

Mining Technician

Mining is a growing, changing industry that requires individuals to be trained in operating and maintaining mine/mill equipment. The Mining Technician functions as part of a mining team. Job duties may include operating a variety of production equipment and the performance of maintenance work. You will gain a good understanding of mining and plant processes.

You should enjoy the active lifestyle involved in this work and have an interest in the mining field.

An added bonus to completing the Mining Technician program is a Millwright certificate. This gives you the option of working as a Mining Technician or a Millwright.

OUTCOMES

1. Demonstrate safe work practices and personal protection.
2. Maintain tools and equipment.
3. Perform measurement and layout.
4. Use cutting and welding equipment.
5. Service shafts, bearings, seals, couplings, clutches, chain and belt driven systems, gears, compressors, pumps and conveying systems.
6. Prepare for installation and maintenance of components and systems.
7. Participate in self-managing teams and to work and learn in an "industrial laboratory"

ENTRANCE REQUIREMENTS

Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. High School

High School Graduation Certificate with a 60% average in the following (or equivalent):

i. English 3201 or 3202 (minimum 60%)

ii. Mathematics (4 credits) chosen from:

Advanced: 2205, 3205 (50% minimum in each course)

Academic: 2204 (50% minimum), 3204 (60% minimum)

iii. Science – 4 credits, two of which must be selected from:

Biology: 3201

Physics: 3204

Chemistry: 3202

Earth Systems: 3209

Note: the remaining two Science credits to be chosen from the highest Science mark in Level 1, 2 or 3.

2. Comprehensive Arts and Science (CAS) Transition

Comprehensive Arts and Science(Transition) Certificate with the following courses:

i. Math: MA1040, MA1041

ii. Two Science courses chosen from one of the following three combinations:

Biology: BL1020, BL1021

Chemistry: CH1030, CH1031

Physics: PH1050, PH1051

3. Adult Basic Education

Adult Basic Education (Level III) Graduation with Degree and Technical Profile including the following courses (or equivalent):

i. English: 3101A, 3101B, 3101C, or 3102A, 3102B, 3102C

ii. Mathematics: 1104A, 1104B, 1104C, 2104A, 2104B, 2104C, 3104A, 3104B, 3104C

iii. Science from one of the following sections:

Biology: 1101, 2101A, 2101B, 2101C, 3101A, 3101B, 3101C

Chemistry: 1102, 2102A, 2102B, 2102C, 3102A, 3102B, 3102C

Physics: 1104, 2104A, 2104B, 2104C, 3104A, 3104B, 3104C

Applicants with Adult Basic Education (Level III)

Graduation with a different Profile may be eligible for admission to the program provided the appropriate selection of courses, including those outlined above, have been completed.

4. Mature Student Status

Applicants who do not meet the education prerequisites, are 19 years of age or older, and have been out of school for at least one year, may be considered on an individual basis under the Mature Student Clause.

EMPLOYMENT OPPORTUNITIES

You may find employment as part of the Operations and Maintenance Teams in a mining environment or as a millwright apprentice. Employment rates for Mining Technician graduates have been strong with 80-90% of current graduates finding employment in the local area. This demand for workers is expected to continue.

DIPLOMA

- Two years
- September start
- Labrador West Campus

COURSES

| CODE | TITLE | Hrs |
|-------------------|---------------------------------------|-----|
| Semester 1 | | |
| TS1520 | WHMIS | 6 |
| TS1530 | Standard First Aid | 14 |
| MS1230 | Hand Tools | 20 |
| MW1240 | Portable Power Tools | 20 |
| MW1450 | Drills, Taps and Reamers | 30 |
| MW1541 | Fasteners | 9 |
| CM2150 | Workplace Communications | 45 |
| MC1050 | Introduction to Computers | 30 |
| MW1291 | Rigging | 30 |
| MW1511 | Power Metal Saws | 20 |
| MW1521 | Pedestal Grinders | 20 |
| HR2130 | Industrial Relations | 45 |
| MA1060 | Basic Math | 60 |
| MT1100 | Introduction to Mining | 45 |
| Semester 2 | | |
| MA1230 | Mathematics | 90 |
| MW1670 | Non-positive Displacement Pumps | 40 |
| MW1690 | Positive Displacement Pumps | 50 |
| MW1460 | Measuring and Layout | 60 |
| WD1330 | Oxy-Fuel Welding | 30 |
| MW2150 | Hydraulics I | 30 |
| MW1251 | Blueprint Reading and Sketching | 20 |
| MW1261 | Equipment Assembly Blueprints | 20 |
| SD1710 | Job Search Skills | 15 |
| SD1720 | Entrepreneurial Awareness | 15 |
| MW1270 | Mechanical Installation Blueprints | 15 |
| MW1281 | Schematics Advanced | 20 |
| MT2400 | Mineral Processing I | 60 |
| Semester 3 | | |
| WT1520 | Work Term | Hrs |
| Semester 4 | | |
| MW1590 | Couplings and Clutches | 30 |
| MW1610 | Belt and Chain Drive Systems | 45 |
| MW1640 | Gear Drive Systems | 50 |
| MW1730 | Electrical Fundamentals | 30 |
| MW1530 | Bearings | 40 |
| MW1580 | Static and Dynamic Seals | 30 |
| MW1470 | Piping Components | 30 |
| MW1550 | Metallurgy | 30 |
| SD1700 | Workplace Skills | 30 |
| MT2410 | Mineral Processing II | 60 |
| Semester 5 | | |
| MT3400 | Mineral Processing III | 60 |
| MW1650 | Lubrication Practices | 20 |
| MW1600 | Vibration Analysis /Machine Alignment | 60 |
| WA1120 | Hydraulics and Pneumatics | 90 |
| MW1140 | Conveyor Systems | 45 |
| PF1600 | Ferrous Pipe Assembly | 60 |
| Semester 6 | | |
| MR1220 | Customer Service | 30 |
| MT1200 | Equipment Reliability Concepts | 30 |
| TS1510 | Occupational Health and Safety | 6 |
| SP2330 | Quality Assurance/Quality Control | 30 |

