B.Sc. Geology Hons/ research (4 years)

Semester 1

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

Semester 2

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

Semester 6

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

Semester 7

S.	Course Title
No.	
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.	Course Title
No.	
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

• For B.Sc. hons with Research, Semester 8 will have more credit distribution towards Research project/ Dissertation.

Semester 8

S.	Course Title
No.	
1.	Applied Stratigraphy
2.	Fuel Geology
3.	Research Project/Dissertation