ERGONOMICS SKILLS

Building Healthy Workplaces

The SFU Occupational Ergonomics Certificate gives students the skills required to gain a competitive edge in industry, whether as an Ergonomist, a Corporate Wellness Consultant or an Active Rehabilitation Professional. For students wanting to work in the Ergonomics profession, the academic background, skills and practical experience offered within the Occupational Ergonomics Certificate are designed to facilitate application to the Canadian Certified Professional Ergonomists.

We encourage students to become student members in the **Association of Canadian Ergonomists** where you can network with professionals and build volunteer hours and experience.

The Courses

BPK 180W

BPK 381

BPK 382

BPK 481

BPK 482

BPK 180W

Introduction to Ergonomics

Skills

Identification of risk factors for work-related musculoskeletal & psychosocial disorders

Navigation of ethical ergonomic issues in the workplace

Familiarization with WorkSafeBC Ergonomics Legislation

WORK SAFE BC

Ability to conduct an ergonomic evaluation of an office, including:

- **Identifying** risk-factors & proposing administrative & engineering solutions
- **Applying** the ergonomic process to an office ergonomic evaluation
- **Writing** a technical report documenting the evaluation process & providing recommendations

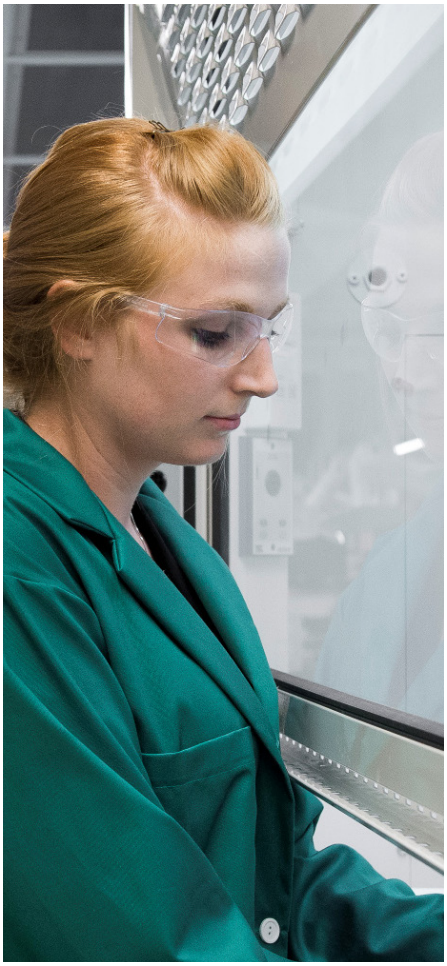
Portfolio Samples

Technical Consultants's Report:
Office Ergonomics

Public Writing:
Article for WorkSafe BC Magazine

Practical Experience

Conducting Office Ergonomics Evaluation



BPK 381
Psychology of Work

Skills

Knowledge of metrics for evaluating:

Motivation

Satisfaction

Commitment

Healthy Workspaces

Stress

Proficiency with the following:

Psychosocial risk factors in the workplace

Psychological healthy workplace guidelines

Legislation related to Human Rights in the workplace + Duty to Accommodate legislation, including drug and alcohol abuse

Understanding of **Bill 14** in British Columbia

Ability to recommend design solutions to address psychosocial hazards

BPK 382
Workplace Health

Skills

Measure & calculate values for variables associated with workplace health, safety & performance

Recommend workplace environmental control measures in terms of engineering, administrative controls & personal protective equipment

Portfolio Samples

Analysis of the safety system of a medium-sized company or organization

Summary of hazards of a specific industry, plus the employment prospects & training required

Calculation of an individual's visual acuity

Audiogram that shows an individual's hearing acuity

Practical Experience

Calibrate and use instruments to measure light, sound, vibration & temperature

Determine compliants of environmental measures with guidelines, standards & regulations

Explain selection & use of personal protective equipment

BPK 481
Musculoskeletal Disorders

Skills

Assemble evidence from job analysis, physical examination & history

Use this evidence to suggest patho-anatomical disorder, probable causes & preventive measures

