

Pre-Professional Advising

Orthotics & Prosthetics (CO, CP, CPO)

- Orthotists fit external supports and braces (orthoses) for people with weakened or deformed body parts.
- Their goal is to enable individuals to function to the best of their ability.
- Orthotists may also be employed in industry as researchers and designers.
- Prosthetists produce and fit artificial (prosthetic) limbs to help people with limb loss function more fully.
- Prosthetists may also be employed in industry as researchers and designers.
- Both fields combine knowledge of medicine, engineering, and materials science to enhance the lives of people.
- They assess the patient's history, test muscle strength and range of motion, and evaluate devices for comfort, stability, and proper fit.
- Some professionals work as either a Prosthetist (CP) or Orthotist (CO), others are Certified Prosthetists Orthotists (CPO) and can practice in both disciplines.
- Orthotists and prosthetists work in a variety of settings: private practice, hospitals, rehabilitation facilities, specialty clinics, nursing homes, and industry.
- These are great careers for people who are problem solvers and who want to have extended relationships with their patients.
- Ultimately, these fields combine art, science, engineering, problem-solving, and patient care in unique and interesting ways.

### **Education & Licensure**

- A master's degree is the minimum educational standard to become a certified practitioner. Currently there are 13 accredited master's degree programs.
- Upon graduation from a CAAHEP-accredited O&P program, students must complete an NCOPE-accredited residency program to gain clinical training and experience in three primary areas: pediatrics, adult, and geriatrics.
- To practice as an Orthotist and/or Prosthetist, individuals must be certified by the American Board for Certification in Orthotics and Prosthetics, Inc.

### Preparation

- Applicants should gain experience in orthotics and prosthetics by volunteering or working at a hospital, clinical rehabilitation facility, clinical orthotics and prosthetics facility or research facility.
- Laboratory experience such as plaster work, laminating, and vacuum forming are all seen favorably, as is patient contact.
- A minimum of one year of prosthetics or orthotics experience is encouraged.
- Taking the Graduate Record Exam (GRE) is required. A TOEFL exam may be required if English is not your first language.
- Prerequisite courses vary between programs, but typical requirements are listed below.
- All required courses must have a minimum C grade.

Purdue Equivalents (specific courses may vary by major)
BIOL 11000-11100 or 13100 & 23100 & 23200 (lab) or BIOL 23000 & upper level biology (including 2 hours of lab)
BIOL 20300-20400 (BIOL 30100-30200)
CHM 11500-11600 or 12500-12600 or 12300-12400 or 12901 (CHM 11500 credit exam recommended along with CHM 12901) or CHM 13600
PHYS 22000-22100 or PHYS 23300-23400 or PHYS 17200 & 27200 or PHYS 17200 & 24100 & 25200 (lab) or ENGR 16100-16200*
PSY 12000
MA 15300-15400 or 15800 or 15900
Gross Anatomy with dissection, Kinesiology, Biomechanics, Material Science, Public Speaking, Art/Drawing/Sculpture, and Business courses

**Common Prerequisite Courses** (required courses determined by each graduate program but similar to this list)

# **Program Information**

<u>Commission on Accreditation (CAAHEP)</u> https://caahep.org/Students/Find-a-Program.aspx (search for Orthotist/Prosthetist)

# Applying

- Application is made to some programs directly through their graduate programs and to others using a common application system called OPCAS (the Orthotics and Prosthetics Centralized Application Service) and also through their online graduate school applications.
- Competitive applicants will have:
  - Strong academic performance
  - High scores on the GRE
  - Leadership, teamwork, and communication skills
  - Volunteer and shadowing/observation experiences
  - Strong positive letters of recommendation
- Early application is recommended as many programs accept only a small number of students. OPCAS opens in mid-July and applications are most competitive if submitted within a month of the application opening.

### **Fee Assistance**

- Visit specific school websites to learn if fee assistance is available.
- <u>OPCAS Fee Waivers</u> https://help.liaisonedu.com/OPCAS\_Applicant\_Help\_Center/Starting\_Your\_OPCAS\_Application/Getting\_Started\_with\_Your\_OPCAS\_Application/O3\_Application\_Fees
- <u>GRE Fee Reduction Program</u> https://www.ets.org/gre/revised\_general/about/fees/reductions/

### **Employment Outlook**

- The <u>Bureau of Labor Statistics</u> estimates demand for orthotic and prosthetic services is expected to increase as much as 20% by 2028. https://www.bls.gov/ooh/healthcare/orthotists-and-prosthetists.htm#
- The Department of Health and Human Services also projects a large increase in diabetic limb loss in the coming years which further increases the need for these professionals.
- Most students are employed before leaving their training programs.
- The median wage of certified Orthotists and Prosthetists is between \$69,120 and \$75,300 in 2019.

# **Diversity Matters**

The orthotics & prosthetics profession needs professionals who look just like you, and who share your life experiences. Race or ethnicity, LGBTQ identity, (dis)ability, age, geographic region, socioeconomic status, and nationality all add to a richer experience for all students in the O & P program classroom, contribute to the O & P profession, and ultimately lead to better outcomes for patients/clients.

# **Programs in the Region**

- <u>Northwestern University</u> Chicago, IL https://www.nupoc.northwestern.edu/education/masters-program/index.html
- Eastern Michigan University Ypsilanti, MI https://www.emich.edu/chhs/hphp/programs/orthotics-prosthetics/index.php
- <u>University of Pittsburgh</u> Pittsburgh, PA https://www.shrs.pitt.edu/po

# **More Information**

- OPCAS (application service) https://opcas.liaisoncas.com/applicant-ux/#/login
- <u>American Academy of Orthotists and Prosthetists https://www.oandp.org/</u>
- Orthotics & Prosthetics (from AAOP) http://www.opcareers.org
- <u>National Commission on Orthotic & Prosthetic Education https://ncope.org/</u>

### **Other Careers to Consider**

Physical Therapy · Occupational Therapy · Athletic Training

Preparing for your Giant Leap purdue.edu/preprofessional