

BACHELOR OF SCIENCE (B.Sc.) UNDER N.E.P.**First Year Bachelor of Science (F.Y.B.Sc.)****SEMESTER I and SEMESTER II****SCHEME OF PAPERS**

The duration of the UG Programme shall be of Four Years/Eight Semesters with multiple entry and exit options. Students shall be eligible to choose Courses from Broad Disciplines of Study for Major and Minor Courses which are as follows:

(i) Natural and Physical Sciences: Microbiology, Botany, Zoology, Biotechnology, Biochemistry, Chemistry, Physics, Electronics, Biophysics, Astronomy, Astrophysics, Earth Sciences, Environmental Sciences, and such others.

(ii) Mathematics, Statistics, and Computer Applications: Mathematics, Statistics, Computer Applications, Programming Software, Applications Software and such others.

(iii) Library, Information, and Media Sciences: Library Science, Information Science, Media Science, Journalism, Mass Media, Communication and such others.

(iv) Commerce and Management: Business Management, Financial Accounting, Cost Accounting, Finance, Banking, Fintech, and such others.

(v) Humanities and Social Sciences: Anthropology, Economics, History, Linguistics, Political Science, Psychology, Social Work, Women's Studies, Sociology, Archaeology, History, Comparative Literature, Arts & Creative Expressions, Creative Writing and Literature, Language(s), Philosophy, Cognitive Science, Environmental Science, Gender Studies, Global Environment, Health, International Relations, Political Economy and Development, Sustainable Development, Public Administration and such others.

Semesters I & II: Students shall undergo one course each from four different subjects chosen from a broad discipline area as Major and Minor courses, and other two Multidisciplinary courses to have basic knowledge not only in Major areas but also in other disciplines. Additionally, students shall also take up courses of their interest from Ability Enhancement (language), Skill Enhancement, and Value-Added categories.

a) In order to facilitate students to make an informed choice at the end of the first year, the two Major Courses and two Minor Courses offered at Semester I & II shall be from different subjects within the broad discipline.

b) Students shall choose the Major of their interest within the broad disciplines at the end of the first year.

A Programme shall comprise of the following categories of courses:

a) Disciplinary/Interdisciplinary Major (Core): A Major course will provide a student the opportunity to pursue in-depth study of a particular subject or discipline.

b) Disciplinary/Interdisciplinary Minors: Students may opt for Minor courses from Disciplinary/ Interdisciplinary areas including skill- based courses relating to a chosen Vocational Education and Training.

c) Vocational Education and Training (VET): VET shall form an integral part of the UG Programme to impart skills along with theory and practical. VET which can be related to the Major or Minor Discipline or choice of the student. **A student shall have to declare subject/courses under VET at the end of Semester II.**

d) Multidisciplinary Courses (MC): UG students shall be required to undergo Introductory-level courses relating to any Broad Discipline that they have not undergone at the HSSC level as given below: Natural and Physical Sciences, Mathematics, Statistics and Computer Applications Library, Information and Media Sciences, Commerce and Management, Humanities and Social Sciences. A student shall mandatorily choose the MC course offered by the BoS from other broad disciplines.

