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 180 W
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

**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

<table>
<thead>
<tr>
<th>Knowledge of metrics for evaluating:</th>
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<tbody>
<tr>
<td>Motivation</td>
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| Healthy Workspaces | Stress |

<table>
<thead>
<tr>
<th>Proficiency with the following:</th>
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<tbody>
<tr>
<td>Psychosocial risk factors in the workplace</td>
</tr>
<tr>
<td>Psychological healthy workplace guidelines</td>
</tr>
<tr>
<td>Legislation related to Human Rights in the workplace + Duty to Accommodate legislation, including drug and alcohol abuse</td>
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<th>Understanding of Bill 14 in British Columbia</th>
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<tr>
<td>Ability to recommend design solutions to address psychosocial hazards</td>
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</table>
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 compliance 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

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