



Orthotics and Prosthetics

**MAKE A CAREER
OF MAKING A
DIFFERENCE**

HOPE Careers Consortium



The Orthotics, Prosthetics & Pedorthics (HOPE) Careers Consortium is a partnership of five institutions:

- Baker College in Flint, Michigan
- Century College in White Bear Lake, Minnesota
- Oklahoma State University Institute of Technology in Okmulgee, Oklahoma
- Spokane Falls Community College in Spokane, Washington
- St. Petersburg College in St. Petersburg, Florida

Together, we are building exciting new programs that provide valuable career education and training in the orthotics, prosthetics, and pedorthics (O&P) sector. There is an urgent need in the U.S. to expand the pipeline of workers qualified to serve individuals living with limb loss or disabilities due to chronic disease or war-related injury—and our programs focus on that need.

The HOPE Careers Consortium is supported by a grant awarded from the Trade Adjustment Assistance Community College and Career Training (TAACCT) Grant Program from the U.S. Department of Labor.

Through this partnership, we are advancing the O&P education and career training we deliver by increasing the number of key credentials offered and matching them to the skills required by O&P employers and better preparing TAA-eligible workers, veterans, and other adults for high-wage, high-skill employment in O&P occupations.

All five of the HOPE Careers Consortium colleges offer occupational training leading to industry-recognized certifications and college degrees in the O&P profession. For more information, visit www.hopecareers.org or www.opcareers.org.



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O&P boasts a range of exciting employment opportunities, including fitters, pedorthists, technicians, assistants, and practitioners.



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Introduction



Orthotic and prosthetic patients can be any age, size, race, gender, or socioeconomic status, but they all have one thing in common: They need the services of caring and trained O&P professionals.

Imagine a career that blends art, science, technology, healthcare, and creativity. Imagine a career that changes people's lives. A career in orthotics and prosthetics offers all this and more.

Orthotics and prosthetics (O&P) is the evaluation, fabrication, and custom fitting of orthopedic braces, known as "orthoses," and artificial limbs, known as "prostheses." O&P professionals are a crucial part of the healthcare team, working with patients, physicians, physical and occupational therapists, nurses, and other care providers.

Orthotic and prosthetic patients can be any age, size, race, gender, or socioeconomic status, but they all have one thing in common: They need the services of caring and trained O&P professionals. Some need short-term care as a result of an injury. Others have conditions that require lifelong care.

Orthotic patients need external support to a part of the body because of neuromuscular or skeletal conditions such as cerebral palsy, scoliosis, spina bifida, traumatic brain injury, stroke, plagiocephaly, multiple sclerosis, sports injuries, and back strain. Other patients may require orthoses because they have foot conditions as a consequence of diabetes, high or flat arches, or repetitive stress.

Prosthetic patients may have been born with limb deficiency or have experienced amputation due to trauma, cancer, infection, or abnormalities in blood vessels or nerves.

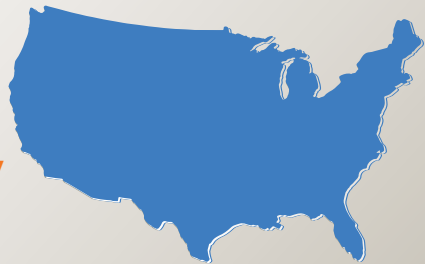
O&P boasts a range of exciting employment opportunities, including fitters, pedorthists, technicians, assistants, and practitioners. All are rewarding careers in great demand throughout the country. Advances in engineering have opened amazing new possibilities for O&P devices and have given O&P professionals exciting new options to help their patients, including robotics, computer-aided design and manufacturing, 3-D printing, lasers, and cutting-edge materials from the aerospace industry.

O&P professionals say some of the highlights of their careers are the variety of skills they use, the flexibility of their work schedules, their connection with patients, and financial security. But they consistently cite the fulfillment that comes with helping patients regain mobility and lead productive lives as the most satisfying aspect of their jobs.

