

## **Introduction to the Engineering Occupational Terminology Workshop**

The engineering terminology workshop begins with four lessons in the licensing module, followed by two lessons in the work search module. The workshop concludes with six lessons focusing on workplace communication in the final module. Each module and each lesson is self-contained, but together they form a comprehensive program for occupation-specific second language learning.

### **Module 1: Communication and Terminology for Licensing**

The licensing module consists of four lessons. Each lesson focuses on the performance of a particular task needed in order to become licensed by the Professional Engineers of Ontario (PEO). The first lesson introduces general procedures for applying for a license within a functional language context of asking for clarification in order to obtain information accurately. The second lesson gives participants an opportunity to fill in a PEO application form. The third lesson concentrates on the development of an experience record centred on PEO criteria. In this activity, participants gain an understanding of the requirements of the regulatory body in terms of engineering experience. The last lesson allows participants to role-play an interview with the PEO Experience Requirements Committee relating theoretical knowledge to practical experience. Since many participants are likely to have the minimum ten years of experience, a successful interview allows them to be exempted from most of the exams.

### **Module 2: Communication and Terminology for Work Search**

The work search module consists of two lessons. Participants analyze job ads in order to understand employer requirements and to match their own skills, personal attributes, educational background, and experience to those required by employers. Participants expand their knowledge of vocabulary that can be used to describe their own skills and personal attributes. In small-group discussions, participants use this vocabulary to practise answering typical employment interview questions.

### **Module 3: Communication and Terminology for the Workplace**

Each lesson in the workplace module includes a task that allows participants to apply their prior knowledge and expertise within a new context. The module begins with an introductory lesson on some common management concepts frequently mentioned in engineering job ads. Participants have an opportunity to apply these concepts during a role-play of a meeting at a company undergoing a decrease in production. The next two lessons provide writing opportunities within the workplace context. Participants are provided with examples of professional correspondence and are given situations for which they have to write a proposal for engineering services and an inter-office email.

The fourth lesson in the module is divided into two parts. In the first part, participants choose a content area related to engineering in order to fulfil the task of explaining a process using a flow chart. In the second part, imperial to metric conversions form the basis for some mathematical problem-solving.

The last two lessons deal with health and safety. These lessons can be taught sequentially or adapted to stand-alone. The first lesson on WHMIS (Workplace Hazardous Materials Information System) is a generic one on health and safety in the workplace. Participants are given WHMIS symbols and information and prepare a short presentation simulating a workplace training session. The second lesson deals more specifically with health and safety as part of engineering professional practice.

Cumulatively, the modules provide an introduction to the communication and terminology needed by internationally-trained engineers to perform tasks related to licensing, work search, and the workplace.

## Overview of Engineering Curriculum for Occupational Terminology Module 1 – Communication and Terminology for Professional Licensing

TOPIC	TASK	ADDITIONAL LANGUAGE COMPETENCIES	TERMINOLOGY OUTCOMES
1. Licensing Application Procedures	5 ask for clarification about PEO application procedures	5 scan for detail in a text 5 ask for clarification using a variety of expressions	5 receptive and productive knowledge of general and PEO licensing terminology
2. PEO Application Form	5 fill out a PEO application form	5 give advice and making suggestions appropriately 5 scan for detail in a text 5 understand the format of an application form	5 receptive and productive knowledge of relevant terminology
3. Experience Record	5 describe a personal employment situation and explain how that experience reflects one or more aspects of PEO experience criteria	5 explain some requirements of PEO experience criteria 5 read PEO information text	5 receptive and productive knowledge of terminology related to PEO experience criteria 5 apply prior knowledge and experience in a new context
4. Academic Requirements and the Interview Process	5 role-play an interview with the PEO Experience Review Committee relating theoretical knowledge with practical experience	5 read a university engineering calendar 5 apply theoretical knowledge to practical engineering practice	Same as above

## Overview of Engineering Curriculum for Occupational Terminology Module 2 – Communication and Terminology for Work Search

TOPIC	TASK	ADDITIONAL LANGUAGE COMPETENCIES	TERMINOLOGY OUTCOMES
1. Understanding Job Ads: Skills and Personal Attributes	5 n/a	5 read job ads to determine employer requirements  5 orally negotiate terminology used to describe skills and personal attributes of an engineer	5 broaden productive knowledge of terminology to describe own skills and personal attributes  5 develop receptive knowledge of words, acronyms, and expressions in job ads.
2. Employment Interview Questions	5 answer employment interview questions by describing skills and personal attributes within an engineering context	5 scan for specific information in an employment interview excerpt  5 orally negotiate terminology related to engineering and related functions (verbs)	5 broaden productive knowledge of terminology used to describe previous engineering experience

## Overview of Engineering Curriculum for Occupational Terminology Module 3 – Communication and Terminology for the Workplace

TOPIC	TASK	ADDITIONAL LANGUAGE COMPETENCIES	TERMINOLOGY OUTCOMES
1. Some Current Workplace Practices	5 participate in a company meeting about decreased productivity	5 discuss issues of motivation in the workplace 5 understand characteristics of traditional and “high-performance” companies 5 orally negotiate management jargon	5 gain receptive and productive knowledge of some common current workplace management practices / jargon (i.e., TQM, ISO, etc.)
2. Workplace Correspondence: Proposals	5 write an engineering proposal	5 read a consulting proposal in order to find specific information 5 negotiate terminology describing engineering services	5 have receptive and productive knowledge of terminology associated with proposals and contracts 5 apply prior knowledge and experience in a Canadian workplace context
3. Workplace Correspondence: Email and Computers	5 write an email message	5 discuss role of computers in engineering and the workplace	5 have receptive and productive knowledge of common and more advanced computer terms in an engineering workplace 5 apply prior knowledge and experience in a Canadian workplace context

## Overview of Engineering Curriculum for Occupational Terminology

### Module 3 – Communication and Terminology for the Workplace

TOPIC	TASK	ADDITIONAL LANGUAGE COMPETENCIES	TERMINOLOGY OUTCOMES
4. A. Describing a Process Using a Flow Chart  B. Converting Measurements	5 A. describe a process (engineering or workplace)	5 draw a flow chart and explain a process	5 receptive and productive knowledge of Imperial Measurement
	5 B. convert measurements (Imperial to Metric)	5 problem-solve	5 apply prior knowledge and experience in a new context
5. Health and Safety – WHMIS	5 prepare a presentation (simulating workplace training on WHMIS)	5 explain safety procedures 5 identify WHMIS symbols	5 receptive and productive knowledge of health and safety terminology 5 apply prior knowledge and experience in a Canadian workplace context
6. Engineering Concepts and Health and Safety Issues	5 discuss and apply health and safety issues to engineering concepts specific to discipline	5 read an article on health and safety 5 negotiate health and safety issues within relevant engineering concepts	5 receptive and productive knowledge of health and safety terminology 5 apply prior knowledge and experience in a Canadian workplace context