Health Career Directory

Prosthetists

Overview

Prosthetic and orthotic technicians work with prosthetists and orthotists to produce, fabricate, and repair prostheses (artificial limbs) and orthoses (braces and supports) that are used to support weakened body parts, correct body defects or replace amputated limbs.

Main Roles

Prosthetic and orthotic technicians may specialize in prosthetics or orthotics, or work on both types of devices. In general, they:

- fabricate and refurbish (the process of maintenance or major repair) orthotic and prosthetic devices from plaster cast positives and assessment forms
- make orthotic and prosthetic devices using materials such as thermoplastic and thermosetting materials, metal alloys and leather
- service and repair appliances as required
- maintain an inventory of materials
- assist prosthetists and orthotists working with patients
- service and repair machinery used in the fabrication of devices.

Who is suited to become prosthetic and orthotic technicians?

Prosthetic and orthotic technicians are most effective when they have the following skills and characteristics:

- good communication and social l skills
- manual skill
- strength and stamina
- mechanical ability and creativity
- the ability to pay close attention to details and work quickly
- good problem solving and decision making skills
- the ability to work well as a member of a team.

They should enjoy:

- working with tools and machinery at tasks that need precision
- analyzing measurements and building devices
- having clear guidelines for their work.

Who employs prosthetic and orthotic technicians?

Prosthetic and orthotic technicians work in:

- laboratories
- private clinics
- hospitals and rehabilitation centres.

The work involves standing at workbenches and using machines such as grinders, sanders, buffers, drill presses, lathes, welding equipment and sewing machines. Depending on the setting technicians may also use computer-aided design and computer-aided manufacturing (CAD/CAM), computer imaging, and computer numerical controlled (CNC) equipment. Technicians may be required to lift items weighting up to 20 kilograms and occasionally as much as 40 kilograms. They also may be under pressure to meet deadlines or change schedules to accommodate emergency services.

Salary

Salary Range - $47,650 - $90,161

Required Training and Education to become prosthetic and orthotic technicians:

To be a successful candidate for entry into prosthetic programs, students should ideally hold a kinesiology or science-based undergraduate degree. The kinesiology program is designed to teach future clinicians the science of Prosthetics and Orthotics at a level that produces "practice ready" graduates. After graduation, students enter a two-year paid residency and complete the national certification exam. After this they are able to independently practice anywhere in Canada, and internationally.

Career Advancement

In large organizations, experienced technicians may advance to supervisory positions.

Resources

Educational Programs

British Columbia Institute of Technology:
http://www.bcit.ca/study/programs/7100diplt

George Brown College
http://www.gbcpando.com/gbcpando/GBCPrograms.html

Financial assistance and bursaries
For information about Canada student loans and grants, please visit:
http://www.hrsdc.gc.ca/eng/learning/canada_student_loan/index.shtml

Associations

The Canadian Board for Certification Of Prosthetists and Orthotists (CBCPO)
http://www.cbcpo.ca/

International Society for Prosthetics and Orthotics (ISPO) Canada

http://www.ispo.ca/

Canadian Paraplegic Association
http://www.cpa-ab.org/

The American Orthotic & Prosthetic Association (AOPA)
http://www.aopanet.org/