A Career in Demand

72,000,000

Number of Americans who will be 65 or older by 2030¹

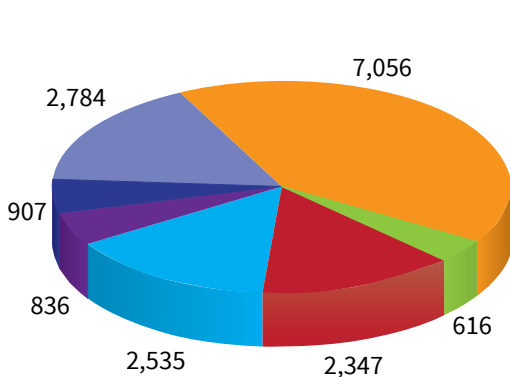


Diabetes **15.3 million** ↑ New cases in the U.S. since 1980²

Heart Disease **27%** ↑ Projected increase in cases in U.S. women by 2030; the projected increase is 26 percent for men³

Obesity **22.3%** ↑ Increase in incidence since 1960⁴

Practicing O&P Professionals



- Practitioners
- Assistants
- Technicians
- Pedorthists
- Orthotic Fitters
- Mastectomy Fitters
- Therapeutic Shoe Fitters

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Approximate percentage of O&P professionals who are 55 or older and likely to retire over the next 10 years. It is critical that more qualified students enter O&P programs to assure access to quality care for individuals with amputations and orthopedic impairments.

Average Total Compensation by Certification⁵

	Practitioners	\$75,300		Pedorthists	\$52,065
	Assistants	\$43,000		Fitters	\$39,500
	Technicians	\$45,630			

¹NIH National Institute on Aging, "Dramatic changes in U.S. aging highlighted in new census, NIH report." 2014.

²CDC, "Annual Number (in Thousands) of New Cases of Diagnosed Diabetes among Adults Aged 18-79 Years, United States, 1980-2011." November 2013.

³Pandya A, et al., "More Americans Living Longer With Cardiovascular Disease Will Increase Costs While Lowering Quality Of Life." *Health Affairs*, October 2013.

⁴Flegal KM, et al., "Prevalence of obesity and trends in the distribution of body mass index among US adults, 1999-2010." *Journal of the American Medical Association*, 2012.

⁵American Orthotic and Prosthetic Association (AOPA), *2013 Compensation and Benefits Report*. Note: Compensation varies based on factors such as geographic location, years of experience, practice setting, and benefits.

O&P Careers

Fitters



Therapeutic shoe fitters

A therapeutic shoe fitter provides non-custom therapeutic shoes and non-custom multi-density shoe inserts for patients diagnosed with diabetes. They assess patients' needs, develop treatment plans, and provide follow-up care. Therapeutic shoe fitters may work in specialty shoe stores, patient care facilities, pharmacies, and long-term care facilities.

Mastectomy fitters

Mastectomy fitters fit and deliver external breast prostheses, custom breast prostheses, mastectomy garments, lymphedema garments, and other breast care products to treat physiological asymmetry as a result of mastectomy, trauma, or congenital defect. A mastectomy fitter works directly with patients to assess their needs, formulate treatment plans, and provide follow-up care. They may work in such settings as retail outlets, patient care facilities, mastectomy boutiques, and cancer care centers.

Orthotic fitters

An orthotic fitter fits and delivers pre-fabricated orthotic devices. They assess patients' needs, develop

treatment plans, and provide follow-up care. An orthotic fitter works in settings such as patient care facilities, physicians' offices, and pharmacies.

Pedorthists

A pedorthist fabricates, fits, and modifies foot orthoses and shoes to alleviate painful or debilitating conditions caused by disease, congenital condition, overuse, or injury. A pedorthist has studied foot anatomy and pathology, biomechanics, shoe construction and modification, foot orthosis fabrication and materials, footwear fitting, and management of medical conditions that originate at or below the ankle. Pedorthists may work in patient care facilities, VA facilities, and rehabilitation facilities.

