

Job Description

Job Title:	CNC Machinist Technician
Department:	Engineering Machine Shop
Reports To:	Manager, Engineering Machine Shop
Jobs Reporting:	None
Salary Grade:	USG 8
Effective Date:	May 2018

Primary Purpose

The CNC Machinist Technician is responsible for precision machining, fabrication, and assembly of research and test equipment which is used in various labs throughout the Engineering Faculty. This is accomplished through the use of both conventional and CNC machine tools. Some projects will include an aspect of planning and design, which will involve consultation and collaboration with the requestor of the project.

Key Accountabilities

Manufacturing

- Assist with the design aspects of jobs assigned if or when required to assure safety, functionality, cost, and timeline targets will be met with the final product
- Develop a process plan to include any necessary fixtures, special tooling, PPE and/or additional safety apparatus required to complete the job
- Program, set-up, and operate both CNC and conventional machine tools to produce precision parts and components as required according to specifications provided
- Assemble and test various apparatus, equipment and mechanisms when necessary as per assignment

Communication

- Internally, the incumbent will discuss information, problems and possible solutions with students, faculty and staff members (customers) as necessary to clearly define desired final product expectations for functionality and finish
- Make recommendations for continuous improvement in efficiencies in the machine shop through enhanced methods and/or specialized shop equipment/tooling purchases
- Report all safety and personnel conflict related issues to the EMS manager

Maintenance and Repair

- Inspect, repair, and maintain EMS shop equipment in accordance with required operational and safety standards
- Documentation of all maintenance and inspection items is necessary
- Other duties as assigned

Required Qualifications

Education

- High School Diploma and Certificate of Qualification (Ontario preferred) in one of the following trades:
General Machinist, Tool and Die Maker, Mold Maker

Experience

- A minimum of 5-7 years' experience in the programming and operation of CNC equipment and the ability to operate manual machinery found in the Engineering Machine Shop
- Proficiency in the use of CAD/CAM and solid modelling software for design, tool-pathing, and customer file evaluation and validation
- Previous design experience required
- Extensive experience working with numerous and varied materials including metals, plastics, composites, and wood
- Prior experience mentoring junior staff an asset

Knowledge/Skills/Abilities

- Extensive knowledge of CAD/CAM systems which includes MasterCam, ability to set-up, program and operate CNC machines using controllers, estimating experience as well as material selection proficiency
- Strong communication and organizational skills
- Good problem solving skills and ability to offer creative solutions
- Comfortable using Microsoft Office products
- SolidWorks knowledge is an asset

Nature and Scope

- **Contacts:** Interaction with staff members, students and faculty members. These interactions would be to share information and consult on the requirements for projects, and communicate status of jobs.
- **Level of Responsibility:** The job has defined duties and responsibilities with minimal supervision. The manager must be consulted in the case of a personnel conflict.
- **Decision-Making Authority:** Minimal; the incumbent works independently and includes task based problem solving; however, all operational, procurement and policy decisions related to the machine shop are made by the EMS Manager.
- **Physical and Sensory Demands:** Physical demands are typical of a manufacturing environment; standing for long periods of time, exposure to machine noise, heavy lifting, and potential for injury. Based on the demands, the job requires exertion of physical or sensory effort resulting in moderate fatigue, moderate strain or risk of injury.
- **Working Environment:** Machine Shop; standing and walking on a concrete floor, exposure to machine noise. Requirement to wear PPE when dictated by potential job hazards.