



Faculty of
Geosciences Engineering

Mining Engineering

RPC-SO-15-No.309-2020

espol[®]

Bachelor of Science in Mining Engineering



Applicant Profile

Applicants to the Mining Engineering program are expected to be:

- ▶ Creative and analytical
- ▶ Grounded in mathematics and sciences
- ▶ Interested in research and innovation
- ▶ Committed to the environment



Employability

ESPOL Mining Engineering professionals will be prepared to work in the following industries and settings:

- ▶ Mining companies
- ▶ Mineral processing plants
- ▶ Public entities
- ▶ As independent consultants
- ▶ Universities and research centers



Professional Skills

Design and plan mining operations; apply sustainability and innovation; use modern technology; and solve complex problems and current challenges in the mining industry.



In fact...

The sustainable mining industry provides essential raw materials for cell phones, computers, electric vehicles, solar panels, and key sectors such as construction.



LEARN MORE



Curriculum

N 100 - I	SINGLE VARIABLE CALCULUS		PHYSICS: MECHANICS	MINING FUNDAMENTALS	MINERALOGY	PROBLEM SOLVING	ENGLISH I
N 100 - II	VECTOR CALCULUS	PROGRAMMING FUNDAMENTALS		GENERAL CHEMISTRY	PETROGRAPHY	COMMUNICATION	ENGLISH II
N 200 - I	LINEAR ALGEBRA	STATISTICS	MINE SURVEYING	STATICS	STRUCTURAL GEOLOGY		ENGLISH III
N 200 - II	DIFFERENTIAL EQUATIONS	GEOMATICS IN MINING	PHYSICS: THERMODYNAMICS AND ELECTRONICS	MINING GEOLOGY	STRENGTH OF MATERIALS		ENGLISH IV
N 300 - I	ENTREPRENEURSHIP AND INNOVATION	FLUID MECHANICS	MINING EQUIPMENT TECHNOLOGY	DRILLING AND BLASTING	GEOMECHANICS	ARTS, SPORTS AND LANGUAGES ELECTIVE COURSES	ENGLISH V
N 300 - II	SUSTAINABILITY SCIENCE	MECHANICAL PREPARATION	MINE SAFETY	OPEN-PIT MINING	MINING GEOTECHNICS	UNDERGROUND MINING	COMMUNITY SERVICE INTERNSHIPS
N 400 - I		MINERALURGY AND EXTRACTIVE METALLURGY	VENTILATION, DRAINAGE AND ELECTRICAL SYSTEMS IN MINING	ENVIRONMENT AND MINING WASTE MANAGEMENT	MINE PLANNING AND DESIGN	HUMANITIES ELECTIVE COURSES	SELECTED ELECTIVE COURSE
N 400 - II						MINING ENGINEERING CAPSTONE COURSE	SELECTED ELECTIVE COURSE
							PRE-PROFESSIONAL BUSINESS INTERNSHIPS



Accredited Program



Engineering
Accreditation
Commission



Did you know?

Sustainable mining transforms mineral resources into technology, development, and opportunities through professionals who apply innovation and good practices for the equitable and responsible use of minerals, contributing to improved quality of life.

www.fict.espol.edu.ec

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International Relations

Through its External Relations Office, ESPOL promotes and develops partnerships with international cooperation organizations, academic institutions, and research centers. These partnerships create mobility opportunities for the entire ESPOL community and contribute to the excellence that distinguishes the institution.

More than 226 international agreements allow students to participate in experiences abroad, including semester or year-long exchange programs, pre-professional internships, research placements, and participation in conferences, competitions, and other academic activities.

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universities
around the world

