

# Los Angeles City College Dental Prosthetic Technology Program

**Dental Prosthetic Technology** (often referred to as Dental Laboratory Technology) is a career in the design and manufacturing of dental prosthetic devices (dentures, partial dentures, crowns and bridges), orthodontic devices (both passive and active retainers) and implant. Dental Technologists usually work in a commercial dental laboratory, which is usually separate from the dental practice. Salary is based upon knowledge level, experience and speed of manufacture among other aspects. Dental Technologists receive dental impressions and prescriptions (work authorizations) from the dentist, apply their skill and expertise in fabricating the appliance and return the prescribed appliance to the dentist for placement in the patient's mouth.

## Entrance into the Dental Prosthetic Technology Program

All candidates for the Dental Prosthetic Technology Program must have a high school diploma or G.E.D. Getting selected into the LACC Dental Prosthetic Technology Program is a two part process. First the candidate must enroll in DT 100 "Introduction to the Dental Laboratory" and DT 102 "Dental Anatomy and Terminology". Candidates for the Dental Prosthetic Technology Program must complete these (2) two courses with a grade of "C" or better. Students that receive a D, F, W or Incomplete grade will not be considered for entrance into the Dental Prosthetic Technology Program.

The second part of the process is to take the Dental Prosthetic Technology Dexterity Exam that will be given on the 10<sup>th</sup> class meeting of the DT 100 course. This exam is **not** a pass/fail exam and there is no way to study for it. The Dexterity Exam gives the selection committee an accurate indication of hand/eye coordination and three-dimensional ability of each candidate. These qualities are necessary for a dental technologist to have. The candidates are ranked according to their individual results with all of the other dental technology candidates. The top 18 candidates out of the testing cohort are invited to enter the Dental Prosthetic Technology Program.

If a candidate is not selected into the Dental Prosthetic Technology Program, the candidate may request to take the Dental Prosthetic Technology Dexterity Exam when it is given in the next testing cohort.

The Associate of Science Degree Program and the Certificate Program are identical from a course sequence standpoint. The only difference is the general education requirements taken outside of the Dental Prosthetic Technology Department. Cohorts are admitted each Spring Semester.

In order to minimize the potential for the spread of infectious diseases amongst patients and dental personnel, Dental Prosthetic Technology students and staff are highly encouraged to be immunized against and/or tested for infectious diseases such as mumps, measles, rubella, hepatitis B, and tuberculosis. If you have any questions regarding your immunization status or recommended immunizations for health care workers, please consult your personal physician. If you would like to learn more about Dental Prosthetic Technology program policies and procedures regarding infection control, you may contact the department at (323)953-4000x2500.

## Associate of Science Degree Program

### DENTAL PROSTHETIC TECHNOLOGY Career

#### Program Degree

This curriculum is specifically designed to provide students with the skills, knowledge and background necessary to become a dental technologist in either a commercial dental laboratory or dental office laboratory. Good eye/hand coordination, communication skills and the ability to follow directions are requisites for successful entrance into this program. All candidates for the Dental Prosthetic Technology program must have a high school diploma or G.E.D. Courses in the Dental Technology curriculum are designed to be taken in sequence. Successful completion of each Dental Technology course in a particular sequence with a grade of "C" or better is required before the student may progress into the next level of courses in the sequence. All courses listed are required for the Associate of Science degree with a major in Dental Technology. Students who successfully complete all the Dental Technology courses will be eligible to sit for the Recognized Graduate Certified Dental Technician Exam given by the National Board for Certification of Dental Technicians.

#### PREREQUISITE

DENTAL TECH 100 .....	2
DENTAL TECH 102 .....	3

#### FIRST SEMESTER SPRING

DENTAL TECH 101 .....	2
DENTAL TECH 103 .....	5
DENTAL TECH 109 .....	5
DENTAL TEK 285.....	2

#### *INTERCESSION (SUMMER)*

DENTAL TECH 106 .....	3.5
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#### **SECOND SEMESTER (FALL)**

DENTAL TECH 105 .....	5
DENTAL TECH 108 .....	3
DENTAL TECH 111 .....	6
DENTAL TEK 285.....	2

#### *INTERCESSION (WINTER)*

DENTAL TECH 204 .....	3
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#### *THIRD SEMESTER (SPRING)*

