

## DEPARTMENT: RESTORATIVE DENTISTRY

As a member of the **Department of Restorative Dentistry** you will join a group of students who are part of the **School of Professional Studies** at New York City College of Technology, City University of New York.

**Mission:** "We Make Smiles"

Dental Laboratory Technology is a unique profession combining the **Arts** (drawing, sculpting, etc.), **Sciences** (Chemistry, Biomechanics, Metallurgy, Computer science, etc.) and **Technology** (CAD-CAM ~ Computer Aided Design – Computer Aided Manufacturing). In the profession of Dentistry, the role of the Dental Laboratory Technician is critical for providing the latest advances in dental materials and dental technologies, in order to design and manufacture viable dental prostheses. The Dental Laboratory Technician offer dentists a valuable knowledge base related to laboratory procedures and dental materials. Dental Technicians have opportunities to become gainfully employed in a dental office, clinic, in a commercial dental laboratory, in a manufacturing or distribution corporation or even become an entrepreneur and open a dental laboratory to service multiple dentists.

Since dental patients' needs vary greatly, the necessary work of a Dental Laboratory Technician is complex and different with every case. Dental technicians work directly with dentists by following detailed written prescriptions and records in order to create the best restorative outcomes for the patient. Such work includes:

- Crowns/Laminates for patients who are missing part/parts of the natural tooth/teeth
- Removable Partial Dentures for patients who are missing some, but not all their teeth
- Full Dentures for patients who are missing all their teeth
- Implant Supported Prostheses for patients who are missing all or some of their teeth. Implants are surgically anchored in the patient's bone
- Maxillofacial Prostheses/Appliances for patients who are missing portions of their face and/or oral cavity
- Orthodontic Appliances to help in correcting mal-alignments of the teeth.

The Restorative Dentistry program at NYCCT is accredited by the Commission on Dental Accreditation [and has been granted the accreditation status of "approval without reporting requirements"]. The Commission is a specialized accrediting body specifically for dental education by the ADA (American Dental Association) and is recognized by the United States Department of Education.

Students learn in state-of-the-art dental laboratories, equipped for learning and practicing the art of fabricating dental appliances in both conventional and/or digital processes. Students should expect acquiring the following skills and aptitudes:

- Know generally accepted practices in the fabrication of dental appliances.
- Understand properties of materials used in the fabrication processes.
- Follow instructions from technical manuals.
- Troubleshoot errors occurring in the fabrication processes.
- Use correct dental and anatomical terminology used in restorative dentistry work.
- Apply knowledge of anatomy and physiology aspects pertaining to fabrication of dental appliances.
- Understand how to read and fulfill a dental prescription.
- Use effective communication skills.
- Know proper safety procedures as it pertains to laboratory materials and equipment.
- Exercise discretion and good judgment in all aspects of work.
- Prepare for the Recognized Graduate (RG) exam in Dental Laboratory Technology.
- Perform tasks required for Specialty Certification in Dental Laboratory Technology.
- Know infection control procedures as it pertains to Dental Laboratory Technology.
- Apply knowledge of mathematics in determining ratios and converting measurements.
- Read and analyze literature found in the dental field.
- Demonstrate an understanding and support of the profession's code of ethics and comply with the profession's scope of practice.

At the **end of the fourth semester**, students who have completed all laboratory courses are permitted to take the Recognized Graduate Examination, administered by the National Board for Certification (NBC). This is the preliminary examination leading to certification as a Certified Dental Technician (CDT). The final (or practical) portion of the certification examination may be taken in one or more of the specialties (ceramics, crown & bridge, dentures, partial dentures, orthodontics, or implants) after gaining proficiency through experience in the field.

**Students** in the Restorative Dentistry major can join the department's club "Jaws Club" and engage in other opportunities, e.g., summer externship program.

## Options for Employment and Further Study

Graduates of the Restorative Dentistry program are prepared for employment in commercial dental laboratories, hospitals, dental schools, or dental offices. Some graduates secure employment with dental manufacturers as research assistants or sales representatives.

Among the employers of the graduates of this program are Sloan-Kettering Hospital, Veterans Administration Hospital, Columbia Dental School, New York University, New York City high schools, Nobel Biocare, Amann Girrbach, Affordable Dentures, Aspen Dental, Clear Choice and others. Over the years, many graduates have accepted teaching positions in dental technology schools while others become the owners and managers of dental laboratories in the New York area and across the country.

Graduates may **pursue baccalaureate degrees** at City Tech through the CUNY baccalaureate program, the Career and Technical Teacher Education program or the Health Services Administration program.

## Fun Facts

- ✓ The Dental Laboratory Technology program at City Tech is the largest in the nation and has always been on the cutting edge.
- ✓ In 1946, it was the first higher education program of its kind in the United States.
- ✓ It was the first dental technology program to:
  - Be accredited by the Commission on Dental Accreditation of the American Dental Association in 1954;
  - become a Certified Dental Lab (CDL) by the National Board for Certification in Dental Laboratory Technology (NBC) in 1995; and
  - purchase and integrate CAD-CAM technology into the curriculum in 2004.
- ✓ Today, the program is a member of the National Association of Dental Laboratories (NADL).