

# Orthopedic Technician

## **Professional Activities**

As an orthopedic technician, you will assist orthopedic physicians who are treating patients with injuries and problems. This will include receiving orders from physicians as well as showing patients how to properly care for their injuries or use and maintain the tools required to assist healing. You will also care for the machines used to treat injuries like these, and you will sometimes operate them as well. Part of the job description may include following up with patients to determine how they are healing and working with physicians to evaluate and change or continue current treatment.

An orthopedic technician will perform a number of different tasks throughout the work day. Most of these involve working with or around patients who have bone or joint breaks or injuries. In addition to having a good bedside manner, orthopedic technicians need to have a great understanding of orthopedic treatment machines and tools.

**Supplies and Equipment:** Some orthopedic technicians will be responsible for the supplies in an orthopedic center or facility. They will need to take inventory of items and order the needed items when supplies are running low. This may include the equipment used to treat or test patients with orthopedic injuries. Orthopedic technicians may be required to test and calibrate machines before patient use, replace machines that are malfunctioning and care for machines after they have been used in patient care.

**Patient Treatment and Care:** One of the biggest aspects of an orthopedic technician's job will be to care for patients who are under the treatment of the residing physician or physicians. With physician orders, the technician may be required to fit patients for and apply treatment equipment and devices. These might include splints, casts, crutches and other medical devices. The technician will often be the one to instruct patients on how to use their medical treatment equipment or how to care for it during the time they must utilize it. When the treatment is over, technicians will be responsible for removing those devices; they may need to evaluate the device if the patient is having problems with or if healing is not progressing as it should.

**Operating Machines:** Many of the machines that are used to care for patients will be the orthopedic technician's responsibility before, during and after treatment. This may include machines and devices such as traction machines, Risser tables, braces, Circoelectric beds, balance and suspensions and more. This care includes troubleshooting machines or devices that do not seem to be functioning properly as well as cleaning and disassembling certain machines.

**Record Keeping:** Technicians, like most other medical professionals, will be required to keep thorough records for nearly everything they do throughout the day. Patients for whom care is provided, as well as the practices used to care for them, will need to be accurately documented. Any equipment that is used by the patient typically needs to be logged and, in some cases, patient responses or reactions will need to be charted as well. Thorough records will need to be kept for machines as well as for any supplies used and ordered in the orthopedic department or clinic. The orthopedic technician is typically responsible for this as well.

**Training:** Some orthopedic technicians will assist in the training of new technicians, which may include training for patient care, machine use, device set-up and break-down and procedures for common tasks that must be accomplished. Typically, these duties fall to technicians who are very experienced and knowledgeable or to those who have been promoted to supervisor positions.

Overall, there are a lot of responsibilities the orthopedic technician will need to fulfill and it is very important to follow all policies and guidelines as patient health and well-being is at stake.

### **Educational Requirements**

While many states do not require orthopedic technicians to obtain any specialized schooling or certification, it can be very difficult to obtain a position in a healthcare setting without those things. Some employers, but not many, are willing to train individuals to perform orthopedic technician duties. Obtaining the proper education and training can help ensure that you will be able to obtain employment. Those who wish to pursue a career as an orthopedic technician should attend a school that is recognized by the National Association of Orthopedic Technologists.

Certification is offered through the National Board for Certification of Orthopedic Technologists, or NBCOT, as well as the National Association of Orthopedic Technologists, or NAOT. In order to sit for the certification examination through the NAOT, individuals must have either 2 years of full time employment in orthopedic technology under the supervision of a physician who specializes in the musculoskeletal system, have completed an educational program recognized by the NAOT, or be a certified or licensed athletic trainer with at least six months' training in orthopedic areas under the supervision of a licensed or certified professional.

In order to complete some courses for becoming an orthopedic technician, individuals must pass the Psychological Services Bureau's Health Occupations Aptitude Exam with a minimum score of 220. This test determines an individual's "readiness and capability for successful completion of the educational program designed to prepare qualified healthcare personnel." It measures abilities, skills, knowledge and attitude which are all important for a future in the orthopedic technician field. There are four parts to the test which include spelling, reading comprehension, information in the natural sciences and vocational adjustment index.

In addition to being certified through either the NBCOT or the NAOT, individuals will need to maintain their certification through testing available with the NBCOT only. Certifications expire every six years and extensions are not available, so it is very important that the technician obtain recertification before their certification expires. The recertification test aims to ensure that individuals are continuing their education either through their job or independently and to enhance the development of those who are certified. Certification cards are given once the individual completes the testing and passes.

It is important to take the time to gather the needed education and certification requirements. This helps future orthopedic technicians better serve their patients and obtain the best possible employment. The length of time it takes to become an orthopedic technician, if going through the process above, is approximately two to three years. Those who opt for more in-depth training through a college or university may require four or more years before becoming certified.

### **Academic Requirements**

The National Association of Orthopedic Technologists (NAOT) recognizes schools with established orthopaedic technology programs that meet standards set by the NAOT Educational Review Committee. Approved curricula for either associate degree or certificate Recognized Programs must consist of a minimum of 450 hours of instruction, comprised of both classroom lecture and practical laboratory instruction. Approved curricula must also include either a clinical rotation or an externship component of at least 200 hours. Students completing NAOT Recognized Programs are eligible to sit for the OTC® certification examination

given by the National Board for Certification of Orthopaedic Technologists following graduation and forego the qualifying requirement of two (2) years of full time on the job training in orthopaedics.

### **Academic Programs**

[Central Georgia Technical College](#)  
[NHTI - Concord's Community College](#)

[Grossmont College](#)

### **Employment/Salary Outlook**

#### **State and National Wages**

Location	Pay Period	2021		
		Low	Median	High
United States	Hourly	\$20.06	\$36.27	\$59.63
	Yearly	\$41,730	\$75,440	\$124,040
Illinois	Hourly	-	-	-
	Yearly	-	-	-

#### **State and National Trends**

United States	Employment		Percent Change	<a href="#">Job Openings</a> <sup>1</sup>
	2021	2031		
Health Technologists and Technicians, All Other	11,100	13,000	17%	1,900
Illinois	Employment		Percent Change	<a href="#">Job Openings</a> <sup>1</sup>
	2020	2030		
Health Technologists and Technicians, All Other	-	-	-	-

<sup>1</sup>Job Openings refers to the average annual job openings due to growth and net replacement.

### **Professional Organizations**

National Association of Orthopedic Technologists ([naot.org](http://naot.org))

National Board for Certification of Orthopedic Technologists ([nbcot.net](http://nbcot.net))

### **References**

*Occupational Outlook Handbook*, U.S. Department of Labor, Bureau of Labor Statistics

(<https://www.bls.gov/ooh/healthcare/orthotists>)

CareerOneStop (<https://www.careeronestop.org/site-search.aspx?keyword=health%20technician>)

Last Modified November 2, 2022