

Graduate Studies in Mineral and Energy Economics

Division of Economics and Business

Apply tools from economics, finance, and operations research to minerals and energy.

Founded in 1969, this world-renowned program leads to M.S. and Ph.D. degrees in Mineral and Energy Economics. Originally known as Mineral Economics, our program attracts students from all over the world, and our alumni are known globally for their career achievements and qualifications. Our faculty's expertise is recognized worldwide creating an exciting and challenging learning environment in the Division.



- Understand the economic and public policy forces driving changes in the energy and mineral industries, both domestically and internationally.
- Apply quantitative tools from economics, finance, optimization and management science to assist in the analysis and implementation of public and business policies.

"Adaptability, strong theoretical background, workdwide and multipisciplinary exposure, cractical orientation, focus on results. These are just some of the common areas between what the energy housitry requires and what Whes offers."

-- Eva Maria Gomez, Sr. Planning Engineer, Occidental Oil and Gas MS degree

"My education from Mines has prepared me for a very exciting and rewarding career including conducting business development activities for two major mining companies and running a small mining company. I now help manage an international private equity investment fund focused exclusively on the mining and minerals sector."

– Ross R. Bhappu, Vice President, Resource Capital Funds PhD degree

Quick Facts

Enrollments:

23 - PhD Program

41 - MS Program

7 - CSM/IFP Joint Degree Program

Placement rate:

Placement rate: PhD 100%

MS 95%

Average starting salary: \$77,814

Range: \$65,000 - \$90,000

ENERGY MINERALS

Recent Placement

Bentek Energy

Credit Suisse

Duff and Phelps

El Paso

Goldman Sachs

Halliburton **Newmont Mining** **PFC Energy** Schlumberger

Wood MacKenzie Xcel

Types of Positions

Energy Economist

Commodity Research

Market Analyst

Oil and Gas Consultant

Operations Manager

Research Economist

Risk & Value Consultant Supply Chain Analyst

T M B M M O A I V M E

Curriculum **CORE COURSES**

Mathematical Economics Operations Research

Natural Resource Economics

Econometrics

Microeconomics Macroeconomics

AREAS OF SPECIALIZATION

Public Policy:

Energy Economics Intl. Trade & Investment **Economics of Metal Industries**

Economic Development

Energy and Mineral Policies

Economic Modeling

Quantitative Business Methods/Operations Research:

Economic Evaluation & Investments

Industrial Accounting

Industrial Systems Simulation

Corporate Finance

Investments & Portfolio Management

Nonlinear Programming

Network Models

Integer Programming

Supply Chain Management

Decision Analysis

Stochastic Models

Advanced Project Analysis

Exploration Economics

Linear Programming

Advanced Mathematical Programming

Recent Thesis Projects

- Global Demand for Road Transport Fuels
- Methods for Improving the Tractability of the Block Sequencing Problem for Open Pit Mining
- Cvar-Constrainted Multi-Period Power Portfolio Optimization
- Modeling the State-Level Impacts of Carbon Policy: The Case of Colorado

Program Collaborations

- Petroleum Economics and Management with the IFP School near Paris, France this work trains the next generation of technical, analytical and managerial professionals vital to the future of the petroleum and energy industries.
- Natural Resource Law with the University of Denver this reciprocal agreement provides students with the opportunity to take law courses.

contact Division of Economics and B Phone: 800.446.9488 (Ext. 3 303.273.3979 (outside the U Email: ebgrad@mines.edu www.mines.edu/academic/econbus