

# Department of Applied Geophysics

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	<a href="#">NGPC501</a>	Seismology	3-1-0	4	Theory
2	<a href="#">NGPC502</a>	Geotechnical Modelling	3-1-0	4	Theory
3	<a href="#">NGPC503</a>	Computational Seismology	3-1-0	4	Theory
4	<a href="#">NGPC504</a>	Geotechnical Modelling Practical	0-0-3	1.5	Practical
5	<a href="#">NGPC505</a>	Seismology Practical	0-0-3	1.5	Practical
6	<a href="#">NGPC506</a>	Computational Seismology Practical	0-0-3	1.5	Practical
7	<a href="#">NGPC507</a>	Remote Sensing: Principles and Data Acquisition System	3-1-0	4	Theory
8	<a href="#">NGPC508</a>	Advanced Numerical Methods	3-1-0	4	Theory
9	<a href="#">NGPC509</a>	Earthquake Statistics and Hazard	3-1-0	4	Theory
10	<a href="#">NGPC510</a>	Remote Sensing: Principles and Data Acquisition System	0-0-3	1.5	Practical
11	<a href="#">NGPC511</a>	Advanced Numerical Methods Practical	0-0-3	1.5	Practical
12	<a href="#">NGPC512</a>	Earthquake Statistics and Hazard Practical	0-0-3	1.5	Practical
13	<a href="#">NGPC513</a>	Geophysical Methods	3-1-0	4	Theory
14	<a href="#">NGPC514</a>	Solid Earth Geophysics	3-1-0	4	Theory
15	<a href="#">NGPC515</a>	Remote Sensing Principles	3-1-0	4	Theory
16	<a href="#">NGPC516</a>	Mathematical Functional Analysis	3-0-0	3	Theory
17	<a href="#">NGPC517</a>	Remote Sensing Principles Practical	0-0-2	1	Practical
18	<a href="#">NGPC518</a>	Mathematical Functional Analysis Practical	0-0-2	1	Practical
19	<a href="#">NGPC519</a>	Geophysical Methods Practical	0-0-2	1	Practical
20	<a href="#">NGPC520</a>	Gravity Method	3-0-0	3	Theory
21	<a href="#">NGPC521</a>	Earthquake Seismology	3-0-0	3	Theory
22	<a href="#">NGPC522</a>	Geoelectrical Methods	3-0-0	3	Theory
23	<a href="#">NGPC523</a>	Seismic Data Acquisition	3-0-0	3	Theory
24	<a href="#">NGPC524</a>	Seismic Data Acquisition Practical	0-0-2	1	Practical
25	<a href="#">NGPC525</a>	Gravity and Geoelectrical Method Practical	0-0-2	1	Practical
26	<a href="#">NGPC526</a>	Earthquake Seismology Practical	0-0-2	1	Practical
27	<a href="#">NGPC527</a>	Course not assigned against this code			
28	<a href="#">NGPC528</a>	Geophysical Inversion	3-0-0	3	Theory
29	<a href="#">NGPC529</a>	Seismic Data Processing and Interpretation	3-0-0	3	Theory
30	<a href="#">NGPC530</a>	Well logging	3-0-0	3	Theory
31	<a href="#">NGPC531</a>	Magnetic Method	3-1-0	4	Theory
32	<a href="#">NGPC532</a>	Geothermics and Geodynamics	3-1-0	4	Theory
33	<a href="#">NGPC533</a>	Geophysical Inversion Practical	0-0-2	1	Practical
34	<a href="#">NGPC534</a>	Seismic Data Processing and Interpretation Practical	0-0-2	1	Practical
35	<a href="#">NGPC535</a>	Well logging Practical	0-0-2	1	Practical
36	<a href="#">NGPC536</a>	Geoelectromagnetic Method	3-0-0	3	Theory
37	<a href="#">NGPC537</a>	Formation Evaluation	3-0-0	3	Theory
38	<a href="#">NGPC538</a>	Reservoir Geophysics and Deep-Water Imaging	3-0-0	3	Theory

39	<a href="#">NGPC539</a>	Artificial Intelligence and Machine Learning in	3-0-0	3	Theory
40	<a href="#">NGPC540</a>	Geoelectromagnetic Method Practical	0-0-2	1	Practical
41	<a href="#">NGPC541</a>	Formation Evaluation Practical	0-0-2	1	Practical
42	<a href="#">NGPC542</a>	Groundwater Geophysics	3-1-0	4	Theory
43	<a href="#">NGPC543</a>	Course not assigned against this code			
44	<a href="#">NGPC544</a>	Vocational Training / Field Visit / Excursion etc.	0-0-0	3	Non-contact
45	<a href="#">NGPC595</a>	Research Methodology	3-0-0	3	Theory
46	<a href="#">NGPC596</a>	Research Methodology	3-0-0	3	Audit
47	<a href="#">NGPC597</a>	Thesis	0-0-0	20	Non-contact
48	<a href="#">NGPC598</a>	Thesis	0-0-0	20	Non-contact
49	<a href="#">NGPC599</a>	Thesis	0-0-0	20	Audit

## Details of Departmental Elective (DE) Courses

Departmental Elective (DE) Courses					
S. No.	Course Code	Course Name	L-T-P	Credit	Course Type
1	<a href="#">NGPD501</a>	Geophysics for Mineral Exploration	3-0-0	3	Theory
2	<a href="#">NGPD502</a>	Well log and Electrofacies Analysis	3-0-0	3	Theory
3	<a href="#">NGPD503</a>	Image Processing and Geographic	3-0-0	3	Theory
4	<a href="#">NGPD504</a>	Airborne Geophysics	3-0-0	3	Theory
5	<a href="#">NGPD505</a>	Seismic Hazard Zonation	3-0-0	3	Theory
6	<a href="#">NGPD506</a>	Hydrology	3-0-0	3	Theory
7	<a href="#">NGPD507</a>	Finite Element Analysis	3-0-0	3	Theory
8	<a href="#">NGPD508</a>	Satellite Image Processing and Geographic Information	3-0-0	3	Theory
9	<a href="#">NGPD509</a>	Time Series Analysis in Geosciences	3-0-0	3	Theory
10	<a href="#">NGPD510</a>	Seismological Data Analysis	3-0-0	3	Theory
11	<a href="#">NGPD511</a>	Near Surface Geophysics and Geotechnical Modelling	3-0-0	3	Theory
12	<a href="#">NGPD512</a>	Strong Motion Seismology and Structural Responses	3-0-0	3	Theory
13	<a href="#">NGPD513</a>	Geoelectromagnetism for Crustal and Lithospheric	3-0-0	3	Theory