

Job Description

Job Title:	Engineering Instructional Support Tutor
Department:	Engineering Undergraduate Office
Reports To:	Director, First Year Engineering
Jobs Reporting:	None
Salary Grade:	USG 8-10
Effective Date:	May 2017

Primary Purpose

Support First Year Engineering activities: tutoring students in labs, tutorials and one-on-one; marking exams and assignments; hiring and management of teaching assistants; operation of the Multimedia and WEEF Labs.

Key Accountabilities

List the major responsibilities of the job, divided into 3 to 5 broad categories. These should reflect 80 - 90% of "what" the job does not the "how". Insert a category heading and in bullet form below, state specific responsibilities.

<p>Tutor first year students</p> <ul style="list-style-type: none"> • Tutor students in labs, tutorials and one-on-one using knowledge of electromagnetics, electric circuits and programming • Tutor students in one or more of the following subject areas: physics, calculus, algebra, and chemistry
<p>Management of teaching assistants and mentoring of others</p> <ul style="list-style-type: none"> • Hire, manage, schedule and evaluate teaching assistants • Mentor teaching assistants • Mentoring other staff members, depending on the level of the incumbent
<p>Support first year operations</p> <ul style="list-style-type: none"> • Develop solution sets and marking schemes for assignments, exams and reports • Grade student submissions in electromagnetics, electric circuits and programming • Archive grades and course materials • Train students on the use of various laboratory equipment • Schedule classes and timetables • Organize help sessions for students • Proctor exams

Required Qualifications

If hiring today, what would be the required education, experience, knowledge, skills and abilities?

<p>Education</p> <ul style="list-style-type: none"> • A minimum Bachelor's degree in engineering, a closely related discipline, or equivalent work-related experience
<p>Experience</p> <ul style="list-style-type: none"> • Some experience in a teaching or engineering environment is an asset • Supervisory experience in a technical environment is preferred • Engineering experience and eligibility for licensing as a professional engineer in Ontario are assets
<p>Knowledge/Skills/Abilities</p> <ul style="list-style-type: none"> • Solid background in the areas of computer programming, electric circuits and electromagnetics • Strong background in first year engineering calculus, algebra, and physics. • Exceptional ability to tutor and instruct students in first year engineering courses • Excellent organizational, communication, presentation and interpersonal skills

Job Description



- Proven ability to build strong mentoring relationships for tutoring and advising engineering students
- Sound judgment, tact, diplomacy and demonstrated problem solving skills
- Ability to learn quickly and to work independently with minimal supervision and in a team environment
- Basic knowledge of Microsoft Office products
- Advanced knowledge of a number of procedural and object oriented programming languages
- Advanced knowledge of commonly available hardware and software embedded systems
- Advanced knowledge of analog and digital electrical measurement laboratory equipment
- Specific knowledge and ability required will depend on the staff member's USG grade

Nature and Scope

- **Contacts:** Internally, the incumbent has significant communications with: All first year engineering students, excluding Biomedical, Software and Systems Design, Course instructors, Lab instructors, WEEF and graduate Teaching Assistants for first year courses supported by the incumbent, and First Year Engineering staff and Engineering Undergraduate Office staff. Externally, this position will have minimal contact with course instructors, Lab instructors and graduate Teaching Assistants for courses NOT supported by the staff member. Occasionally the incumbent may interact with Engineering Computing staff regarding computer systems and software used in various courses. At USG 10 the incumbent may deal with external vendors as needed for their position.
- **Level of Responsibility:** The details of the support provided vary based on the needs of a specific course, the needs of a particular course team, and the level of the incumbent. Different instructional support responsibilities are assigned to different levels depending upon the breadth and depth of course support provided. Details are given in the accompanying Career Path document for this position.
- **Decision-Making Authority:** The decision making authority will increase progressively with the level of experience and abilities of the staff member. Details are given in the accompanying Career Path document for this position.
- **Physical and Sensory Demands:** Minimal physical and sensory demands typical of a staff member operating within a university teaching and non-hazardous laboratory environment.
- **Working Environment:** Minimal exposure to physical conditions and psychological factors typical of a staff member operating within a university teaching and non-hazardous laboratory environment.