

# **VIDYASAGAR UNIVERSITY**

**Midnapore, West Bengal**



***PROPOSED CURRICULUM & SYLLABUS (DRAFT) OF***

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## **BACHELOR OF SCIENCE WITH GEOLOGY (MULTIDISCIPLINARY STUDIES)**

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

*Based on*

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

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**VIDYASAGAR UNIVERSITY, PASCHIM MIDNAPORE, WEST BENGAL**

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

Level	YR.	SEM	Course Type	Course Code	Course Title	Credit	L-T-P	Marks				
								CA	ESE	TOTAL		
<b>SEMESTER-I</b>												
B.Sc. in Physical Sc. with Geology	1 <sup>st</sup>	I	Major (Disc.-A1)	GELPMJ101	T: Introduction to Geology <i>(To be studied by the students taken Geology as Discipline-A)</i>	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 <i>(To be studied by the students taken Geology as Discipline-C)</i>	4	3-1-0	15	60	75		
							Semester-I Total	20				
<b>SEMESTER-II</b>												
II		Major (Disc.-B1)		To be decided <i>(Same as like A1 for students taken Geology as Discipline-B )</i>	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 <i>(To be studied by the students taken Geology as Discipline-C)</i>	4	3-0-1	15	60	75			
		Summer Intern.	CS	Community Service	4	0-0-4	-	-	50			
		Semester-II Total										
		<b>TOTAL of YEAR-1</b>										
		<b>800</b>										

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

### MAJOR (MJ)

<b>MJ A1/B1: Introduction to Geology</b>	<b>Credits 04 (FM: 75)</b>
<b>MJ A1/B1T: Introduction to Geology</b>	<b>Credits 04 [60L]</b>

#### **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)

<b>MI-1/C1: Same as Minor-1 (GELMI01) of Geology (Hons) programme</b>	<b>Credits 04</b>
	<b>Full Marks: 75</b>

<b>MI-2/C2: Same as Minor-2 (GELMI02) of Geology (Hons) programme</b>	<b>Credits 04</b>
	<b>Full Marks: 75</b>

### 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)**