

VIDYASAGAR UNIVERSITY

Midnapore, West Bengal



PROPOSED CURRICULUM & SYLLABUS (DRAFT) OF

BACHELOR OF SCIENCE WITH GEOLOGY (MULTIDISCIPLINARY STUDIES)

3-YEAR UNDERGRADUATE PROGRAMME
(w.e.f. Academic Year 2023-2024)

Based on
**Curriculum & Credit Framework for Undergraduate Programmes
(CCFUP), 2023 & NEP, 2020**

VIDYASAGAR UNIVERSITY
BACHELOR OF SCIENCE IN PHYSICSL SCIENCES with GEOLOGY
(under CCFUP, 2023)

| Level | YR. | SEM | Course Type | Course Code | Course Title | Credit | L-T-P | Marks | | | | |
|------------------------------------|-----------------|-----|------------------|--------------|--|-------------------|-------|-------|-----|-------|-----|--|
| | | | | | | | | CA | ESE | TOTAL | | |
| B.Sc. in Physical Sc. with Geology | 1 st | I | SEMESTER-I | | | | | | | | | |
| | | | Major (Disc.-A1) | GELPMJ101 | T: Introduction to Geology (To be studied by the students taken Geology as Discipline-A) | 4 | 3-0-1 | 15 | 60 | 75 | | |
| | | | SEC | SEC01 | To be chosen from SEC-01 of Discipline A/B/C of their Hons. prog. | 3 | 0-0-3 | 10 | 40 | 50 | | |
| | | | AEC | AEC01 | Communicative English-1 (common for all programmes) | 2 | 2-0-0 | 10 | 40 | 50 | | |
| | | | MDC | MDC01 | Multidisciplinary Course-1 (to be chosen from the list) | 3 | 3-0-0 | 10 | 40 | 50 | | |
| | | | VAC | VAC01 | VAC-01: ENVS (common for all programmes) | 4 | 2-0-2 | 50 | 50 | 100 | | |
| | | | Minor (Disc.-C1) | GEL MI 01/C1 | T: Essentials of Geology (To be studied by the students taken Geology as Discipline-C) | 4 | 3-1-0 | 15 | 60 | 75 | | |
| | | | | | | Semester-I Total | 20 | | | | 400 | |
| | | II | SEMESTER-II | | | | | | | | | |
| | | | Major (Disc.-B1) | | To be decided (Same as like A1 for students taken Geology as Discipline-B) | 4 | 3-0-1 | 15 | 60 | 75 | | |
| | | | SEC | SEC02 | To be chosen from SEC-02 of Discipline A/B/C of their Hons. prog. | 3 | 0-0-3 | 10 | 40 | 50 | | |
| | | | AEC | AEC02 | MIL-1 (common for all programmes) | 2 | 2-0-0 | 10 | 40 | 50 | | |
| | | | MDC | MDC02 | Multi Disciplinary Course-02 (to be chosen from the list) | 3 | 3-0-0 | 10 | 40 | 50 | | |
| | | | VAC | VAC02 | VAC-02 (to be chosen from the list) | 4 | 4-0-0 | 10 | 40 | 50 | | |
| | | | Minor (Disc.-C2) | GEL MI 02/C2 | T: Introduction to Mineralogy; P: Practical (To be studied by the students taken Geology as Discipline-C) | 4 | 3-0-1 | 15 | 60 | 75 | | |
| | | | Summer Intern. | CS | Community Service | 4 | 0-0-4 | - | - | 50 | | |
| | | | | | | Semester-II Total | 24 | | | | 400 | |
| | | | | | | TOTAL of YEAR-1 | 44 | - | - | - | 800 | |

P MJ= Major Programme (Multidisciplinary), MI = Minor, A/B = Choice of Major Discipline; C= Choice of Minor Discipline; SEC = Skill Enhancement Course, AEC = Ability Enhancement Course, MDC = Multidisciplinary Course, VAC = Value Added Course; CA= Continuous Assessment, ESE= End Semester Examination, T = Theory, P= Practical, L-T-P = Lecture-Tutorial-Practical, MIL = Modern Indian Language, ENVS = Environmental Studies

VIDYASAGAR UNIVERSITY, PASCHIM MIDNAPORE, WEST BENGAL

MAJOR (MJ)

MJ A1/B1: Introduction to Geology

Credits 04 (FM: 75)

MJ A1/B1T: Introduction to Geology

Credits 04 [60L]

Course contents:

Unit-I: Introduction to geology and its scope, Earth and solar system: origin, size, shape, mass, density and its atmosphere.

Unit-II: A brief account of various theories regarding the origin and age of the earth; Brief idea of interior of earth and its composition.

Unit-III: Weathering and erosion: factors, types and their effects

Unit-IV: Earthquakes: nature of seismic waves, their intensity and magnitude scale; Origin of earthquake and preventive measures; Volcanoes: types, products and causes of volcanism.

Unit V: Introduction to the concept of deep time in geological studies Stratigraphy: definition and scope; Brief history of development of stratigraphic principles; concepts of Uniformitarianism; Fundamental laws of stratigraphy: Superposition, Faunal succession and correlation; Geological Time Scale.

Suggested Readings:

1. Duff, P. M. D., & Duff, D (Eds.), 1993. *Holmes' principles of physical geology*. Taylor & Francis.
2. Emiliani, C., 1992. *Planet earth: cosmology, geology, and the evolution of life and environment*.

MINOR (MI)

MI-1/C1: Same as Minor-1 (GELMI01) of Geology (Hons) programme

**Credits 04
Full Marks: 75**

MI-2/C2: Same as Minor-2 (GELMI02) of Geology (Hons) programme

**Credits 04
Full Marks: 75**

SKILL ENHANCEMENT COURSE (SEC)

**TO BE CHOSEN FROM THE BUCKET OF SECs OF SELECTED DISCIPLINE A/B/C
(As per A/B/C Hons. Prog. Syllabus)**