

**Vanita Vishram Women's University
School of Science and Technology
Department of Microbiology**



**Bachelor of Science (B.Sc.) Honours Microbiology Programme
Under New Education Policy (NEP) & Learning Outcomes-Based
Curriculum Framework (LOCF) as a reference for Under Graduate (UG)
Education**

**Core Courses (CC), Ability Enhancement Compulsory Courses (AECC),
Skill Enhancement Course (SEC), Department Elective (DE)
Generic Elective Courses (GE)**

*Course structure is applicable to the students seeking admission in the
following programmes*
**B.Sc., Microbiology, Biotechnology and Chemistry Under NEP & LOCF
w.e.f. the Academic Year 2022-2023**

B.Sc. (Honours) Microbiology Programme Course Credit Structure

Semester	Subjects	Core Course	Component wise Credits	Total Credits
Semester 1	Microbiology	Core Course-I (Credit-2) Core Course-II (Credit-2) Core Course Lab-1 (Credit=2)	6	24
	Biotechnology	Core Course-I (Credit-2) Core Course-II (Credit-2) Core Course Lab-1 (Credit=2)	6	
	Chemistry/ Physics	Core Course-I (Credit-2) Core Course-II (Credit-2) Core Course Lab-1 (Credit=2)	6	
	AECC	English Communication-I Environmental Studies-I	2 2	
	Elective	Elective (From Other Discipline)	2	
Semester 2	Microbiology	Core Course-III (Credit-2) Core Course-Iv (Credit-2) Core Course Lab-2 (Credit=2)	6	24
	Biotechnology	Core Course-III (Credit-2) Core Course-IV (Credit-2) Core Course Lab-2 (Credit=2)	6	
	Chemistry/ Physics	Core Course-III (Credit-2) Core Course-IV (Credit-2) Core Course Lab-2 (Credit=2)	6	
	AECC	English Communication-II Environmental Studies-II	2 2	
	Elective	Elective (From Other Discipline):	2	
Semester 3	Microbiology	Core Course-V (Credit-2) Core Course-VI (Credit-2) Core Course-VII (Credit-2) Core Course Lab-3 (Credit=3)	9	24
	Biotechnology	Core Course-V (Credit-2) Core Course-VI (Credit-2) Core Course-VII (Credit-2) Core Course Lab-3 (Credit=3)	9	
	SEC	Skill Enhancement-1 Skill Enhancement-2	4	
	Department Elective	Department Elective-1 (Certificate Course (30 Hrs)*/ In House Or Outside Training (30 Hrs)/ Student Exchange Program)	2	
Semester 4	Microbiology	Core Course-VIII (Credit-2) Core Course-IX (Credit-2) Core Course-X (Credit-2) Core Course Lab-4 (Credit=3)	9	24
	Biotechnology	Core Course-VIII (Credit-2) Core Course-IX (Credit-2) Core Course-X (Credit-2) Core Course Lab-4 (Credit=3)	9	

	SEC	Skill Enhancement-3 (Credit-2) Skill Enhancement-4 (Credit-2)	4	
	Department Elective	Department Elective-2 (Certificate Course (30 Hrs)*/ In House Or Outside Training (30 Hrs)/ Student Exchange Program)	2	
Semester 5	Microbiology	Core Course-XI (Credit-2) Core Course-XII (Credit-2) Core Course-XIII (Credit-2) Core Course-XIV (Credit-2) Core Course-XV (Credit-2) Core Course-XVI (Credit-2) Core Course Lab-V (Credit-6)	18	24
	Department Elective	Department Elective-3 (Credit-2) Department Elective-4 (Credit-2) Department Elective-Lab-1 (Credit-2)	6	
Semester 6	Microbiology	Core Course-XVII (Credit-2) Core Course-XVIII (Credit-2) Core Course-XIX (Credit-2) Core Course-XX (Credit-2) Core Course Lab-VI (Credit-4)	18	24
	Department Elective	Department Elective-5 (Credit-2) Department Elective-6 (Credit-2) Department Elective-Lab-2 (Credit-2)	6	
Semester 6	Optional/Proposed	Project Work/ Training (90 Hrs)/ Internship (2 Weeks)	6	
Semester 7	Microbiology	Core Course-XXI (Credit-4) Core Course Lab-7 (Credit=2)	6	22
	Research Specific Elective	Research Methodology (Credit-2) Research Area Specific Elective-I (Credit-2)	4	
	Research Component	Dissertation (Credit-9) Seminar (Credit-1) Research Article Writing (Credit-2)**	12	
Semester 8	Microbiology	Core Course-XXII (Credit-4) Core Course Lab-8 (Credit=2)	06	22
	Research Specific Elective	Data Analysis Course (Credit-2) Research Area Specific Elective-II (Credit-2)	4	
	Research Component	Dissertation (Credit-9) Seminar (Credit-1) Research Paper Presentation in Seminar Or Conference (Credit-2)	12	
Total				188

* Certificate Course May Be In Online/Offline Or In Blended Mode

****Research Article Writing Comprises Articles Submitted To The Supervisor.**

Suggestive Notes for The Implementation Of NEP 2020:

- **As Per Government Guidelines, Yet We Can Implement NCC/NSS/ Saptdhara/ Physical Training As 2 Credit Component In Each Semester And Incorporate It In The Course Curriculum**

Subject Combinations to be Offered for Academic Year 2022-23

1	Microbiology, Biotechnology, Chemistry
2	Biotechnology, Microbiology, Physics