel and Martin Land, 5th ed., Mosby, 28 July 2015. ISBN: 9780323080118. <https://www.elsevier.com/books/contemporary-fixed-prosthodontics/rosenstiel/978-0-323-08011-8>

Hobkirk, John, et al. *Introducing Dental Implants*. 1st ed., Churchill Livingstone, 2003. eBook ISBN: 9780702059339. <https://www.elsevier.com/books/introducing-dental-implants/unknown/978-0-443-07185-0>

McOrmond, Al. *Complete Denture Fabrication*. 1st ed., WD Publishing, 2018. ISBN: 9780968143063. https://www.amazon.ca/Complete-Denture-Fabrication-Introduction-Laboratory/dp/B086TwxRW6/ref=sr_1_1?dchild=1&keywords=complete+denture+fabrication+mccormond&qid=1620690922&sr=8-1

McOrmond, Al. *Orthodontic Laboratory Techniques*. 3rd ed., WD Publishing, 1 Jan. 2014. ISBN: 9780968143056. https://www.amazon.ca/Orthodontic-Laboratory-Techniques-K-McOrmond/dp/B086V4T7XS/ref=sr_1_1?dchild=1&keywords=orthodontic+laboratory+techniques&qid=1620691885&sr=8-1

Rahn, Arthur, et al. *Textbook of Complete Dentures*. 6th ed., 30 Sept. 2009. ISBN: 9781607950257. <https://www.amazon.com/Textbook-Complete-Dentures-Arthur-Rahn/dp/1607950251>

Unit 4: Accountability and Professionalism

Dental Laboratory Technology - Basic Sciences, Removable Prosthodontics, and Orthodontics. Air Force Pamphlet, 47-103. V.1, 3 Feb. 2012. <https://static.e-publishing.af.mil/etc/afpam47-103v1.pdf>

Fujimoto, Junhei, et al. *Contemporary Fixed Prosthodontics*, edited by Stephen Rosenstiel and Martin Land, 5th ed., Mosby, 28 July 2015. ISBN: 9780323080118. <https://www.elsevier.com/books/contemporary-fixed-prosthodontics/rosenstiel/978-0-323-08011-8>

McOrmond, Al. *Orthodontic Laboratory Techniques*. 3rd ed., WD Publishing, 1 Jan. 2014. ISBN: 9780968143056. https://www.amazon.ca/Orthodontic-Laboratory-Techniques-K-McOrmond/dp/B086V4T7XS/ref=sr_1_1?dchild=1&keywords=orthodontic+laboratory+techniques&qid=1620691885&sr=8-1

Unit 5: Patient Care

Dental Laboratory Technology - Basic Sciences, Removable Prosthodontics, and Orthodontics. Air Force Pamphlet, 47-103. V.1, 3 Feb. 2012. <https://static.e-publishing.af.mil/etc/afpam47-103v1.pdf>

Dental Laboratory Technology - Fixed and Special Prosthodontics. Air Force Pamphlet, 47-103. V.2, 3 Feb. 2012. <https://static.e-publishing.af.mil/etc/afpam47-103v2.pdf>

Krol, Arthur. *Removable Partial Denture Design*. 5th ed., University of the Pacific, School of Dentistry, 1 Jan. 1999. <https://www.amazon.com/Removable-partial-denture-design-syllabus/dp/B0006R7WZS>

McOrmond, Al. *Complete Denture Fabrication*. 1st ed., WD Publishing, 2018. ISBN: 9780968143063. https://www.amazon.ca/Complete-Denture-Fabrication-Introduction-Laboratory/dp/B086TwxRW6/ref=sr_1_1?dchild=1&keywords=complete+denture+fabrication+mccormond&qid=1620690922&sr=8-1

Unit 6: Leadership, Business Management, and Administration

Dental Laboratory Technology - Fixed and Special Prosthodontics. Air Force Pamphlet, 47-103. V.2, 3 Feb. 2012.
<https://static.e-publishing.af.mil/etc/afpam47-103v2.pdf>

Grant, Gerald T., et al. "Glossary of Digital Dental Terms." *Journal of Prosthodontics*, 19 Sept. 2016. American College of Prosthodontics. <https://doi.org/10.1111/jopr.12532>

Rahn, Arthur, et al. *Textbook of Complete Dentures*. 6th ed., 30 Sept. 2009. ISBN: 9781607950257.
<https://www.amazon.com/Textbook-Complete-Dentures-Arthur-Rahn/dp/1607950251>

Appendix 3 – KBA Master Blueprint

The competencies and performance indicators shown below define the body of content to be examined using the Knowledge-Based Assessment (KBA). These indicators and competencies are aligned to knowledge-based testing, and therefore are suitable for assessments using the computer-based format of the KBA.

