

UG CERTIFICATE COURSE IN GEOLOGY (FIRST YEAR)

SEMESTER I				
Course Types	Course Code	Name of Course	(L+T+P)	Credits
Major Course	GEL51MJ00104	Mineralogy	3+0+1	4
Minor Course		From Chemistry/Environmental Science/Physics/Maths/Statistics / Computer Sciences/ Biological Sciences/ SWAYAM courses		4
Multidisciplinary Course (MD)		From other Departments / SWAYAM courses		3
Skill Enhancement Course (SEC)	GEL51SE00203	Tools and Techniques used in Geological Sciences	1+1+1	3
Value Added Course (VAC)	GEL51VA00302	Indian Contributors in Earth Sciences	2+0+0	2
Value Added Course (VAC)		Courses offered by other Departments		2
Ability Enhancement Course (AEC)		University level offered Courses		2
Minimum Credits required for Semester I				20

Courses offered for students of other Departments

Course Types	Course Code	Name of Course	(L+T+P)	Credits
Minor Course	GEL51MJ00104	Mineralogy	3+0+1	4
Multidisciplinary Course (MD)	GEL51MD00403	Earth System Science	2+1+0	3

SEMESTER II				
Course Types	Course Code	Name of Course	(L+T+P)	Credits
Major Course	GEL52MJ00504	Introduction to Geological Sciences	3+1+0	4
Minor Course		From Chemistry/Environmental Science/Physics/Maths/Statistics / Computer Sciences/ Biological Sciences/ SWAYAM courses		4
Multidisciplinary Course (MD)		From other Departments / SWAYAM courses		3
Skill Enhancement Course (SEC)	GEL52SE00603	Surveying and Mapping Techniques	1+0+2	3
Value Added Course (VAC)	GEL52VA00702	Sustainable Development Goals (SDGs)	2+0+0	2
Value Added Course (VAC)		Courses offered by other Departments		2
Ability Enhancement Course (AEC)		University level offered Courses		2
Minimum Credits required for Semester II				20
After Two Semesters Summer Vacation (6-8 weeks) Summer Internship				4

Courses offered for students of other Departments

Course Types	Course Code	Name of Course	(L+T+P)	Credits
Minor Course	GEL52MJ00504	Introduction to Geological Sciences	3+1+0	4
Multidisciplinary Course (MD)	GEL52MD00803	Natural Resource Management	2+1+0	3

UG DIPLOMA COURSE IN GEOLOGY (SECOND YEAR)

SEMESTER III				
Course Types	Course Code	Name of Course	(L+T+P)	Credits
Major Course	GEL61MJ00904	Petrology	3+0+1	4
Major Course	GEL61MJ01004	Elements of Geochemistry	3+1+0	4
Minor Course		From Chemistry/Environmental Science/Physics/Maths/Statistics / Computer Sciences/ Biological Sciences/ SWAYAM courses		4
Multidisciplinary Course (MD)		From other Departments / SWAYAM courses		3
Skill Enhancement Course (SEC)	GEL61SE01103	Gemology	2+1+0	3
Ability Enhancement Course (AEC)		University level offered Courses		2
Minimum Credits required for Semester III				20

Courses offered for students of other Departments

Course Types	Course Code	Name of Course	(L+T+P)	Credits
Minor Course	GEL61MJ01004	Elements of Geochemistry	3+1+0	4
Multidisciplinary Course (MD)	GEL61MD01203	Geodiversity-Geoheritage-Geopark	2+1+0	3

SEMESTER IV				
Course Types	Course Code	Name of Course	(L+T+P)	Credits
Major Course	GEL62MJ01304	Palaeontology	3+0+1	4
Major Course	GEL62MJ01404	Structural Geology	3+0+1	4
Major Course	GEL62MJ01504	Introduction of Geospatial Technology	2+0+2	4
Major Course	GEL62MJ01602	Geohazards and Disaster Risk Reduction	2+0+0	2
Minor Course		From Chemistry/Environmental Science/Physics/Maths/Statistics / Computer Sciences/ Biological Sciences/ SWAYAM courses		4
Ability Enhancement Course (AEC)		University level offered Courses		2

Minimum Credits required for Semester IV	20
After Two Semesters Summer Vacation (6-8 weeks) Summer Internship	4

Courses offered for students of other Departments

Course Types	Course Code	Name of Course	(L+T+P)	Credits
Minor Course	GEL62MJ01304	Palaeontology	3+0+1	4

BACHELOR OF SCIENCE IN GEOLOGY (THIRD YEAR)

SEMESTER V				
Course Types	Course Code	Name of Course	(L+T+P)	Credits
Major Course	GEL71MJ01704	Marine Geology and Micropaleontology	3+0+1	4
Major Course	GEL71MJ01804	Indian Stratigraphy	3+0+1	4
Major Course	GEL71MJ01904	Economic Geology	3+0+1	4
Major Course	GEL71MJ02002	Applied Geomorphology	2+0+0	2
Major Course	GEL71MJ02102	Internship/Seminar	0+0+2	2
Minor Course		From Chemistry/Environmental Science/Physics/Maths/Statistics / Computer Sciences/ Biological Sciences/ SWAYAM courses		4
Minimum Credits required for Semester V				20

