

Introduction to Mining Engineering

Why? Who?
What? Where?



Why Mining Engineering?

Mining Engineering is one of the most interesting branches of Engineering. It involves extracting and processing of minerals and resources from a naturally occurring environment.

Who should be an Mining Engineer?

Any student who:

- Has a high interest in discovering
- Is creative
- Is research savvy
- Has a sound knowledge of natural resources

Specialisations within Mining Engineering:

- Ventilation
- Rock Mechanics
- Mine Planning
- Materials Handling
- Drilling and Blasting
- Minerals Processing



Did you know? An Australian woman named Gina Rinehart is the richest woman in the world and is from the mining industry!

Career in Mining Engineering:

Government and public sector organisations like:

- The Indian Bureau of Mines
- Geological Survey of India
- Coal India Ltd.
- IPCL
- Neyveli Lignite Corporation

Best colleges for Mining Engineering in:

India

- Indian School of Mines-Dhanbad
- NIT-Rourkela
- NIT-Nagpur

USA

- Columbia University
- Colorado School of Mines
- New Mexico Institute of Mining and Technology

UK

- University of Exeter
- University of Bath
- University of Bristol

Canada

- McGill University
- University of Montreal

Discover the Career Options Right for You

1 Initial Options



What are your career ideas?

If you haven't already given it a thought, then base it on influences from:

- Parents, family and friends
- Passion towards a subject
- Personal experiences
- Media and internet

Univariety probes and provides answers

Initial Options

Go to step 2

Instructions

- Follow this process, one at a time, to finalise career choices
- If the answer is 'No' 'at any stage then start from stage 1
- Do in-depth self research
- Complete details of this process and the questions around a 'Typical Day' Test are at www.univariety.com/courses

2 Hypothesis



Do you like it?

Remember the activities from the past which gave you joy and happiness. Does this career option similarly excite you?

Initial Hypothesis



Can you do it?

- Do you know how long it takes to get the degree?
- Do you like the subjects which you will study?
- Can you perform to get through to good colleges?
- Do you have the financial resources to support the degree?

Final Hypothesis

Go to step 3

3 Validation



Do you want it?

Do you like the:

- Nature of work you will do?
- Type of people you will deal with?
- Physical and mental effort required?
- The challenge it poses?



Will it fulfill your and your family's ambitions?

Will this give you a good:

- Lifestyle?
- Time with family and friends?
- Salary and money potential?
- Possibility of being famous?

Validated Hypothesis

Go to step 4

4 Finalisation



'Typical Day' Test?

"If you want to know the road ahead, then ask someone who has travelled it."

- Ancient Chinese Proverb

Here, we ask you to identify 2 - 3 people who have the same career that you have chosen and brought to this stage. Observe and ask questions to understand the 'typical life' in that career



Decision

Tools

- Discussion within the family and friends
- Univariety Website – Career Section
- Sessions with Univariety Counsellors
- Internet, books and other media