Blueprint weights apply to the KBA in two ways. First, each Competency Unit from the [National Essential Competencies for Dental Technology Practice in Canada, 2019 \(NEC\)](#) is assigned a weight, describing its relative importance in assessing entry-to-practice. The weights were determined based on the collective judgment of a nationally representative group of licensed dental technology professionals. Second, weights are assigned to individual competencies and indicators based on both the frequency of performance of the competencies/indicators by licensed dental technology professionals and their importance for safe and/or effective practice. A correspondingly larger number of questions on the assessment are tied to more frequently performed and more important indicators.

Legend	example
Competency	1.2 Apply knowledge of oral ...
Performance Indicator	1.2.a Define the structure ...

Unit 1: Foundational Knowledge	30%
1.1 Demonstrate knowledge of biology and of head and neck anatomy related to dental technology practice.	
1.1.a Identify basic biological systems and their function relevant to dental technology. 1.1.b Identify the basic elements of human anatomy, physiology, and pathology relevant to dental technology and appliances. 1.1.c Identify the craniofacial anatomy to provide the working boundaries of dental prostheses and appliances.	
1.2 Apply knowledge of oral structures, tooth morphology, and oral pathology to dental technology.	
1.2.a Define the structure and function of the teeth and supporting tissues, tooth arrangement, and tooth numbering systems. 1.2.b Identify occlusal interdigitations of teeth. 1.2.c Identify and demonstrate knowledge of aspects of occlusion and Angle’s classification of occlusion. 1.2.d Recognize diseases and abnormalities that may impact dental health. 1.2.e Demonstrate an understanding of the impact of dental health and functionality on a patient’s overall health. 1.2.f Apply knowledge of the mechanics and movement of the mandible and of the mechanical devices that simulate it.	
1.3 Apply basic principles of physics and chemistry to the practice of dental technology.	
1.3.a Explain basic physics and chemistry principles as they relate to dental technology, including dental materials. 1.3.b Apply knowledge of force, heat, electricity, light, sound, chemical elements, mechanics, and other principles that are related to dental technology.	
1.4 Apply foundational knowledge of materials commonly used in Canadian dental technology practice.	
1.4.a Identify the different classifications of materials used in the design, fabrication, and repair of dental prostheses and appliances. 1.4.b Demonstrate awareness of dental-materials and medical device restrictions under the regulatory authority of the Health Protection Branch of Health Canada. 1.4.c Summarize the characteristics and the physical and mechanical properties of dental materials. 1.4.d Select and utilize dental materials best suited for specific dental prostheses and appliances, considering the materials’ characteristics and properties.	

1.4.e	Explain the effects of manipulation on different types of dental materials.	
1.4.f	Recognize and remedy possible defects which can result from the manipulation of dental materials.	
1.5 Apply basic mathematical principles to design and fabricate functional dental prostheses and appliances.		
1.5.a	Demonstrate knowledge of basic geometry in all aspects of design and fabrication.	
1.5.b	Perform accurate calculations and measurements, in accordance with manufacturer's instructions, to ensure precision of the dental prosthesis or appliance.	
1.6 Demonstrate awareness of the common oral and maxillofacial-related prostheses and appliances.		
1.6.a	Recognize oral and maxillofacial health conditions and surgical procedures that necessitate the design and fabrication of various dental prostheses and appliances.	
1.6.b	Identify the basic steps in the design and fabrication of related prostheses and appliances for oral and maxillofacial treatment options.	
1.7 Demonstrate knowledge of key design and fabrication principles and technical skills used in dental technology.		
1.7.a	Describe indications and contraindications for and limitations of dental prostheses and appliances.	
1.7.b	Identify different components of dental prostheses and appliances.	
1.7.c	Analyze the design, fabrication, and material requirements of functional dental prostheses and appliances.	
1.7.e	Apply digital technology skills to support the design and fabrication of dental prostheses and appliances.	
1.7.f	Apply the principles of shade matching and colour measurement and communicate colour parameters.	
Unit 2: Environmental Safety and Use of Laboratory and Equipment		15%
2.1 Demonstrate knowledge of key design and fabrication principles and technical skills used in dental technology.		
2.1.a	Apply knowledge of pathogenic diseases and of microbiology in the transmission of disease related to the practice of dental technology.	
2.1.b	Follow laboratory infection-prevention and -control principles in accordance with provincial and federal regulations and manufacturers' requirements.	
2.1.c	Use the appropriate reprocessing procedures to clean and disinfect all instruments, equipment, and work surfaces.	
2.1.d	Follow Standard Precautions to reduce the risk of transmission of bloodborne diseases and other pathogens from both recognized and unrecognized sources.	
2.2 Undertake activities that support safe use and handling of dental materials and reduce risk in the environment.		
2.2.a	Identify and manage the potential dangers associated with the use of dental materials and bio-hazardous materials.	
2.2.c	Demonstrate knowledge of Workplace Hazardous Materials Information System (WHMIS) standards, including classifications, labelling of chemicals, and safety data sheets.	
2.2.d	Follow WHMIS standards when using chemicals and if a chemical incident occurs.	
2.2.e	Follow health and safety practices as they relate to dental technology.	
2.2.f	Follow manufacturers' instructions and demonstrate proper handling and storage of materials and solutions.	
2.2.g	Identify and act to reduce potential or real risks in the laboratory environment (e.g., falls due to spills, injury due to faulty equipment, unsafe use of equipment, unsafe handling of bio-hazardous materials).	