DENTAL TECH 112 .....	6
DENTAL TECH 203 .....	2
DENTAL TECH 206 .....	6
DENTAL TEK 185.....	1

#### *INTERCESSION (SUMMER)*

DENTAL TECH 207 .....	6
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#### *FOURTH SEMESTER (FALL)*

DENTAL TECH 208 .....	6
DENTAL TECH .....	4
DENTAL TECH 401 .....	4

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DENTAL TEK 185.....1

**TOTAL.....74.5UNITS**

To complete general education requirements in this area of study, Plan B for the AA/AS Degree is required. PLAN B: Please consult with a counselor about specific courses needed or see the college catalog "Graduation Requirements" section. Plan B is not designed for transfer to a four-year college.

- 3 Units English Composition
- 3 Units Communication/Analytical Thinking
- 3 Units Natural Sciences/3 Units Humanities
- 3 Units Social/Behavioral Sciences (including American History & Governments)
- 3-4 Units Health/Physical Education
- 3-5 Units Math Competency

## CERTIFICATE PROGRAMS

### DENTAL PROSTHETIC TECHNOLOGY Career Program Certificate

This curriculum is specifically designed to provide students with the skills, knowledge and background necessary to become a dental technician in either a commercial dental laboratory or dental office laboratory. Good eye/hand coordination, communication skills and the ability to follow directions are requisites for successful entrance into this program. Students selected for each new group are admitted into the program based upon their successful completion of DT 100 course; their dexterity exam score administered during the DT 100 course; evaluation of the student's level of commitment and determination and the ability to follow directions. All candidates for the Dental Prosthetic Technology Program must have a high school diploma or G.E.D. Courses in the Dental Prosthetic Technology curriculum are designed to be taken in sequence. Successful completion of each Dental Prosthetic Technology course in a particular sequence with a grade of "C" or better is required before the student may progress into the next level of courses in the sequence. All courses listed are required for the Associate of Science degree with a major in Dental Prosthetic Technology. Students who successfully complete all the Dental Prosthetic Technology courses will be eligible to sit for the Recognized Graduate Certified Dental Technician Exam given by the National Board for Certification of Dental Technicians. A certificate in Dental Prosthetic Technology will be issued by the Dental Prosthetic Technology Department upon successful completion of all Dental Prosthetic Technology courses. Courses in the Dental Prosthetic Technology Certificate program are the following:

#### PREREQUISITE

DENTAL TECH 100 .....2  
DENTAL TECH 102 ..... 3

#### FIRST SEMESTER SPRING

DENTAL TECH 101 .....2  
DENTAL TECH 103 .....5  
  
DENTAL TECH 109 ..... 5  
DENTAL TEK 285..... 2

#### INTERCESSION (SUMMER)

DENTAL TECH 106 .....3.5

#### SECOND SEMESTER (FALL)

DENTAL TECH 105 .....5  
DENTAL TECH 108 .....3  
  
DENTAL TECH 111 .....6  
DENTAL TEK 285..... 2

#### INTERCESSION (WINTER)

DENTAL TECH 204 .....3

#### THIRD SEMESTER (SPRING)

DENTAL TECH 112 .....6  
DENTAL TECH 203 .....2  
  
DENTAL TECH 206 .....6  
DENTAL TEK 185.....1

#### INTERCESSION (SUMMER)

DENTAL TECH 207 .....6

#### FOURTH SEMESTER (FALL)

DENTAL TECH 208 .....6  
DENTAL TECH .....4  
DENTAL TECH 401 .....4  
DENTAL TEK 185.....1

**TOTAL.....74.5UNITS**

## Courses

### DENTAL TECHNOLOGY 100

#### Introduction to the Dental Laboratory

2 UNITS - ( A ) Lecture: 1 hour. Lab: 3 hours per week.

Open to all college students.

This course is the prerequisite for all dental technology laboratory courses. Successful completion of this course is required for entrance into the Dental Technology Associate of Science Degree or Certificate Programs. It is an Introduction to the workings of a modern dental laboratory. Students will learn their first job skill for a dental laboratory employment, model and die production.

