

Department of Applied Geology

NEP courses for the batch admitted from AY 2024-25

Details of Departmental Compulsary (DC) Courses

Departmental Compulsary (DC) Courses					
S. No.	Course Code	Course Name	L-T-P	Credit	Course Type
1	NGLC501	Mineralogy	3-1-0	4	Theory
2	NGLC502	Applied Geochemistry	3-1-0	4	Theory
3	NGLC503	Methods of Structural Geology	3-0-0	3	Theory
4	NGLC504	Applied Sedimentology	3-0-0	3	Theory
5	NGLC505	Mineralogy and Geochemistry Practical	0-0-2	1	Practical
6	NGLC506	Methods of Structural Geology Practical	0-0-2	1	Practical
7	NGLC507	Sedimentology Practical	0-0-2	1	Practical
8	NGLC508	X-Ray Crystallography and Mineral Optics	3-1-0	4	Theory
9	NGLC509	Engineering Geology	3-0-0	3	Theory
10	NGLC510	Hydrogeology	3-0-0	3	Theory
11	NGLC511	Atmosphere, Ocean and Climate Dynamics	3-0-0	3	Theory
12	NGLC512	Sample Preparation and Analytical Techniques in Geosciences	3-0-0	3	Theory
13	NGLC513	Geology of Natural Resources	3-0-0	3	Theory
14	NGLC514	Micropaleontology and Vertebrate Palaeontology	3-0-0	3	Theory
15	NGLC515	Coal Geology	3-0-0	3	Theory
16	NGLC516	Remote Sensing and GIS	3-0-0	3	Theory
17	NGLC517	Ore Geology	3-0-0	3	Theory
18	NGLC518	Geomorphology	3-0-0	3	Theory
19	NGLC519	Elements of Rock Engineering	3-0-0	3	Theory
20	NGLC520	Petroleum Geology	3-0-0	3	Theory
21	NGLC521	Igneous Petrology	3-0-0	3	Theory
22	NGLC522	Metamorphic Petrology	3-0-0	3	Theory
23	NGLC523	Programming in MATLAB	3-0-0	3	Theory
24	NGLC524	Igneous Petrology Practical	0 0 2	1	Practical
25	NGLC525	Metamorphic Petrology Practical	0 0 2	1	Practical
26	NGLC526	Coal Geology and Petroleum Geology Practical	0 0 2	1	Practical
27	NGLC527	Sedimentary Field Training	0-0-0	3	Non-contact
28	NGLC528	Exploration Geology and Mineral Economics	3-0-0	3	Theory
29	NGLC529	Economic Geology & Indian Mineral Deposits	3-0-0	3	Theory
30	NGLC530	Engineering Geology Practical	0 0 2	1	Practical
31	NGLC531	Hydrogeology Practical	0 0 2	1	Practical
32	NGLC532	Micropaleontology and Vertebrate Palaeontology Practical	0 0 2	1	Practical
33	NGLC533	Geodynamics	3-0-0	3	Theory
34	NGLC534	Ore Geology Practical	0 0 2	1	Practical
35	NGLC535	Exploration Geology Practical	0 0 2	1	Practical
36	NGLC536	Structural and Economic Geology Field Training	0-0-0	3	Non-contact
37	NGLC595	Research Methodology	3-0-0	3	Theory
38	NGLC596	Research Methodology	3-0-0	3	Audit
39	NGLC597	Thesis	0-0-0	20	Non-contact
40	NGLC598	Thesis	0-0-0	20	Non-contact
41	NGLC599	Thesis	0-0-0	20	Audit

Details of Departmental Elective (DE) Courses

Departmental Elective Courses

S. No.	Course Code	Course Name	L-T-P	Credit	Course Type
1	NGLD501	Coalbed Methane, Shale Gas and Gas Hydrate Exploration	3-0-0	3	Theory
2	NGLD502	Nanotechnology in Mineral and Hydrocarbon Exploration	3-0-0	3	Theory
3	NGLD503	Rock Slope Engineering	3-0-0	3	Theory
4	NGLD504	Stratigraphy	3-0-0	3	Theory
5	NGLD505	Environmental Geology	3-0-0	3	Theory
6	NGLD506	Modern Instrumental Methods in Exploration Geosciences	3-0-0	3	Theory
7	NGLD507	Image Processing and Data Analysis	3-0-0	3	Theory
8	NGLD508	Sequence Stratigraphy and Basin Analysis	3-0-0	3	Theory
9	NGLD509	Geotechnical Engineering	3-0-0	3	Theory
10	NGLD510	Radiogenic and Stable Isotope Geology	3-0-0	3	Theory
11	NGLD511	Kinematics of Rock Deformation	3-0-0	3	Theory
12	NGLD512	Introduction to Data Science for Geosciences	3-0-0	3	Theory