

Program Schemes for [M.Sc. Botany]

Cluster: Basic & Applied Sciences

Institute: University Institute of Biotechnology

Department: Biosciences

Type of Program: PG

First Year				Second Year			
Semester-1	Course Name	Course Category	Credits	Semester-3	Course Name	Course Category	Credits
	Plant Ecology	Program Core	3		Plant Physiology and Metabolism	Program Core	3
	Algae and Bryophytes: Diversity and Evolution	Program Core	3		Anatomy of Angiosperms	Program Core	3
	Molecular and Mendelian Genetics	Program Core	3		Mycology & Plant Pathology	Program Core	3
	Biology and Diversity of Microbes	Program Core	3		Biostatistics	Skill Enhancement	2
	Seminar	Skill Enhancement	1		Elective-II	Program Core	3
	Laboratory Course on Plant Ecology and molecular and mendelian genetics	Program Core	1		Laboratory Course on Anatomy of Angiosperms and Mycology and Plant Pathology	Program Core	1
	Laboratory Course on Biology & Diversity of Microbes, Algae and Bryophytes	Program Core	1		Laboratory Course on Plant Physiology and Metabolism	Program Core	1
	Seed Science and Technology	Program Core	2		Laboratory Course on Biostatistics	Program Core	1
	Fundamentals of Research Methodology	Ability Enhancement	2		Summer Training	Summer Internship	2
					Dissertation Part-I	Project	2
			Professional	Skill	1		

					Soft Skills-I	Enhancement	
					Aptitude & Reasoning-I	Ability Enhancement	1
Semester -2	Pteridophytes and Gymnosperms: Diversity and Evolution	Program Core	3	Semester-4	Plant Resource Utilization and Conservation	Program Core	1
	Plant Biosystematics	Program Core	3		Dissertation Part -II	Project	2
	Cell and Molecular Biology of Plants	Program Core	3				
	Embryology of Angiosperms	Program Core	3				
	Analytical Botany	Program Core	2				
	Bioinformatics	Skill Enhancement	2				
	Laboratory Course on Pteridophytes, Gymnosperms, and Plant Biosystematics	Program Core	1				
	Laboratory Course on Embryology of Angiosperms and Molecular Biology of Plants	Program Core	1				
	Laboratory Course on Analytical Botany	Program Core	1				
	Laboratory Course on Bioinformatics	Skill Enhancement	1				
	Plants and Human Welfare	Ability Enhancement	1				
	Professional Communication Skills	Skill Enhancement	1				

Elective Basket Name			
Semester	Course Name	Course Category	Credits
Semester-II Elective-1: Group-I (Applied Botany)	Advanced Plant Tissue Culture	Program Elective	3
	Crop Genetics and Breeding	Program Elective	3
Elective-1: Group- II (Environmental and Microbial Botany)	Forest Biology	Program Elective	3
	Weed Biology	Program Elective	3
Semester-III Elective-2: (Applied Botany)	Floriculture and Nursery Management	Program Elective	3
	Advanced Mycology	Program Elective	3
	Mushroom Cultivation	Program Elective	3
	Phytochemistry and Medicinal Plant Biology	Program Elective	3
	Advanced Plant Physiology and Biochemistry	Program Elective	3
Semester-IV Elective-3: (Environmental and Microbial Botany)	Microbial Ecology	Program Elective	3
	Entrepreneurship In Botany	Program Elective	3
	Biofertilizers & Biopesticides	Program Elective	3
	Advanced Phycology	Program Elective	3
	Industrial Microbiology	Program Elective	3