2.3 Use laboratory equipment safely and competently to ensure work efficiency and to reduce harm to self and others.		
2.3.a	Identify potential or real risks and take the necessary steps to reduce risk to self and others when using laboratory equipment.	
2.3.c	Follow manufacturers' instructions for the proper use and cleaning of equipment.	
2.3.e	Recognize equipment breakdown and faulty operation and take corrective actions.	
Unit 3: Design, Fabrication, and Repair of Dental Technology Prostheses and Appliances		40%
3.1 Analyze the healthcare practitioner's prescription and patient's information to plan the design and materials selection for the fabrication of the dental prosthesis and/or appliance.		
3.1.a	Understand the clinical application of the prescription and recognize effects of any technical limitations on prescribed dental prosthesis and/or appliance.	
3.1.b	Identify and communicate any limitations and contraindications of the proposed treatment plan to the healthcare practitioner.	
3.1.c	Obtain clarification of the prescription and request additional information about the treatment plan, when needed.	
3.1.d	Ensure a final complete prescription is received from the responsible healthcare practitioner.	
3.1.e	Determine the appropriateness of the materials prescribed or selected.	
3.1.f	Verify the quality of the received impressions and models and the completeness and accuracy of supplemental documentation.	
3.1.g	Read provided radiographic images to identify the patient's anatomy for case planning; ensure accurate design of the dental prosthetic and appliance; and identify normal and abnormal presentations.	
3.2 Design various types of dental prostheses and appliances.		
3.2.a	Assess oral anatomy and structure from the model, cast, and radiographic images to ensure harmonized design in relationship the prescription.	
3.2.b	Apply knowledge of foundational sciences when designing dental prostheses and appliances.	
3.2.c	Identify tooth-preparation requirements for various types of dental prostheses and dental material requirements.	
3.2.d	Select various components of the dental prosthesis or appliance and choose materials appropriate to the design, prescription, and patient's anatomy.	
3.3 Fabricate and repair functional dental prostheses and appliances.		
3.3.a	Follow federal and provincial dental and health standards for materials and components used in the fabrication and repair of dental prostheses and appliances.	
3.3.b	Select the appropriate dental laboratory equipment and tools, considering relevant factors including, appliance components, materials, and procedures.	
3.3.c	Apply skill and judgment in the manipulation of the materials and when integrating the appliance components.	
3.3.d	Consider all relevant factors related to the fabrication to ensure full function of the prosthesis or appliance (e.g., the materials, components, the prescription, design parameters, and spatial constraints).	
3.4 Perform quality control prior to releasing a dental prosthesis or an appliance.		
3.4.a	Confirm the final dental prosthesis and/or appliance adheres to the prescription, both throughout the fabrication and prior to release.	
3.4.b	Identify any imperfections or deficiencies and make appropriate adjustments.	
3.5 Modify and repair dental prostheses and appliances, considering relevant factors.		
3.5.a	Identify and assess the existing prosthesis or appliance and determine the reason for the defect or breakage.	
3.5.b	Consider the compatibility of new materials with the existing materials, patient assessment data, and prosthesis or appliance history.	
3.5.c	Explain any limitations of the repair to the healthcare practitioner or patient.	