Advocate for an injured worker applying for compensation

Design strategies for the management of specific musculoskeletal disorders

Portfolio Samples

Job description for a specific job

Task analysis for a specific job

Photographs of risky working postures

Identify risk level for a particular working posture

Report summarizing risk of musculoskeletal injuries

Letter of transmittal to workplace supervisor

Case study of a person with a musculoskeletal injury

Practical Experience

View videos of people at work and sport, and **identify** risky elements

Describe steps required to do a particular task

Identify & quantify risky features of tasks

Review case studies of people with musculoskeletal injuries

BPK 482
Ergonomics & Rehabilitation

Skills

Develop an understanding of the importance of return to work programs in developing healthy individuals, societies & organizations

Navigate return to work legislation and policies in the workplace and understand implications

Analyze the range of user needs, limitations & capabilities within the workplace

Integrate strategies to support an effective return to work program

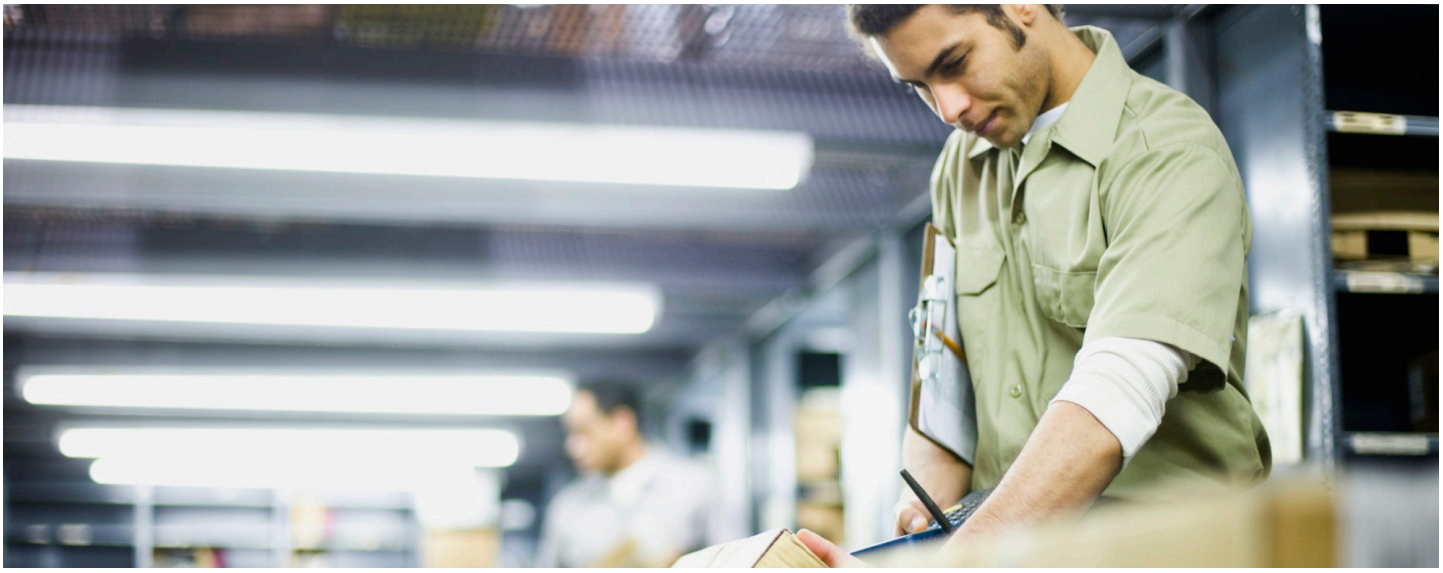
Interpret a functional capacity evaluation

Conduct a physical demands analysis

Perform a task analysis

Complete an occupational biomechanical analysis

Apply anthropometrics to evaluate & design equipment, tools & environments



Hands on experience with the latest assessment tools, including:

- ACGIH TLV + Low Back
  SNOOK Tables
  MITAL Tables
- REBA/RULA
- NIOSH Lifting Equations
- 3DSSPP
- Motion Analysis
- Electrogoniometers
- Force transducers

...and more

Portfolio Samples

Technical Consultant's **Report**

Completed Physical Demands **Assessment**

Final Project **Presentation to Client**

Occupational Biomechanical **Assessments**

Practical Experience

Minimum **33 hours** in return to work/ergonomic program in the workplace

Resources

SFU

More information about the Ergonomics certificate program at SFU BPK can be found at **www.sfu.ca/bpk**