Orthotic and prosthetic technicians

The technician fabricates, repairs, and maintains devices to provide the best possible fit, function, and appearance in consultation with the practitioner. The technician is an expert in techniques and materials used to fabricate devices and is skilled in the use of tools and machines. Technicians work in settings such as fabrication laboratories, VA facilities, and patient care facilities.



Technicians



Pedorthists

O&P practitioners

An orthotist designs and fabricates custom-made orthopedic braces, or “orthoses,” and fits pre-fabricated devices. A prosthetist designs, fabricates, and fits custom-made artificial limbs, or “prostheses.” Orthotists and prosthetists (i.e., practitioners) evaluate patients, formulate treatment plans, and provide follow-up care and continued patient management that ensures the overall welfare of the patient. Practitioners work in settings including patient care facilities, hospitals, VA facilities, rehabilitation facilities, long-term care facilities, and patients’ homes.

O&P assistants

Under the guidance and supervision of the practitioner, an O&P assistant performs orthotic and prosthetic tasks related to the management of patients. The assistant also fabricates, repairs, and maintains devices to provide appropriate fit, function, and appearance. They may work in settings such as patient care facilities, hospitals, and VA facilities.



Practitioners



Assistants

Visit
www.opcareers.org
to view videos of
O&P professionals
on the job.

Pathways to the Profession

You may choose to make any of these a lifelong career or further your education and training to transition into other O&P roles.



Therapeutic shoe fitter

Provides patients with non-custom therapeutic shoes and multi-density shoe inserts.

- High school diploma, GED, or college degree
- Pre-certification education course
- 250 hours of patient care
- Certification exam



Orthotic fitter

Fits patients with pre-fabricated orthotic devices.

- High school diploma, GED, or college degree
- Pre-certification education course
- 1,000 hours of patient care
- Certification exam



Mastectomy fitter

Fits patients for external breast prostheses and provides other post-mastectomy products and services.

- High school diploma, GED, or college degree
- Pre-certification education course
- 500 hours of patient care
- Certification exam



Technician

Fabricates, repairs, and maintains devices.

- High school diploma, GED, or college degree
- Technician education program, or two years of work under the supervision of a certified practitioner or technician
- Certification exam



Practitioner

Manages all aspects of patient care. Designs, fabricates, and fits devices.

- O&P master's degree
- Residency in orthotics, prosthetics, or both
- Certification exam



Pedorthist

Manufactures, fits, modifies, and provides patients with foot orthoses and shoes.

- High school diploma, GED, or college degree
- Pre-certification education course
- 1,000 hours of patient care
- Certification exam



Assistant

Performs patient management tasks under the supervision of a certified practitioner. Fabricates, repairs, and maintains devices.

- High school diploma, GED, or college degree
- Courses in human anatomy, physics, and medical terminology
- One year of patient care
- Certification exam

O&P Schools

All programs listed are accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) or the National Commission on Orthotic and Prosthetic Education (NCOPE).

Technician Programs

Baker College of Flint★

Flint, Michigan

www.baker.edu/programs-degrees/orthotic-prosthetic-technology-associate

Century College★

White Bear Lake, Minnesota

www.century.edu/futurestudents/programs/pnd.aspx?id=99

Oklahoma State University Institute of Technology★

Okmulgee, Oklahoma

www.osuit.edu/op

Spokane Falls Community College★

Spokane, Washington

www.spokanefalls.edu/OandP

St. Petersburg College★

St. Petersburg, Florida

www.spcollege.edu/opt

Francis Tuttle Technology Institute

Oklahoma City, Oklahoma

www.francistuttle.edu/classOfferings

Joliet Junior College

Joliet, Illinois

www.jjc.edu/orthotics-prosthetics/Pages/default.aspx

Practitioner Programs

Concordia University/Century College★

St. Paul, Minnesota

www.csp.edu/academics/graduate/master-of-science-orthotics-prosthetics

St. Petersburg College/Florida State University★

St. Petersburg, Florida

www.spcollege.edu/op

Alabama State University

Montgomery, Alabama

www.alasu.edu/academics/colleges-departments/health-sciences/prosthetics-orthotics/index.aspx

