

P. E. Society's
Modern College of Arts, Science and Commerce , Ganeshkhind , Pune -16 (Autonomous)
M.Sc (Biotech) Curricular Framework (As per NEP2020 guidelines)
(2024-25)

Level	Sem	V1	V2	V3	V3	V3	Total Credits
		Major Mandatory	Major Elective	RM	OJT/FP	Research Project (RP)	
	I		<p>(BIO5121) Nanobiotechnology (2 Cr) (T), (BIO5122) Nanobiotechnology Lab (2 Cr)(P)</p> <p>OR</p> <p>(BIO5123) Molecular Physiology (2 Cr)(T), (BIO5124) Molecular Physiology Lab (2 Cr)(P)</p>	<p>(BIO5131) Research Methodology (2 Cr) (T),</p> <p>(BIO5132) Research Methodology Lab (2 Cr) (P)</p>			22
6		(BIO5211) Genetic and Genome Engineering (4 Cr) (T),	(BIO5221) Food Biotechnology (2 Cr)(T),		(BIO5231) OJT/FP (4 Cr)(P)		22

II	<p>(BIO5212) Bioinformatics and Systems Biology (4 Cr) (T),</p> <p>(BIO5213) Environmental Biotechnology (2 Cr) (T),</p> <p>(BIO5214) Genetic and Genome Engineering Lab (2 Cr) (P),</p> <p>(BIO5215) Bioinformatics and Systems Biology Lab (2 Cr) (P)</p>	<p>(BIO5222) Food Biotechnology Lab (2 Cr)(P) OR</p> <p>(BIO5223) Pharmaceutical Biotechnology (4 Cr)(T)</p>			
	<p>(BIO6311) Advanced Biochemistry and Bioanalytical Techniques (4 Cr) (T),</p> <p>(BIO6312) Bioprocess Engineering (4 Cr) (T),</p>	<p>(BIO6321) Forensic Biotechnology (2 Cr) (T),</p> <p>(BIO6322) Forensic Biotechnology Lab (2 Cr) (P)</p>		<p>(BIO6331) Research Project (4 Cr) (P)</p>	22

III	(BIO6313) Ethical Issues in Biotechnology and IPR (2 Cr) (T),				
6.5	(BIO6314) Advanced Biochemistry and Bioanalytical Techniques Lab (2 Cr) (P), (BIO6315) Bioprocess Engineering Lab (2 Cr) (P)				
IV	(BIO6411) Advanced OMICS (4 Cr) (T), (BIO6412) Animal and Stem Cell Biotechnology (2 Cr) (T), (BIO6413) Plant and Agricultural Biotechnology (2 Cr) (T), (BIO6414) Animal and Stem Cell Biotechnology Lab (2 Cr) (P),	(BIO6421) Bio-entrepreneurship and Start-up Designing (4 Cr) (T)			(BIO6431) Research Project (6 Cr) (P)

**(BIO6415) Plant and
Agricultural
Biotechnology Lab
(2 Cr) (P)**