

Dental and Ophthalmic Laboratory Technicians and Medical Appliance Technicians

SOC: 51-9080 • Career Profile Report

■ Key Facts

\$45,820

Median Salary

66,800

Employment

-1.0%

Growth Rate

■ Requirements & Salary Range

Education: High school diploma

■ Automation Risk Assessment

Medium Risk - 38.0% probability of being automated in the next 10-20 years.

This job has some routine elements but still requires human judgment and interaction.

■■ Work-Life Balance

4.9/10 - Fair work-life balance

■ Personality Fit (RIASEC)

Higher scores indicate better personality fit for this career type.

Realistic	8.4/10	Investigative	5.0/10
Artistic	3.8/10	Social	4.6/10
Enterprising	4.0/10	Conventional	8.0/10

■ Top Skills Required

Detail oriented, Dexterity, Interpersonal skills, Problem-solving skills, Technical skills

✓ Strengths

- High Demand
- Flexible Work
- Continuous Learning

■ Challenges

- Burnout Risk
- Rapid Technological Change

■ What They Do

Dental and Ophthalmic Laboratory Technicians and Medical Appliance Technicians create, repair, and adjust **dental, vision, and medical devices used for patient care**. They work with materials such as metals, plastics, and ceramics to produce dentures, glasses, prosthetics, and orthodontic appliances. Their work is critical in dental offices, optical labs, and medical device facilities.

This career is well suited for individuals who enjoy hands-on technical work, precision, and supporting healthcare outcomes.

What Do Dental and Ophthalmic Laboratory Technicians and Medical Appliance Technicians Do?

These professionals design, fabricate, and repair dental, vision, and medical devices according to specifications.

Common responsibilities include:

- Reading prescriptions, plans, and diagrams from dentists, optometrists, or physicians
- Selecting and shaping materials for appliances or devices
- Assembling, adjusting, and finishing dental prosthetics, lenses, or medical devices
- Testing devices for fit, function, and durability
- Repairing and modifying appliances based on patient or clinician feedback
- Maintaining equipment, tools, and workspaces
- Adhering to safety, health, and quality standards

Key Areas of Laboratory and Medical Appliance Work

Technicians may focus on specific types of devices or materials:

- Dental Laboratory Work: Producing dentures, crowns, bridges, and orthodontic appliances
- Ophthalmic Laboratory Work: Making eyeglass lenses, frames, and other vision aids
- Medical Appliance Fabrication: Creating prosthetics, orthotics, and surgical devices
- Repair and Adjustment: Fixing or modifying existing appliances for proper fit
- Quality Assurance: Ensuring devices meet prescribed specifications and safety standards

Skills and Abilities Needed

These technicians combine technical skill with attention to detail and precision.

Core Professional Skills

Personal Qualities That Matter

Education and Career Pathway

This role typically requires vocational training or specialized education:

- High School Diploma or GED: Basic science, math, and technical skills
- Postsecondary Training or Certificate: Programs in dental, ophthalmic, or medical appliance technology
- On-the-Job Training: Practical experience under experienced technicians
- Continuous Learning: Staying current with new materials, techniques, and safety standards

Where Do They Work?

They are employed in settings that produce or repair medical and vision devices:

- Dental Laboratories

- Optical Laboratories
- Medical Appliance Manufacturing
- Hospitals, Clinics, and Prosthetic Centers
- Private Practices

Work environments may include labs, workshops, offices, and patient care facilities.

Is This Career Difficult?

This career requires precision, technical knowledge, and patience. Technicians must handle detailed fabrication tasks, adhere to strict specifications, and maintain quality standards.

Who Should Consider This Career?

This career may be a strong fit if you:

- Enjoy hands-on technical and laboratory work
- Are detail-oriented and precise
- Have an interest in healthcare and medical devices
- Can follow instructions and maintain high quality standards
- Want a career that supports patient care through custom devices

How to Prepare Early

- Take courses in biology, chemistry, math, and technical design
- Explore vocational or certificate programs in dental, ophthalmic, or medical technology
- Gain experience through internships or entry-level laboratory work
- Develop manual dexterity, precision, and problem-solving skills
- Stay informed on new materials, fabrication techniques, and safety protocols

Dental and ophthalmic laboratory technicians and medical appliance technicians create and maintain devices that improve patient health, vision, and quality of life.

*Generated by StartRight • Data from U.S. Bureau of Labor Statistics & O*NET*

Source: <https://www.bls.gov/ooh/production/dental-and-ophthalmic-laboratory-technicians-and-medical-appliance-technicians.htm>