## 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	<b>Course Code</b>	Course Title	Credit	L-T-P	Marks		
			Туре					CA	ESE	TOTAL
			SEMESTER-I							
			Major	GELPMJ101	T: Introduction to Geology	4	3-0-1	15	60	75
			(DiscA1)		(To be studied by the students taken Geology as Discipline-A)					
		I	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	GEL	T: Essentials of Geology	4	3-1-0	15	60	75
			(DiscC1)	MI 01/C1	(To be studied by the students taken Geology as Discipline-C)	20				
B.Sc. in Physical			Semester-I Total							400
			SEMESTER-II							
Sc.	1 <sup>st</sup>		Major		To be decided	4	3-0-1	15	60	75
with Geology		II	(DiscB1)		(Same as like A1 for students taken Geology as Discipline-B)					
			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
				GEL	T: Introduction to Mineralogy; P: Practical	4	3-0-1	15	60	75
				MI 02/C2	(To be studied by the students taken Geology as Discipline-C)				<u> </u>	
			Summer	CS	Community Service	4	0-0-4	-	-	50
			Intern.							
					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

#### 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)