

## Dental Laboratory Technology

### Degrees:

<b>AAS:</b>	Dental Laboratory Technology	61-64
<b>Certificate:</b>	Dental Laboratory Technology	26

### Description:

This program prepares individuals to fabricate dental prosthetic appliances that replace or repair natural teeth to help patients eat, chew, talk, and smile as well or better than they did before. Dental technicians work collaboratively with dentists by following a written work authorization that details the type of prosthesis needed. Dental technicians do not have direct contact with the patient but instead use stone models made from impressions of the patient's teeth and surrounding soft tissues.

The curriculum includes courses in general education and in dental laboratory technology as required by the Commission on Dental Accreditation. Students enrolled in the Dental Laboratory Technology Program must achieve a GPA of 2.0 in the Dental Laboratory Technology program. Upon completion, graduates are eligible to take the National Board for Certification Recognized Graduate Examination and the Certified Dental Technician exam.

The dental laboratory technician has many employment options including commercial dental laboratories, dental offices that have their own laboratories, dental sales and manufacturing firms. Graduates may also choose to own a laboratory, state laws permitting, or seek a teaching position at a dental technology education program.

Earning a Certificate in Dental Laboratory Technology prepares students for employment as entry-level dental technicians.

Applicants are accepted into the one-year Certificate Program each fall according to the Guidelines for Admission (Appendix A) to the Dental Laboratory Technology Program. This is a selective admissions process with approximately twenty students accepted each year. Students must maintain technical standards and a minimum GPA of at least a 2.0 (on a 4.0 scale) in the curriculum in order to progress from one semester to the next.

Employment opportunities exist throughout Kentucky in commercial dental laboratories and dental offices.

For more information, visit the Dental Laboratory Technology program Web site at [www.bluegrass.kctcs.edu/ah/dlt/](http://www.bluegrass.kctcs.edu/ah/dlt/)

**Implementation:** Spring 2008

### Competencies:

#### AAS: Dental Laboratory Technology

**General Education Competencies:** Competencies will be met at the level appropriate to the credential.

- I. Communicate Effectively
  1. Read and listen with comprehension.
  2. Speak and write clearly using standard English.
  3. Interact cooperatively with others using both verbal and non-verbal means.
  4. Demonstrate information processing through basic computer skills.
- II. Think Critically
  1. Make connections in learning across the disciplines and draw logical conclusions.
  2. Demonstrate problem solving through interpreting, analyzing, summarizing, and/or integrating a variety of materials.
  3. Use mathematics to organize, analyze, and synthesize data to solve a problem.
- III. Learn Independently
  1. Use appropriate search strategies and resources to find, evaluate, and use information.
  2. Make choices based upon awareness of ethics and differing perspectives/ideas.
  3. Apply learning in academic, personal, and public situations.
  4. Think creatively to develop new ideas, processes, or products.
- IV. Examine Relationships in Diverse and Complex Environments

1. Recognize the relationship of the individual to human heritage and culture.
2. Demonstrate an awareness of the relationship of the individual to the biological and physical environment.
3. Develop an awareness of self as an individual member of a multicultural global community.

**Technical Competencies:**

- I. Apply the principles of occlusion, anatomy, and the physiology of mandibular movements to the fabrication of various fixed and removable prostheses.
  1. Design and fabricate complete dentures.
  2. Design and fabricate removable partial dentures.
  3. Design and fabricate full metal restorations.
  4. Design and fabricate ceramic restorations.
  5. Design and fabricate orthodontic appliances.
  6. Manipulate and describe the properties of dental materials.
- II. Manage laboratory facilities.
  1. Communicate and collaborate with members of the dental health team.
  2. Practice chemical and infection control safety precautions.
  3. Demonstrate proper use and care of dental laboratory equipment.
  4. Discuss the need to update professional skills and knowledge.
  5. Practice dental technology within the legal and ethical boundaries of the profession and local statutes.

**Certificate: Dental Laboratory Technology**

1. Communicate effectively using standard written English.
2. Demonstrate an awareness of one's interaction with the biological/physical environment.
3. Perform routine dental technology procedures such as pouring and articulating casts.
4. Fabricate dental prostheses in complete dentures, removable partial dentures, full metal and ceramic restorations.
5. Demonstrate proper use and care of dental laboratory equipment.
6. Manipulate and describe the properties of dental materials used in the dental laboratory.
7. Practice safe chemical and infection control procedures.

**Outlines:**

		<b>Associate in Applied Science Dental Laboratory Technology</b>	
ENG	101	Writing I*	3
ENG	102	Writing II*	3
		Social/Behavioral Sciences Course*	3
		Heritage/Humanities*	3
		Oral Communication Course*	3
		Quantitative Reasoning Course*.	3
		Natural Sciences Course*	3
		Computer/Digital Literacy	0-3
DLT	101	Dental Morphology	2
DLT	111	Dental Materials I	2
DLT	121	Complete Dentures I	2
DLT	131	Removable Partial Dentures I	2
DLT	151	Fixed Prosthodontics I	2
DLT	112	Dental Materials II	2
DLT	122	Complete Dentures II	2
DLT	132	Removable Partial Dentures II	2
DLT	142	Occlusion	2
DLT	152	Fixed Prosthodontics II	2
DLT	261	Applied Lab Techniques	8
DLT	281	Orthodontic Lab Techniques	2

General Education Titles and Requirements Updated October 2011

DLT	262	Advanced Specialty Laboratory Techniques	8
DLT	291	Dental Laboratory Management, History and Ethics	2
		<b>Total</b>	<b>61-64</b>

**Certificate:**

**Dental Laboratory Technology**

DLT	101	Dental Morphology	2
DLT	111	Dental Materials I	2
DLT	112	Dental Materials II	2
DLT	121	Complete Dentures I	2
DLT	122	Complete Dentures II	2
DLT	131	Removable Partial Dentures I	2
DLT	132	Removable Partial Dentures II	2
DLT	142	Occlusion	2
DLT	151	Fixed Prosthodontics I	2
DLT	152	Fixed Prosthodontics II	2
ENG	101	Writing I	3
		Science Course	3
		<b>Total</b>	<b>26</b>

**Dates of Actions:**

**Approved:**

**Revised:** February 2007