Baylor College of Medicine

Houston, Texas

www.bcm.edu/education/schools/school-of-allied-health-sciences/programs/orthotics-and-prosthetics

California State University Dominguez Hills

Long Beach, California

www.csudh.edu/oandp

Eastern Michigan University

Ypsilanti, Michigan

www.emich.edu/chhs/hphp/orpr

Georgia Institute of Technology

Atlanta, Georgia

www.ap.gatech.edu/mspo

Loma Linda University

Loma Linda, California

www.llu.edu/allied-health/sahp/op/elmsop.page



Northwestern University

Chicago, Illinois

www.nupoc.northwestern.edu

University of Hartford

West Hartford, Connecticut

www.hartford.edu/mspo

University of Pittsburgh

Pittsburgh, Pennsylvania

www.shrs.pitt.edu/po

University of Texas Southwestern Medical Center

Dallas, Texas

www.utsouthwestern.edu/po

University of Washington

Seattle, Washington

www.rehab.washington.edu/education/degree/po

Pedorthic Programs

St. Petersburg College★

St. Petersburg, Florida

www.spcollege.edu/orthotics-ceu

Francis Tuttle Technology Center

Oklahoma City, Oklahoma

www.francistuttle.edu/classOfferings

Kennesaw State University

Marietta, Georgia

www.ccpe.kennesaw.edu/pedorthics



★ HOPE Careers Consortium member



Jodee

Hollywood, Florida
www.jodee.com

Nearly Me Technologies, LLC

Various locations
www.nearlyme.org

OandPEdu

www.oandpedu.com/fitter-classes

Trulife

Various locations
www.trulife.com

Therapeutic Shoe Fitter Programs

Aetrex Therapeutic Shoe Fitter Course

Teaneck, New Jersey
www.aetrex.com/aetrex-shoe-fitter-course

CFS Allied Health Education

Distance learning
www.cfslearningstore.com/ocart

Dr. Comfort

Various locations
www.drcomfort.com/CFTS.pdf

Foot Solutions

Marietta, Georgia
www.footsolutions.com

National Pedorthic Services, Inc.

Milwaukee, Wisconsin
www.npsfoot.com

OrthoFeet

Various locations
www.orthofeetonline.com

OandPEdu

Various locations
www.oandpedu.com/schedule

Orthotic Fitter Programs

Oklahoma State University Institute of Technology ★

Okmulgee, Oklahoma
www.osuit.edu/op

St. Petersburg College ★

St. Petersburg, Florida
www.spcollege.edu/orthotics-ceu

CFS Allied Health Education

Various locations
www.cfslearningstore.com/ocart/

DeRoyal

Powell, Tennessee
www.deroyal.com/orthoticfitterscourse

Kassel Group Inc.

Various locations
www.kasseledu.com/courses

Medical Careers Institute

www.themedicalcareersinstitute.com

OandPEdu

www.oandpedu.com/fitter-classes

Össur Americas, Inc.

Various locations
www.ossur.com/injury-solutions

Viscent Orthopedic Solutions

Oklahoma City, Oklahoma
www.viscent.com/viscent-university

Mastectomy Fitter Programs

St. Petersburg College ★

St. Petersburg, Florida
www.spcollege.edu/orthotics-ceu

American Breast Care, LP

Various locations and distance learning
www.americanbreastcare.com

Amoena

Various locations
www.amoena.us/fitter

Anita International Corporation

Various locations
www.anita.com

B*FRIN

Upper Darby, Pennsylvania
www.bfrin.org

Visit www.opcareers.org for the most current program information.

O&P Organizations



Education organizations

These organizations are important as you pursue your O&P education and training.

Commission on Accreditation of Allied Health Education Programs (CAAHEP)

www.caahep.org

Accredits O&P technician and practitioner education programs.

The Center for Orthotics and Prosthetics Learning and Outcomes/ Evidence-Based Practice (COPL)

www.centerforoandp.org

Dedicated to advancing the development of and learning about outcomes and evidence-based research projects in the O&P field.

