

Career and Technical Education

MINE	210	Mining Methods	2
MET	101	Intro to Metallurgical Engineering	1
MET	102	Intro to Metallurgical Engineering II	2
Total Program Requirement Credits			18

Certificate of Achievement— Mining Industry - Dual Enrollment ONLY

Professional Skills and Career Paths

Entry level position in the mining industry in either geology, mining or metallurgy roles. The ability to study further in related fields at either GBC or UNR to pursue associate or 4-year degrees.

Student Learning Outcomes

Graduates of the certificate of achievement in the mining industry certificate program will have relevant knowledge and skills as follows:

- To be able to recognize the common rocks and minerals on earth and the tectonic and geological processes that occur in the earth.
- Acquire mining related knowledge and describe all the activities and functions associated with the entire mining cycle.
- Gain a general introductory knowledge of the unit operations of mining: Including drilling, blasting, loading and hauling.
- Gain a general understanding of surface and underground mine development techniques and practices (e.g. adit & drift, shaft, slope development, roadways), as a function of the orebodies geological and geotechnical characteristics
- Explain the concepts of the main extractive metallurgical processes and how to utilize them to produce metals from their raw materials as well as secondary materials, taking basic environmental and economic challenges into account.

Formal admission to this program is required. Refer to admission standards for more information.

General Education Requirements		Credits
English/Communications.		6
ENG 101 and ENG 102		
Computation — MATH 126 or 126E and MATH 127		6
Human Relations — PSY 208		3
Total General Education Credits		15

Program Requirements		Credits
ECON 102	Principles of Microeconomics	3
GEOL 101	Exploring Planet Earth	4
CHEM 121	General Chemistry I	4
MINE 101	Mining Engineering I	1
MINE 102	Mining Engineering II	1

SUGGESTED COURSE SEQUENCE Certificate of Achievement— Mining Industry

FALL—(Grade 11)		Credits
MINE	101	1
MET	101	1
ECON	102	3
TOTAL		5

SPRING—(Grade 11)		Credits
MINE	102	1
PSY	208	3
MET	102	2
TOTAL		6

SUMMER		Credits
MINE	210	2
TOTAL		2

FALL—(Grade 12)		Credits
MATH	126 or 126E	3
GEOL	101	4
ENG	101	3
TOTAL		10

SPRING—(Grade 12)		Credits
MATH	127	3
CHEM	121	4
ENG	102	3
TOTAL		10

Minimum Credits: 33