A dexterity exam will be given on the 10<sup>th</sup> day of the course. The results of the dexterity exam will be used to select students into the program.

### DENTAL TECHNOLOGY 101

#### Elements of Dental Technology

2 UNITS - Lecture: 2 hours per week.

Advisory: English 21 or equivalent.

Open to all college students.

Students receive an orientation to the field of dental laboratory technology, including ethics, jurisprudence, history, and categories of education and employment. The detailed procedures for all dental technology specialties are covered.

### DENTAL TECHNOLOGY 102

#### Dental Anatomy and Terminology

3 UNITS - Lecture: 3 hours per week.

Advisory: English 21 or equivalent. Open to all college students.

This course is the prerequisite for all dental technology laboratory courses. Successful completion of this course is

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required for entrance into the Dental Technology Associate of Science Degree or Certificate Programs. The students learn about oral cavity and dental terminology, including morphology and function of primary and secondary human dentition, occlusion concepts and anatomical landmarks. Additionally, the students learn the significance of: skull of osteology, myology and tooth supporting structures histology.

## **DENTAL TECHNOLOGY 103 Complete Denture Prosthetics I**

5 UNITS - *Lecture: 3 hours. Laboratory: 5 hours per week.*  
*Prerequisite: Dental Technology 100 & 102 with satisfactory grades and acceptance into the Dental Technology Program.*  
This 1<sup>st</sup> semester course covers the Art and Science of creating natural looking functional complete dentures. Setting anterior and posterior denture teeth by using Productivity Training Corporation's technique's and methodology based on positive student learning outcomes. This course will include: anatomy, concepts of natural smile, selecting teeth, setting denture teeth, waxing to duplicate natural tissue, processing, finishing, and polishing dentures. **Students must purchase the PTC Creating Natural Dentures package for successful completion of this course.**

## **DENTAL TECHNOLOGY 105 Complete Denture Prosthodontics II**

5 UNITS - *Lecture: 2 hours. Laboratory: 2 hours per week.*  
*Prerequisite: Dental Technology 103 with a satisfactory grade.*  
This 2<sup>nd</sup> semester course will cover the Art and Science of fabricating Maxillary and Mandibular complete dentures in Lingualized occlusion. The course will also cover techniques of denture repairs, denture relines, custom impression trays and surgical templates.

## **DENTAL TECHNOLOGY 106 Dental Materials**

3.5 UNITS - *Lecture: 3 hours. Laboratory: 1 hour per week.*  
*Prerequisite: Dental Technology 103 & 109 with satisfactory grades.*  
This 1<sup>st</sup> intersession course covers the physical properties, composition, and proper uses of dental materials used in the fabrication of restorative and orthodontic dental appliances.

## **DENTAL TECHNOLOGY 108 Gnathological Concepts**

3 UNITS - *Lecture: 2 hours. Lab: 2 hours per week.*  
*Prerequisite: Dental Technology 111 with a satisfactory grade.*  
This 3<sup>rd</sup> intersession course covers advanced occlusion concepts. "Organic" waxing of occlusal surfaces will be accomplished on fully adjustable articulators.

## **DENTAL TECHNOLOGY 109 Fixed Prosthetics I**

5 UNITS - *Lecture: 2 hour. Lab: 6 hours per week.*  
*Prerequisite: Dental Technology 100 & 102 with satisfactory grades and acceptance into the Dental Technology Program.*  
*Advisory: English 21 or equivalent.*  
This 1<sup>st</sup> semester course covers the waxing of anterior and posterior single units by using Productivity Training Corporation's technique's and methodology based on positive student learning outcomes. Learning and understanding concepts such as: tooth contour, alignment, functional and morphological occlusion. Applied techniques in spruing,

investing and metal finishing and polishing are part of the course outline. **Students must purchase the PTC's Crown & Bridge waxing package for successful completion of this course.**

## **DENTAL TECHNOLOGY 111 Fixed Prosthetics II**

6 UNITS - *Lecture: 2 hours. Lab: 6 hours per week.*  
*Prerequisite: Dental Technology 109 with a satisfactory grade.*  
This 2<sup>nd</sup> semester course covers the waxing of single unit copings and multiple unit full contour bridges by using PTC techniques and methodology based on positive student learning outcomes. Learning and understanding concepts such as: tooth contour alignment, functional and morphological occlusion. Applied techniques in spruing, investing and casting including soldering, are also covered.

