BCIT Assayer Training Program

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For LBMA Assaying & Refining Conference,
Outline of Presentation

- BCIT
- BCIT Assayer Training Program
- Assayer Certification Program of British Columbia
- BC Assayer Certification Partnership
- Q & A
BCIT - who are we?

Polytechnic

British Columbia Institute of Technology

1964

48,000 students → 38% full time

1,800 full time faculty & staff + 600 part time
BCIT - who are we?
Vision: Integral to the economic, social, and environmental prosperity of British Columbia

BCIT’s foundation is comprised of certificates, diplomas, and both undergraduate and graduate degrees

To deliver hands-on training to students for attaining job ready skills
BCIT - who are we?

START HERE
Science and Sustainability

For people who like science, care about progress with sustainability, and enjoy investigating problems, this newly-revised program can provide the skills to make a positive difference in an interesting career. Chemical and Environmental Technology is a rewarding two-year diploma program where students learn the latest chemical analysis techniques along with environmental science; process engineering and materials technology from experts in the field. This career can be pursued in any setting — laboratory, consulting, industrial or research. The program's combination of science theory with hands-on practice using sophisticated instruments provides a real "edge" in the job market. Graduates who want to continue into a degree may bridge into a BCIT BTech program or transfer to a university for a science or engineering degree.

EXPLORE
Related programs or options:
- Chemical and Environmental Technology (Analytical Science Option)
  - Full-time
  - Diploma
- Chemical and Environmental Technology (Process Engineering Option)
  - Full-time
  - Diploma
Chemical & Environmental Technology

Day School

Two-year diploma program

- Mineral Processing
- Pulp & Paper
- Assaying
- Environmental Sciences
- Process Engineering
- Material Sciences
BCIT Part Time Studies

YOUR SCHEDULE
IS SOMETHING
WE CAN WORK WITH.
PART-TIME STUDIES
FOR A COMPLEX WORLD.

REGISTER NOW >
BCIT Assayer Training Program

Assay Industry Request

BCIT Part-time Study

BCIT Assayer Training program

1996 September
BCIT Assayer Training Program

Assay Industry demand 1996 → BCIT Assayer Training Program → Classroom format night school, 1996 Sep

Ongoing update to training materials ← Expansion beyond Canada, 2006 ← Distance self-study format, 2000
BCIT Assayer Training Program

**Objectives**

- To deliver targeted training for gaining competency in assaying
- To provide learning opportunities – acquiring new techniques, upgrading analytical skills or taken as refresher
- To support BCIT’s mandate on the offering of program for meeting interest from public
- To serve as a preparation course for candidates who wish to attempt the BC Assayer Certification Examination
BCIT Assayer Training Program

Entrance requirement
- Post secondary education, or
- Work experience without formal education

Typical student
- Sponsored fully by employer,
- Sponsored fully/partially by government employment office
## BCIT Assayer Training Program

### Course delivery
- Course material binder
- Assignments
- Quizzes and examinations

### Communication
- Email
- Facsimile (not frequent)
- Flexibility – self paced

### Study timelines
- Assigned course module timeline is 1 year
- Could speed up to one module per 4 months

### Program content
- 5 modules
BCIT Assayer Training Program
Module 1 – Assayer Training Introduction

- Laboratory Safety
- Laboratory QA/QC
- Sampling
- Sample Preparation Techniques
- Sampling Theories
BCIT Assayer Training Program
Module 2 – Mineral ID, Geology and Fire Assay

- Geology
- Mineral Identification
- Precious Metals Analysis by Fire Assaying
BCIT Assayer Training Program
Module 3 – Wet Assay & Qualitative Analysis

- Sample digestion chemistry and techniques
- Qualitative wet methods
- Classical quantitative techniques
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Module 4 – Analytical Instrumentation

- Theory and principles
- Description and function of the various instrument components
- Relative advantages / disadvantages
- Limitations
- Calibration methods
BCIT Assayer Training Program
Module 5 – Laboratory Practicum

- Contamination Sources and Control
- Laboratory Experiments
BCIT Assayer Training Program

Overview

Comprehensive assayer training is available through Chemical and Environmental Technology on a part-time studies basis (as night school, distance education, workshop or Internet courses). The training was developed to meet the mining industry's growing demands for skilled and competent assayers in B.C. The advanced training we offer in applied analytical chemistry prepares Successful students to become eligible to write the exam for Provincial Certification given by the B.C. Ministry of Energy and Mines.

Students can also opt to take any part of the training for the purpose of job upgrading, information only, or as a "refresher." The complete training involves 1.5 - 2 years of combined classroom work and lab practicums. Lab practicums (considered an essential component of this training) help students gain maximum benefit from classroom work; it also helps students develop speed and accuracy in analytical work. Enrolment in each course is limited to 12 students.

www.assay.bcit.ca
BCIT Assayer Training Program

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BCIT Assayer Training Program

Canada
Mexico
South America
Europe
Malaysia
US
Australia
Africa

Over 160 active students
BCIT Assayer Training Program

Module 2 -> Certificate in Fire Assay

Module 3 -> Certificate in Classical Assaying

Module 4 -> Certificate in Analytical Instrumentation

Module 5 -> Certificate in Assay Training

BC Assayer Certification Examination

PASS

Certified BC Assayer

Added Accreditation Potential
Purpose

- Provides for the examination and certification of assayers.
- Ensures that assayers practicing in the province meet the high standards of competency required by the mining and securities industries.

History of Program

- **1895** Program established & run by Government of BC
- **1998** Program run by **partnership** of Academia, Government & Industry
Questions?
Thank You