Courses offered for students of other Departments

Course Types	Course Code	Name of Course	(L+T+P)	Credits
Minor Course	GEL71MJ01704	Marine Geology and Micropaleontology	3+0+1	4

SEMESTER VI				
Course Types	Course Code	Name of Course	(L+T+P)	Credits
Major Course	GEL72MJ02204	Research Methodology	3+1+0	4
Major Course	GEL72MJ02304	Geophysical Techniques	3+1+0	4
Major Course	GEL72MJ02404	Hydrogeology	3+0+1	4
Major Course	GEL72MJ02504	Field Geology and Field Training	2+0+2	4
Minor Course		From Chemistry/Environmental Science/Physics/Maths/Statistics / Computer Sciences/ Biological Sciences/ SWAYAM courses		4
Minimum Credits required for Semester VI				20

Courses offered for students of other Departments

Course Types	Course Code	Name of Course	(L+T+P)	Credits
Minor Course	GEL72MJ02304	Geophysical Techniques	3+1+0	4

BACHELOR OF SCIENCE (HONOURS) IN GEOLOGY (FOURTH YEAR)

SEMESTER VII				
Course Types	Course Code	Name of Course	(L+T+P)	Credits
Major Course	GEL81MJ02604	Igneous & Metamorphic Petrology	3+0+1	4
Major Course	GEL81MJ02704	Advanced Remote Sensing & Its Applications in Geosciences	2+1+1	4
Major Course	GEL81MJ02804	Advanced Mineralogy	3+0+1	4
Major Course	GEL81MJ02904	Sedimentology and Sequence Stratigraphy	3+0+1	4
Minor Course		From Chemistry/Environmental Science/Physics/Maths/Statistics / Computer Sciences/ Biological Sciences/ SWAYAM courses		4
Minimum Credits required for Semester VII				20

Courses offered for students of other Departments

Course Types	Course Code	Name of Course	(L+T+P)	Credits
Minor Course	GEL81MJ02804	Advanced Mineralogy	3+0+1	4

SEMESTER VIII				
Course Types	Course Code	Name of Course	(L+T+P)	Credits
Major Course	GEL82MJ03004	Engineering Geology	3+1+0	4*
Major Course	GEL82MJ03104	Environmental and Medical Geology	3+1+0	4*
Major Course	GEL82MJ03204	Statistics and Computer Applications in Geology	1+1+2	4*
Major Course	GEL82MJ03304	Mining Geology and Energy	3+1+0	4*
Major Course	GEL82MJ03404	Climatology	3+1+0	4*
Major Course	GEL82MJ03504	Application of Geospatial Technology in Water Resources Management	2+1+1	4*
Minor Course		From Chemistry/Environmental Science/Physics/Maths/Statistics / Computer Sciences/ Biological Sciences/ SWAYAM courses		4
Minimum Credits required for Semester VIII				20

*All the major courses offered in VIII semester are Discipline Based Core Elective (DE) in nature and student can choose 4 courses as per your interest from the provided major course basket and one 4 credit course from other departments.

Courses offered for students of other Departments

Course Types	Course Code	Name of Course	(L+T+P)	Credits
Minor Course	GEL82MJ03004	Engineering Geology	3+1+0	4

**BACHELOR OF SCIENCE HONOURS WITH RESEARCH IN GEOLOGY
(FOURTH YEAR)**

SEMESTER VIII				
Course Types	Course Code	Name of Course	(L+T+P)	Credits
Major Course	GEL82MJ03612	Research Project	0+0+12	12
Major Course	GEL82MJ03004	Engineering Geology	3+1+0	4
Minor Course		From Chemistry/Environmental Science/Physics/Maths/Statistics / Computer Sciences/ Biological Sciences/ SWAYAM courses		4
Minimum Credits required for Semester VIII				20

MASTER OF SCIENCE (INTEGRATED) IN GEOLOGY (FIFTH YEAR)

SEMESTER IX				
Course Types	Course Code	Name of Course	(L+T+P)	Credits
Major Course	GEL91MJ03704	Applied Palaeontology	3+0+1	4*
Major Course	GEL91MJ03804	Oceanography	3+1+0	4*
Major Course	GEL91MJ03904	Quaternary Geology and Glaciology	3+1+0	4*
Major Course	GEL91MJ04004	Geo-Exploration	3+1+0	4*
Major Course	GEL91MJ04104	Urban Geology and Watershed Modelling	2+1+1	4*
Major Course	GEL91MJ04204	Geochronology and Isotope Geology	4+0+0	4*
Minimum Credits required for Semester IX				20

* All the major courses offered in IX semester are Discipline Based Core Elective (DE) in nature and student can choose any 5 courses as per your interest from the provided major course basket.

Courses offered for students of other Departments

Course Types	Course Code	Name of Course	(L+T+P)	Credits
Minor Course	GEL91MJ03804	Oceanography	3+1+0	4

SEMESTER X				
Course Types	Course Code	Name of Course	(L+T+P)	Credits
Major Course	GEL92MJ04320	Dissertation	0+0+20	20
Minimum Credits required for Semester X				20