Unit 4: Accountability and Professionalism	5%
4.1 Provide safe, ethical, and effective services.	
4.1.a Demonstrate ethical behaviours in accordance with the professional Code of Ethics.	
4.1.e Accept responsibilities and accountability for own actions and for the integrity of completed work.	
4.2 Practice in accordance with applicable legislation, regulations, standards, and guidelines.	
4.2.a Keep current with the regulatory professional standards, regulations, and legislation.	
4.2.b Collect, store, disclose, and destroy personal information in compliance with privacy and confidentiality legislation and organizational policies.	
4.2.c Obtain healthcare practitioner or patient consent for collection, use, or disclosure of personal information.	
4.2.d Maintain records according to provincial standards and organizational policies.	
4.2.e Complete documentation according to provincial standards and organizational policies.	
4.3 Demonstrate sustainable business practices that are socially responsible and environmentally friendly.	
4.3.a Demonstrate an awareness of the impact of sustainability on the health and well-being of self and others (public, patients, staff), and on the environment (e.g., reduce toxin emissions and waste).	
4.3.b Describe and implement sustainable business practices within dental technology (e.g., recycling, energy conservation).	
4.4 Use effective communication skills.	
4.4.a Use appropriate dental terminology in communications with the healthcare team.	
4.4.b Employ effective, respectful, and ethical communications.	
4.4.d Enter timely, clear, accurate, and valid documentation in records.	
4.6 Apply critical-thinking skills and use professional judgment in all aspects of practice.	
4.6.a Consult with and/or refer to others when issue(s) and client or patient needs are beyond personal competence and/or professional scope of practice.	
4.6.b Demonstrate awareness of potential problems and consider options for different course(s) of action.	
4.6.c Critically evaluate every situation and make decisions based on sound reasoning and evidence-based practice.	
4.6.d Integrate pertinent theoretical knowledge, experience, and collected data to justify and/or modify services.	
Unit 5: Patient Care	5%
5.2 Apply cultural competence to practice when providing services to patients.	
5.2.a Demonstrate a commitment to provide services to and understand demographics and cultural differences within the entire patient population.	
5.2.b Recognize and respect cultural perspectives and differences.	
5.3 Collect and document relevant information to inform the design and to assist with treatment planning.	
5.3.a Collect information from the patient and other appropriate sources related to current and prior medical and dental-health history, including current medication use.	
5.3.b Take intraoral and extraoral photographs of the patient and any existing dental prosthesis and appliances to support the design and fabrication or repair of the dental prosthesis or appliance.	
5.4 Perform clinical laboratory procedures in a competent manner.	
5.4.b Perform shade matching and record the selected shade to ensure aesthetically pleasing results.	

Unit 6: Leadership, Business Management, and Administration	5%
6.1 Demonstrate leadership skills to support the safe, efficient, and ethical delivery of dental technology services.	
6.1.e Recognize own limitations and seek support and assistance when needed.	
6.1.f Recognize limitations of others and provide support when needed.	
6.2 Demonstrate accountability for all work performed within the dental technology practice when supervising others.	
6.2.a Ensure the dental prostheses or appliances meet the prescription requirements and professional standards.	
6.2.b Review material documentation to confirm compatibility and to ensure materials used meet required regulations.	
6.2.c Maintain records to track material use and case parameters.	
	100%

Appendix 4 – PBA Master Blueprint

The performance indicators listed under the Units and Competencies below require demonstration to be properly assessed. Inclusion on this list means that these performance indicators are used as the **basis** for the development of Performance-Based Assessment (PBA) stations. The omission of other performance indicators, found in the [National Entry-to-Practice Competencies and Performance Indicators \(NETP\)](#), from this list does NOT imply that they are absent in the PBA. The other competencies and performance indicators, assessed in the KBA, will serve as background knowledge for competent performance in the PBA. For example, knowledge of many competencies and performance indicators listed in the NETP under *Unit 1: Foundational Knowledge* are likely necessary for a PBA activity that involves the design, fabrication, or repair of a dental prosthesis.

Candidates are well-advised to focus on the performance indicators listed below in preparation for the CADTR Performance-Based Assessment (PBA).

