**Department of Human Resources**

**OPSEU Job Description**

**Job Title:** Electronics Technician

**Job Number:** SS-046

**NOC:** 2241

**Band:** 9

**Department:** Science

**Supervisor Title:** Dean of Arts & Science (Science)

**Last Reviewed:** May 20, 2008

**Job Purpose**

Under general direction provides technical services in support of teaching and research, particularly in the areas of electrical and electronics, which includes repair, maintenance, design and consulting.

**Key Activities**

1. Uses skills and experience to repair and maintain electrical and electronic equipment in support of teaching and research to reduce or avoid interruptions in these activities.
2. Uses skills, experience and creativity to design, develop and construct research and teaching equipment (including digital and analog electronics, computer interfacing) to enable or enhance research and teaching activities. Uses computer software such as CAD, MS Word, and MS Excel for job design and documentation. Performs “in house” manufacture of printed circuit boards including design layout, development, etching, drilling, and component population and testing as required.
3. Acts as a consultant to faculty, staff and students in the area of electronics by becoming acquainted with their technical requirements, then providing advice based on knowledge and experience so as to provide appropriate solutions.
4. Uses interpersonal skills as well as technical knowledge and experience to supervise the work of students and assistants as required to speed up job completion or to assure safety requirements are being met.
5. Keeps abreast of current developments in relevant areas of electronics by reading and attending seminars and trade shows so as to be able to apply new technology and techniques as required.
6. Manages electronics shop finances by making all purchasing and invoicing decisions so as to maintain viability of shop while staying within budget. Other activities including phone calls, meeting, paperwork, etc.
7. Provides support in machining and welding to the Science Machine Shop Technician.
8. Provides support to Micro Computer Technologist - PC repair and networking.
9. Demonstrates operation of electrical and electronic equipment, and measurement techniques to faculty and students as required.

**Education**

General University Degree (3 year).

**Experience Required**

Over two years and up to four years.

**Communication**

Internal:

* Faculty and staff, provide repair services
* Faculty, staff, and students, provide design or consultation services
* Faculty and staff, advise on upgrading equipment
* Faculty and staff, Demonstrates operation and use of electronic and electrical apparatus and techniques.

External:

* Suppliers, selecting equipment for specific purposes
* Outside clients, providing support services
* External colleagues, communicate with

**Motor/ Sensory Skills**

* Fine Motor Skills, Dexterity, Coordination - Repair and construct electronic circuits, operate complex equipment
* Hearing - Troubleshooting often involves fine noise distinctions
* Visual - In working on miniature electronics, must distinguish fine detail such as colour and shape

**Effort**

Mental:

* Sustained attention, concentration, listening - Required while troubleshooting systems (especially during operation), designing new circuits, consulting with clients

Physical:

* Lifting, Carrying - Moving equipment
* Keyboarding - Research, correspondence

**Working Conditions**

Physical:

* Odours - Unpleasant odours while working in animal house
* Potentially hazardous conditions - Work with high voltage electrical equipment leads to shock hazard, consequences of which are potentially lethal.

Psychological:

* Time pressures - Changing deadlines/ time pressures when clients underestimate the time required for projects or when they change project requirements
* Interruptions - Interruptions due to unexpected requests for service