First Year Bachelor of Science (F.Y.B.Sc.) SCHEME OF PAPERS

Broad Discipline	Sr. No	Sem I				Sem II		
		Major	Minor	Multidisciplinary Course * choose any one from the subject not taken at HSSC Level		Major	Minor	Multidisciplinary Course * choose any one from the subject not taken at HSSC Level
Natural and Physical Sciences	1	Chemistry	Physics	ECO-131 Sustainable Development HIS-131 Indigenous Heritage of Goa HIN-131 आधुनिक हिंदी साहित्य की प्रमुख विधाएँ (Major Genres of Modern Hindi Literature) KON-131 मौखिक कोंकणी Spoken Konkani MAR-131 मराठी साहित्यानंद (Joy of Marathi Literature) PHI-131 Ethics and Contemporary Social Issues POL-131 Contemporary Issues in India PSY-131 Psychology of Adjustment		Botany	Zoology	ECO-132 Globalisation HIS-132 Women in Goan History HIN-132 सिनेमा में साहित्य (Literature in Film) KON-132 लोकवेदादांतली कोंकणी Functional Usage of Konkani MAR-132 माहितीपट निर्मिती (Documentary Creation) PHI-132 Introduction to Feminist Consciousness POL-132 Introduction to Human Rights PSY-132 Environmental Psychology
	2	Botany	Chemistry			Physics	Geology	
	3	Chemistry	Zoology			Geology	Botany	
	4	Chemistry	Geology			Zoology	Physics	
	5	Botany	Geology			Chemistry	Physics	
	6	Zoology	Physics			Chemistry	Botany	
	7	Geology	Botany			Zoology	Chemistry	
	8	Physics	Zoology			Chemistry	Geology	
	9	Biotechnology** (Self Financing)	Zoology	ECO-131 Sustainable Development		Microbiology	Chemistry	CSC-133 Cyber Security Essentials
Mathematics, Statistics, and Computer Applications	10	Mathematics*	Computer Science*	ECO-131 Sustainable Development HIS-131 Indigenous Heritage of Goa HIN-131 आधुनिक हिंदी साहित्य की प्रमुख विधाएँ (Major Genres of Modern Hindi Literature) KON-131 मौखिक कोंकणी Spoken Konkani MAR-131 मराठी साहित्यानंद (Joy of Marathi Literature) PHI-131 Ethics and Contemporary Social Issues POL-131 Contemporary Issues in India PSY-131 Psychology of Adjustment		Computer Applications	Statistics	ECO-132 Globalisation HIS-132 Women in Goan History HIN-132 सिनेमा में साहित्य (Literature in Film) KON-132 लोकवेदादांतली कोंकणी Functional Usage of Konkani MAR-132 माहितीपट निर्मिती (Documentary Creation) PHI-132 Introduction to Feminist Consciousness POL-132 Introduction to Human Rights PSY-132 Environmental Psychology
	11	Computer Science*	Mathematics*			Computer Applications	Statistics	

* In case of broad discipline (ii) Mathematics, Statistics, and Computer Applications, the College offers B.Sc.(Honours) degree in the subject of Computer Science and B.Sc.(Honours) degree in the subject of Mathematics only.

**A student offering Biotechnology(Self Financing) Course will have to continue with B.Sc.(Honours) degree in the subject of Biotechnology only.

e) Value-Added Courses (VAC): The following are the VAC common to all UG students. In Semester I, one of the two Credit courses under VAC shall be Environmental Studies (EVS)

VAC	Sem I	Sem II
1	Paper I : Environmental Science and Education i) VAC 101: Environmental Studies 1 ii) VAC 103: Environmental Practices in Goa	Paper III : Digital and Technological Solutions i) VAC 101: Environmental Studies 1 ii) VAC 111: Awareness of Cyber Crimes and Security
2	Paper II : Understanding India i) VAC 105: Constitutional Values and Obligations ii) VAC 107: NCC and Nation Building (Army) iii) VAC 108: NCC and Nation Building (Navy) iv) VAC 109: Introduction to The Folktales of India v) VAC 110: Indian Economic Thought	Paper IV: Health & Wellness, Yoga education, sports and fitness i) VAC 115: Health and Wellness

f) Ability Enhancement Courses (AEC): Students shall achieve competency in a Modern Indian Language (MIL) and in the English Language with special emphasis on communication, reading and writing skills. **Semester I and II shall have English under AEC.**

g) Skills Enhancement Courses (SEC): SECs shall focus on practical skills, hands-on training, soft skills and such other courses to enhance the employability of students. **Student will be offered an SEC paper in the Major subject in respective Semester.**

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Semester	MajorCore	Minor	MC	AEC	SEC	VAC	Total Credits	Exit
I	Major-1 (4)	Minor-1 (4)	MC-1 (3)	AEC-1 (2)	SEC-1 (3)	VAC-1 (2) VAC-2 (2)	20	—
II	Major-2 (4)	Minor-2 (4)	MC-2 (3)	AEC-2 (2)	SEC-2 (3)	VAC-3 (2) VAC-4 (2)	20	4

Note:-

1. Major-1, Major-2, etc. are the Major Courses.
2. Minor-1, Minor-2, etc. are the Minor Courses.
3. The students shall undergo one course each from four different subjects chosen from a broad discipline area as Major and Minor courses in Semester I and II.
4. Credits are indicated in brackets.
5. Those who exit shall have to do an additional 4 Credit Vocational Course during the summer term.