

B.Sc.+ M.Sc. Integrated Geology (5 years)

Semester 1

S. No.	Course Title
1.	Fundamentals of Geology and Understanding the Planet Earth
2.	Mineralogy and crystallography
3.	Earth Materials, Surface Features and Processes
4.	Geology: Earth Science for Everyone
5.	Geological mapping
6.	Behavioral Science
7.	Environmental Studies-1
8.	Foreign Business language (German/French)
9.	Punjabi

Semester 2

S. No.	Course Title
1.	Structural Geology
2.	Palaeontology
3.	Environmental Earth Sciences
4.	Natural hazards and Disaster Management
5.	Behavioral Science
6.	Environmental Studies-2
7.	Foreign Business language (German/French)
8.	Punjabi
9.	Optics and Optical mineralogy

Semester 3

S. No.	Course Title
1.	Igneous Petrology
2.	Sedimentary Petrology
3.	Geomorphology
4.	Climate change: past, present and future
5.	Introduction to Communication Skills
6.	Geological Field work

Semester 4

S. No.	Course Title
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1.	Metamorphic Petrology
2.	Principles of Stratigraphy and Precambrian Stratigraphy of India
3.	Phanerozoic Stratigraphy of India
4.	Evolution of life through time
5.	Professional Etiquette and Workplace Communications
6.	Economic Geology

Semester 5

S. No.	Course Title
1.	Hydrogeology
2.	Ore Geology
3.	Geochemistry and Isotope Geology
4.	Remote Sensing and Geographic Information System in Geology

Semester 6

S. No.	Course Title
1.	Engineering Geology
2.	Micropalaeontology
3.	Mining and Mineral Exploration
4.	Oceanography

Semester 7

S. No.	Course Title
1.	Igneous Activity and Crustal Evolution
2.	Advanced Mineralogy
3.	Structural Geology and Tectonics
4.	Meteorology and Climate Change
5.	Applied Geophysics

Semester 8

S. No.	Course Title
1.	Metamorphic processes and phase Equilibria
2.	Applied Stratigraphy
3.	Advances in Geochemistry and Isotope Geology
4.	Fuel Geology
5.	Metamorphic processes and phase Equilibria

Semester 9

S. No.	Course Title
1.	Advanced Hydrogeology
2.	Applied Palaeontology
3.	Mineral Exploration, Mining & Beneficiation
4.	Research Project/ Dissertation

Semester 10

S. No.	Course Title
1.	Environmental Geology and Geotechnical engineering
2.	Remote Sensing and Geomorphology
3.	Research Project/ Dissertation