## **DENTAL TECHNOLOGY 112 Removable Partial Denture Prosthetics I**

6 UNITS - *Lecture: 3 hours. Laboratory: 5 hours per week.*  
*Prerequisite: Dental Technology 103 with a satisfactory grade.*  
This 2<sup>nd</sup> semester course covers an introduction to the study of removable partial dentures and their fabrication techniques. The use of the dental surveyor for surveying and designing of removable partial dentures are covered as well as the waxing, casting, recovery, finishing and polishing techniques for Cobalt Chromium alloys.

## **DENTAL TECHNOLOGY 202 Laboratory Management**

*Co-requisite: Dental Technology 207 or 208*  
4 UNITS - *Lab: 6 hours per week.*  
This 4<sup>th</sup> semester course offers the opportunity to observe and work with a skilled dental technologist in a dental office, clinic or dental laboratory setting. Opportunity to apply the knowledge and skills learned in the classroom in a dental office, clinic or dental laboratory for a minimum of 6 hours per week. Students will learn business managements from a laboratory prospective. This course also prepares students for taking the Recognized Graduate Examination (RG) the 1<sup>st</sup> of three examinations to become a Certified Dental Technologist.

## **DENTAL TECHNOLOGY 203 Metal Ceramic Restorations**

2 UNITS - *Lecture: 1 hour. Lab: 3 hours per week.*  
*Prerequisite: Dental Technology 111 with a satisfactory grade.*  
This 3<sup>rd</sup> semester course in metal ceramic restorations, including proprieties, design, manipulation, firing, staining, glazing, polishing, science of color and esthetics; single units and soldered splint porcelain fused to metal.

## **DENTAL TECHNOLOGY 204 Orthodontics**

3 UNITS - *Lecture: 2 hours. Lab: 2 hours per week.*  
*Prerequisite: Dental Technology 112 with a satisfactory grade.*  
This 2<sup>nd</sup> intersession course covers the theory, fabrication and repair of Orthodontic and Pedodontic appliances. Emphasis will be placed on pouring and trimming Orthognathic study casts, wire bending techniques, soldering and welding techniques, and fabrication of various types of orthodontic appliances.

## **DENTAL TECHNOLOGY 206**

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## **Advanced Fixed Prosthetics**

6 UNITS - *Lecture: 4 hours. Laboratory: 12 hours per week.*  
*Prerequisite: Dental Technology 111 with a satisfactory grade.*  
This 3<sup>rd</sup> semester course is the first course for Fixed Prosthetic Specialists in the Dental Technology Program. This course incorporates advanced fixed partial denture design, and fabrication techniques.

## **DENTAL TECHNOLOGY 207**

### **Advanced Complete Dentures**

6 UNITS – *Lecture: 4 hours. Laboratory: 12 hours per week.*  
*Prerequisite: Dental Technology 105 and 205 with satisfactory grades.*  
This 4<sup>th</sup> semester course is the second course for Removable Prosthetic Specialists in the Dental Technology Program. This course incorporates advanced complete denture design and fabrication techniques. One day per week of this course will be devoted to CAD/CAM design and production techniques.

## **DENTAL TECHNOLOGY 208**

### **Advanced Ceramic Restorations**

6 UNITS – *Lecture: 4 hours. Laboratory: 12 hours per week.*  
*Prerequisite: Dental Technology 206 with a satisfactory grade.*  
This 4<sup>th</sup> semester course is the second course for Fixed Prosthetic Specialists in the Dental Technology Program. This course incorporates advanced ceramic restoration design and fabrication techniques. One day per week of this course will be devoted to CAD/CAM design and production techniques.

## **DENTAL TECHNOLOGY 401**

### **Dental Implants**

4 UNITS – *Lecture: 2 hours. Laboratory: 6 hours per week.*  
*Prerequisite: Dental Technology 207 or 208.*  
This 5<sup>th</sup> semester course will cover the theory and procedures of producing simple dental implant prosthesis. Students will learn to produce single implant screw retained, single implant cement retained and multiple implant removable prosthesis.