INDUSTRIAL TRADES

Mining Technician

DIPLOMA

- **Two years**
- **September start**
- **Labrador West Campus**

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. The Mining/Mineral Processor will have a good understanding of mining and plant processes.

The Mining Technician student should enjoy the active lifestyle involved in this work and have an interest in the mining field.

The Mining Technician is a two year program that trains individuals in trade specific courses, academic courses and industry specific courses. It consists of five academic semesters and one work term.

OBJECTIVES

1. To provide education and training in a broad range of practical, academic, technical and general employability skills in mining and mineral processing technology.
2. To provide general transition and access to technology.
3. To provide transition and access to employment in the mining and mineral processing industry.
4. To set the foundation and provide specific credit toward industry certifications in a number of trades related to the mining and mineral processing industry and in mining and mineral processing engineering technology.
5. To provide the opportunity for students to 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 (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 (College Transition)

Comprehensive Arts and Science Certificate (College Transition program) 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

The Mining Technician graduate may find employment as part of the Operations and Maintenance Teams in a mining environment. The graduate of this program may also find employment as a millwright apprentice. Graduates completing this program may also choose to pursue further studies in the technology areas. Employment rates for Mining Technician graduates have been strong with 80-90% of current graduates finding employment in the local area. This demand for graduates is expected to continue.

CREDIT TRANSFER TO OTHER PROGRAMS

An added bonus to graduates of the Mining Technician program is the awarding of a certificate in apprentice Millwright. Graduates are also able to transfer many of their credits towards various School of Engineering two and three year diploma programs. However, courses such as Math, Chemistry and Electro Technology would have to be completed to enroll in many of the technology programs.

COURSES

CODE	TITLE	
Semester 1		**Hrs**
TS1520	WHMIS	6
TS1530	Standard First Aid	14
MS1230	Hand Tools	20
MW1240	Portable Power Tools	20
MW1450	Drills, Taps and Reamers	30
MW1540	Fasteners	9
CM2150	Workplace Communications	45
MC1050	Introduction to Computers	30
MW1290	Rigging	30
MW1510	Power Metal Saws	20
MW1520	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
MW1250	Blueprint Reading and Sketching	20
MW1260	Equipment Assembly Blueprints	20
SD1710	Job Search Skills	15
SD1720	Entrepreneurial Awareness	15
MW1270	Mechanical Installation Blueprints	15
MW1280	Schematics Advanced	20
MT2400	Mineral Processing I	60
Semester 3		
WT1520	Work Term	
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