LEGEND	
	Performance Indicator

Unit 1: Foundational Knowledge	
1.4 Apply foundational knowledge of materials commonly used in Canadian dental technology practice.	
1.4.d	Select and utilize dental materials best suited for specific dental prostheses and appliances, considering the materials' characteristics and properties.
1.7 Demonstrate knowledge of key design and fabrication principles and technical skills used in dental technology.	
1.7.c	Analyze the design, fabrication, and material requirements of functional dental prostheses and appliances.
1.7.d	Demonstrate the manual dexterity and spatial perception required for handling dental technology instruments.
Unit 2: Environmental Safety and Use of Laboratory and Equipment	
2.1 Demonstrate knowledge of key design and fabrication principles and technical skills used in dental technology.	
2.1.b	Follow laboratory infection-prevention and -control principles in accordance with provincial and federal regulations and manufacturers' requirements.
2.2 Undertake activities that support safe use and handling of dental materials and reduce risk in the environment.	
2.2.b	Take necessary steps to reduce risk to self and others when handling all materials.
2.2.d	Follow WHMIS standards when using chemicals and if a chemical incident occurs.
2.2.e	Follow health and safety practices as they relate to dental technology.
2.3 Use laboratory equipment safely and competently to ensure work efficiency and to reduce harm to self and others.	
2.3.b	Demonstrate safe and efficient operation of dental technology equipment.
2.3.d	Ensure routine inspection and maintenance is completed and documented.
Unit 3: Design, Fabrication, and Repair of Dental Technology Prostheses and Appliances	
3.1 Analyze the healthcare practitioner's prescription and patient's information to plan the design and materials selection for the fabrication of the dental prosthesis and/or appliance.	
3.1.f	Verify the quality of the received impressions and models and the completeness and accuracy of supplemental documentation.
3.2 Design various types of dental prostheses and appliances.	
3.2.a	Assess oral anatomy and structure from the model, cast, and radiographic images to ensure harmonized design in relationship the prescription.
3.2.b	Apply knowledge of foundational sciences when designing dental prostheses and appliances.
3.2.d	Select various components of the dental prosthesis or appliance and choose materials appropriate to the design, prescription, and patient's anatomy.

3.3 Fabricate and repair functional dental prostheses and appliances.
3.3.a Follow federal and provincial dental and health standards for materials and components used in the fabrication and repair of dental prostheses and appliances.
3.3.b Select the appropriate dental laboratory equipment and tools, considering relevant factors including, appliance components, materials, and procedures.
3.3.c Apply skill and judgment in the manipulation of the materials and when integrating the appliance components.
3.3.d Consider all relevant factors related to the fabrication to ensure full function of the prosthesis or appliance (e.g.: the materials, components, the prescription, design parameters, and spatial constraints).
3.3.e Create a prototype to ensure functionality of each dental prosthesis and appliance.
3.4 Perform quality control prior to releasing a dental prosthesis or an appliance.
3.4.a Confirm the final dental prosthesis and/or appliance adheres to the prescription, both throughout the fabrication and prior to release.
3.4.b Identify any imperfections or deficiencies and make appropriate adjustments.
3.4.c Clean and disinfect the dental prosthesis and/or appliance, and package for safe and secure transportation to and receipt by the client.
3.5 Modify and repair dental prostheses and appliances, considering relevant factors.
3.5.a Identify and assess the existing prosthesis or appliance and determine the reason for the defect or breakage.
3.5.d Ensure functionality of the repaired dental prosthesis or appliance.
3.5.e Clean and disinfect the device prior to packaging for delivery.
Unit 4: Accountability and Professionalism
4.2 Practice in accordance with applicable legislation, regulations, standards, and guidelines.
4.2.c Obtain healthcare practitioner or patient consent for collection, use, or disclosure of personal information.
4.2.d Maintain records according to provincial standards and organizational policies.
4.4 Use effective communication skills.
4.4.b Employ effective, respectful, and ethical communications.
4.4.c Demonstrate transparent communications.
4.4.d Enter timely, clear, accurate, and valid documentation in records.
4.6 Apply critical-thinking skills and use professional judgment in all aspects of practice.
4.6.a Consult with and/or refer to others when issue(s) and client or patient needs are beyond personal competence and/or professional scope of practice.
4.6.c Critically evaluate every situation and make decisions based on sound reasoning and evidence-based practice.
4.6.d Integrate pertinent theoretical knowledge, experience, and collected data to justify and/or modify services.
Unit 5: Patient Care
5.4 Perform clinical laboratory procedures in a competent manner.
5.4.b Perform shade matching and record the selected shade to ensure aesthetically pleasing results.
Unit 6: Leadership, Business Management, and Administration
6.2 Demonstrate accountability for all work performed within the dental technology practice when supervising others.
6.2.a Ensure the dental prostheses or appliances meet the prescription requirements and professional standards.

In addition to the competencies and performance indicators, PBA activities will involve each category and item listed below. Accordingly, students should be prepared to demonstrate skill in each aspect shown.

Discipline
Crown & Bridge Cast Partial Orthodontics Dentures

Materials
Acrylic Wax Wire Porcelain / Ceramics

Other
Analog Digital