DENTAL LABORATORY TECHNOLOGY

The goal of the Dental Laboratory Technology Program is to train students to be capable of the design, fabrication and production of dental prostheses, including full and partial dentures, crowns, bridges and orthodontic appliances.

Program Description

Dental laboratory technicians possess the skills, competencies and knowledge that is invaluable to the practice of modern dentistry. Through the unique Dental Laboratory Technology Program situated at the well equipped laboratories at the SUNY Erie South Campus, students are instructed in all aspects of dental laboratory technology. Opportunities are available for second-year students to work with dentists in private practice, at hospitals and at commercial dental laboratories as they prepare to join the profession and the oral health team.

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The curriculum, offered on a full-time basis during the day, highlights coursework in anatomy, physiology, occlusion, biomedical materials, dental metallurgy, dental prostheses, ceramics technology and computer assisted design. Classroom learning is supplemented with laboratory experiences in our well equipped laboratories at the college, as well as at local hospitals and commercial laboratories.

The Dental Laboratory Technology laboratories at the South Campus have been designed to accommodate students confined to wheelchairs.

Employment opportunities are available in commercial dental laboratories, private dental practices, hospitals, public dental health facilities, manufacturers of dental supplies, materials and equipment and in research facilities and educational institutions. Our graduates are employed in various types of positions: research and development for large manufacturing companies; quality control; technicians working at the bench; and lecturers and demonstrators. Several are on the faculty of dental and/or dental laboratory schools; some are denturists in Canada and in the several states in the U.S. that license denturism; and some open their own laboratories. Several graduates have gone on to dental school in order to continue their education.

The National Board for Certification in Dental Laboratory Technology’s (NBC) Recognized Graduate (RG) Examination is offered to students at the conclusion of the second year of study. ECC students traditionally exhibit one of the highest overall averages in the nation. ECC’s South Campus is also a site for the NBC’s Certified Dental Technician (CDT) examinations.
Accreditation

The Dental Laboratory Technology Program is accredited by the Commission on Dental Accreditation. The Commission is a specialized accrediting body recognized by the United States Department of Education. ECC's program is one of only seventeen programs that have this status. The Commission on Dental Accreditation can be contacted at (312) 440-4653.

Special Admission Requirements/Prerequisites

Applicants should have a high school diploma or HSE (High School Equivalency). Good manual dexterity, color perception and an aptitude for detail are essential. Students are required to purchase a dental tool kit at the approximate cost of $400.

Program Flexibility

Required liberal arts and science courses are available at all three campuses, evenings and summers. Dental Laboratory Technology courses are offered at South Campus. Although most students begin in September, a limited number are accepted in January as part of the extended curriculum option.

Scholarships Available

- American Dental Association
- ECC Health Sciences

Program Competencies

Upon graduation with an Associate in Applied Science degree in Dental Laboratory Technology, the graduate will be able to:

- draw to scale and carve each permanent tooth;
- identify uses of and list the properties of the various dental materials;
- construct a denture which is functional and aesthetic;
- demonstrate knowledge of surveying and designing by constructing a removable partial denture;
- perform minor repairs on dental lab equipment;
- mount and articulate maxillary and mandibular casts on a semi-adjustable articulator;
- repair all types of oral prostheses;
- construct custom trays and fabricate models and dies;
- develop and construct any type of fixed bridge (single unit and multiple unit);
- identify malocclusions;
- design and construct an orthodontic appliance capable of correcting a specific malocclusion;
- construct various types of crowns (one-piece posted crown and two-piece post, core and crown);
- construct a bridge using semi-precision attachments and a milled lock attachment; also using attachments in conjunction with removable partial dentures;
- construct metal substructure and build, fire and complete porcelain on single and multiple units;
- construct a complete set of implant dentures;
- construct a bridge and removable appliance using implants attachment;
- treat patients of different cultural, racial, ethnic and class back-grounds;
- be cognizant of the health care system; and
- prevent contamination by bloodborne infectious diseases.

CURRICULUM

Total Degree Credits: 76.5

First Year, Fall Semester
DL 110 Introduction to Technical Dentistry (1 cr)
DL 111 Dental Anatomy, Physiology, Occlusion (2 cr)
DL 112 Lab for DL 111 (3 cr)
DL 113 Biomedical Materials and Dental Metallurgy (1 cr)
DL 114 Lab for DL 113 (1 cr)
DL 115 Complete Denture Technique I (1 cr)
DL 116 Lab for DL 115 (3 cr)

First Year, Spring Semester
DL 121 Removable Partial Denture Technique (1 cr)
DL 122 Lab for DL 121 (3 cr)
DL 123 Restorative Technique I (2 cr)
DL 124 Lab for DL 123 (3 cr)
DL 125 Complete Denture Technique II (1 cr)
DL 126 Lab for DL 125 (3 cr)

Second Year, Fall Semester
DL 230 Dental Laboratory Practice I (3 cr)
DL 231 Removable Partial Denture Technique II (1 cr)
DL 232 Lab for DL 231 (2 cr)
DL 233 Restorative Technique II (1 cr)
DL 234 Lab for DL 233 (3 cr)
DL 235 Ceramics Technique I (1 cr)
DL 236 Lab for DL 235 (1 cr)
DL 237 Orthodontic Technique 1 (1 cr)
DL 238 Lab for DL 237 (1.5 cr)

Second Year, Spring Semester
DL 240 Dental Laboratory Practice II (4 cr)
DL 241 Senior Seminar (1 cr)
DL 243 Restorative Technique III (1 cr)
DL 244 Lab for DL 243 (3 cr)
DL 245 Ceramics Technique II (1 cr)
DL 246 Lab for DL 245 (1 cr)
DL 264 Lab II for DL 245 (1 cr)
Specialty Course Options

Five credits of Specialty Course Options are required for completion of the Program

- DL 250 Dental Lab Specialties (2 cr)
- DL 251 Partial Denture Seminar (2 cr)
- DL 253 Complete Denture Seminar (2 cr)
- DL 255 Ceramics/Restorative Seminar (2 cr)
- DL 257 Maxillofacial Prosthesis (1 cr)
- DL 258 Lab for DL 257 (1 cr)
- DL 260 Dental Implantology (2 cr)
- DL 261 Orthodontic Technique II (1 cr)
- DL 262 Lab for DL 261 (1 cr)
- DL 265 Cosmetic and Aesthetic Dentistry (2 cr)
- DL 266 Lab for Denture Set-Ups (1 cr)
- DL 270 Dental Laboratory Internship (2 cr)
- DL 271 CAD/CAM Systems for Dental Lab Technology (1 cr)

Additional Courses:
Twenty credits of Liberal Arts/General Studies are required. The following four courses are required plus eight additional credits of Liberal Arts/General Studies of the students' choice.

- CH 144 General Chemistry with Introductory Organic and Biochemistry (3 cr)
- EN 110 College Composition (3 cr)
- EN 111 Composition and Interpretation of Literature (3 cr)
- MT 112 Survey of Mathematics (3 cr)

Note: This is a recommended sequence. Student should consult his/her academic adviser prior to registering.