The Orthotic and Prosthetic Education and Research Foundation (OPERF)

www.operf.org

OPERF awards grants and prizes to O&P researchers and students to promote excellence in patient care.

National Commission on Orthotic and Prosthetic Education (NCOPE)

www.ncope.org

NCOPE develops, implements, and assures compliance with standards for O&P education through accreditation and approval processes that promote exemplary patient care.

American Board for Certification in Orthotics, Prosthetics and Pedorthics (ABC)

www.abcop.org

ABC certifies practitioners, pedorthists, technicians, fitters, and assistants.

The Orthotic and Prosthetic Activities Foundation (OPAF)

www.opafonline.org

Aims to enable individuals served by the O&P community to enjoy the rewards of personal achievement, physical fitness, and social interaction.

Board for Certification/ Accreditation, International (BOC)

www.bocusa.org

BOC certifies practitioners, pedorthists, and fitters.



Certifying agencies

These organizations are important as you begin your career in O&P.

Foundations

These organizations raise money to support the O&P profession.





Professional organizations

These organizations are important after you become certified and are working as an O&P professional.

The American Academy of Orthotists and Prosthetists (The Academy) www.oandp.org

The primary source for the continuing education you need to maintain your certification. The Academy also represents the interests of individual O&P professionals.

The Association of Children's Prosthetic-Orthotic Clinics (ACPOC) www.acpoc.org

An association of professionals who are involved in clinics that provide O&P care to children with limb loss or orthopedic disabilities.

The American Orthotic and Prosthetic Association (AOPA) www.aopanet.org

Represents the business interests of O&P facilities and manufacturers.

National Association for the Advancement of Orthotics and Prosthetics (NAAOP) www.naaop.org

Educates the public and promotes public policy that is in the interest of the O&P patient.

The International Society for Prosthetics and Orthotics (ISPO) www.ispoint.org

Focuses on O&P practice throughout the world.

The Amputee Coalition (AC) www.amputee-coalition.org

Empowers people affected by limb loss to achieve their full potential through education, support, and advocacy, and promotes limb-loss prevention.

American Association of Breast Care Professionals (AABCP) www.aabcp.org

AABCP is a member-driven national advocacy organization for post-mastectomy professionals.

Pedorthic Footcare Association www.pedorthics.org

Represents the interests of the credentialed pedorthist and supports the pedorthic profession at large.

Frequently Asked Questions

Is this the right career for me?

The various O&P careers are ideal for individuals with a wide range of skills and interests, including:

- Strong interpersonal skills
- Passion for helping others
- Excellent hand skills
- Compassion
- Problem-solving abilities
- Aptitude for math and science
- Creativity
- Dedication

Many people enter the O&P profession because they or a family member use a prosthesis or orthosis, or they work in an O&P facility or related field of rehabilitation, such as physical or occupational therapy. Others come to the profession out of undergraduate majors such as engineering, bioengineering, athletic training, kinesiology, or biology. Still others wish to enter a new profession with a greater personal impact on the world.

If this sounds like you, you owe it to yourself to research the exciting career opportunities in orthotics and prosthetics.



Where would I work?

O&P professionals work in settings including:

- O&P patient care facilities
- Physicians' offices
- Retail outlets
- Fabrication laboratories
- Hospitals
- Rehabilitation facilities
- Specialty clinics
- Patients' homes
- Long-term care facilities
- Pharmacies
- Mastectomy boutiques
- Specialty stores
- VA facilities
- Cancer care centers

Some O&P professionals specialize in one area of care such as pediatrics, geriatrics, or sports medicine, while others choose to be generalists.

Who needs orthotic and prosthetic services?

Orthotic and prosthetic patients can be any age, size, race, gender, or socioeconomic status, but they all have one thing in common: They need the services of caring and trained O&P professionals. Some need short-term care as a result of an injury. Others have conditions that require lifelong care.

Orthotic patients need external support to a part of the body because of neuromuscular or skeletal conditions such as cerebral palsy, scoliosis, spina bifida, traumatic brain injury, stroke, plagiocephaly, multiple sclerosis, sports injuries, and back strain. Other patients

may require orthoses because they have foot conditions as a consequence of diabetes, high or flat arches, or repetitive stress.

