

Revised Course Structure for the 5-year Integrated M. Tech.
in Applied Geology Program
(Effective for Non-CBCS Batches from 2015-2016 but before 2019-2020)

From VI Semester to X Semester

VI Semester

Course Number	Courses	L – T – P	Credit
<u>Theory</u>			
GLO 529	Remote Sensing and GIS	3 – 0 – 0	06
GLD 540	Geomorphology	3 – 0 – 0	06
GLC 26137	Environmental Geology	3 – 0 – 0	06
MER 16105	Rock Mechanics	3 – 0 – 0	06
MCE301	Operations Research	3 – 0 – 0	06
<u>Lab/Project/Seminar/Dissertation/Viva-voce</u>			
GLC 24226	Remote Sensing and GIS Lab	0 – 0 – 2	02
GLC 24223	Geomorphology Lab	0 – 0 – 2	02
MER 16205	Rock Mechanics Lab	0 – 0 – 2	02
GLC 16917	Sedimentary Terrain Mapping (S)	0 – 0 – 0	02
GLC 16518	Viva-voce	0 – 0 – 0	02
	Total	15 – 0 – 6	40

VII Semester

Course Number	Courses	L – T – P	Credit
<u>Theory</u>			
GLC 23120	Coal Geology	3 – 0 – 0	06
GLC 518	Principles and Applications of Geostatistics	3 – 0 – 0	06
GLO523	Atmosphere, Ocean and Climate Dynamics	3 – 0 – 0	06
MER 17106	Surveying	3 – 0 – 0	06
GPE202	Geophysical Prospecting	3 – 0 – 0	06
<u>Lab</u>			
GLC 23220	Coal Geology Lab	0 – 0 – 2	02
GLC 524	Principles and Applications of Geostatistics Lab	0 – 0 – 2	02
GLC 25235	Atmosphere, Ocean and Climate Dynamics Lab	0 – 0 – 2	02
MER 17206	Surveying Lab	0 – 0 – 2/2	01
GLC 17820	Project	0 – 0 – 0	02
	Total	15 – 0 – 9	39

VIII Semester

Course Number	Courses	L – T – P	Credit
<u>Theory</u>			
GLC 512	Petroleum Geology	3 – 0 – 0	06
GLC 527	Exploration Geology and Mineral Economics	3 – 0 – 0	06
MSC 18152 GLE 26138 GLO545 GLD528	Electives (Any one of the following): Industrial Management Coal Bed Methane, Shale Gas and Gas Hydrate Exploration Nuclear Geology Geotechnical Engineering	3 – 0 – 0	06
FMC 26151	Mineral Beneficiation	3 – 0 – 0	06
MNO503	Sustainable Mining	3 – 0 – 0	06
<u>Lab/Project/Seminar/Dissertation/Viva-voce</u>			
GLC 24225	Petroleum Geology Lab	0 – 0 – 2	02
GLC 534	Exploration Geology Lab	0 – 0 – 2	02
FMC 26251	Mineral Beneficiation Lab	0 – 0 – 2	02
GLC 18926	Geological Mapping Training (S)	0 – 0 – 0	02
GLC 18527	Viva-Voce	0 – 0 – 0	02
GLC 18828	Project	0 – 0 – 0	04
	Total	15 – 0 – 10	44

IX Semester

Course Number	Courses	L – T – P	Credit
<u>Theory</u>			
GLC 520	Hydrogeology	3 – 0 – 0	06
GLC 519	Engineering Geology	3 – 0 – 0	06
GLC 19128	Geodynamic Processes	3 – 0 – 0	06
GLE 19129 GLE 25130 GLE 25131 GLE 25132 GLE 25129 GLE 25133 GLE 25134	Electives(Any one of the following): Kinematics of Rock Deformation Sequence stratigraphy and Basin Analysis Image Processing Contaminant Hydrogeology Well logging Organic Geochemistry in Hydrocarbon Exploration Computer Applications in Geology	3 – 0 – 0	06
PER 51102	Petroleum Reservoir Engineering and Field Development	3 – 1 – 0	07
<u>Lab/Project/Seminar/Dissertation/Viva-voce</u>			
GLC 25227	Hydrogeology Lab	0 – 0 – 2	02
GLC 19227	Engineering Geology Lab	0 – 0 – 2	02
GLC 19536	Topical Seminar	0 – 0 – 0	02
GLC 19837	Project	0 – 0 – 0	04
	Total	15 – 1 – 8	41

X Semester

Course Number	Courses	L – T – P	Credit
<u>Project/Seminar/Dissertation/Viva-voce</u>			
GLC 10838	Summer Internship/ Industrial Training	0 – 0 – 0	02
GLC 10539	Project	0 – 0 – 25	25
GLC 10140	Seminar on Project	0 – 0 – 0	04
GLC 10541	Viva-voce on Project	0 – 0 – 0	04
GLC 10542	Composite Viva-voce	0 – 0 – 0	10
	Total	0 – 0 – 25	45