Prosthetic patients may have been born with limb deficiency or have experienced amputation due to trauma, cancer, infection, or abnormalities in blood vessels or nerves.

Most patients have evolving orthotic and prosthetic needs. As a result, patient and professional often have a long relationship and strong bond.

What if I have a college degree in an unrelated field?

Regardless of your background, there is a place for you in O&P. Job shadowing, interning, or volunteering in an O&P setting is a great place to start.

Technicians, assistants, pedorthists, and fitters generally require a high school diploma, GED, or college-level studies. To be certified, O&P professionals at these levels must complete special training courses, gain experience, and take examinations.

All who seek to enter the profession at the practitioner level must earn a master's degree from an O&P graduate program.

To see more information about entering the profession at any level, turn to pages 8 and 9.

How can I find out more about O&P or get some real-life experience working in an O&P setting?

Go to www.opcareers.org and click “Talk to an O&P Professional in Your Area.” Click on your state to find a list of professionals willing to answer your questions or provide you with an opportunity to see them at work. If there is no one close to you, email info@opcareers.org for assistance.

What resources are available to help me pay for my O&P education?

With any college program, start by completing a Free Application for Federal Student Aid (FAFSA). This form is used to determine your eligibility for federal, state, and college-sponsored financial aid including grants, loans, and work-study programs. Visit www.fafsa.ed.gov for details. In addition, your school may offer scholarships that have separate application requirements. You can find more information about O&P scholarships at www.opcareers.org. If you are a veteran or a dependent spouse or child of a veteran, the Montgomery GI Bill may pay for your education and some of your other expenses while you study to become an O&P professional. Visit www.benefits.va.gov to learn more. You may also qualify for funding through the Trade Adjustment Assistance (TAA) program if you meet the eligibility criteria. Visit www.doleta.gov/tradeact for details.

Can an occupational therapist (OT) or physical therapist (PT) transition into O&P without having to obtain additional education?

All levels of O&P will require some O&P-specific training. You should check with the school you wish to attend to see which of your credits are transferable and what courses you’ll need to complete.

What should I do to become more familiar with the day-to-day job responsibilities of an O&P professional?

Go to www.opcareers.org to view videos that show O&P professionals on the job. Use the link on the homepage to “Talk to an O&P Professional in Your Area.” Contact someone and see if he or she is willing to allow you to job shadow. Visit the facility to see what a typical day might be like. If you attend or plan to attend a HOPE Careers Consortium member program, speak with the school’s career navigator for more details.

As a graduate from an O&P program, how can I find a job?

Prior to applying to O&P schools, you should intern or volunteer with a facility in your area. Maintain that relationship because that facility may one day become your employer. It is also critical to stay informed about what is going on in the profession. Students can do so by joining O&P professional organizations and attending their meetings. A list of these organizations can be found on page 12. In addition, several O&P publications list job openings and employment opportunities. Your school may offer career placement services. If you attend a HOPE Careers Consortium member program, seek out the guidance of your career navigator. Visit www.hopecareers.org for more information.

Is it possible to work full-time while training to be a fitter, pedorthist, technician, or assistant?

Although it can be quite challenging to attain an O&P education while juggling a full-time career, several O&P schools have implemented programs to make this easier. Distance- and blended-learning programs are tailored to those who hold a job while in school. Students may be required to combine online work and home studies with clinical experience on campus. Please contact

individual schools or visit www.opcareers.org for the latest information on online education options.

What happens after I finish school?

Whether you have graduated from a fitter course or pedorthist, technician, assistant, or practitioner program, you will need to pursue certification by ABC, BOC, or both. Don’t forget to keep building your career network by participating in O&P meetings and events. These relationships could make a big difference in your life as you look for mentors, friends, and prospective employers.



Want to know more? Visit www.opcareers.org.



For More Information

Take the first steps to a new and rewarding career. Visit www.opcareers.org.