

Department of Biology

M.Sc. Molecular Biology and Biotechnology Curriculum

(Applicable to the students admitted from AY: 2025 onwards)



**School of Engineering and Sciences
SRM University AP, Andhra Pradesh**

ABBREVIATIONS

AEC	Ability Enhancement Courses
VAC	Value Added Courses
SEC	Skill Enhancement Courses
FIC	Foundation & Interdisciplinary Courses
OE	Open Elective
RDIP	Research / Design / Industrial Practice / Project / Thesis / Internship
CE	Core Elective
CC	Core Course
SE	Stream Elective
TE	Technical Elective

SEMESTER - I							
S. No	Category	Sub- Category	Course Title	L	T/D	P/Pr	C
1	SEC	S SEC	Statistics	3	1	0	4
2	Core	CC	Molecular Biology	3	1	0	4
3	Core	CC	Biophysical and Biochemical Techniques	3	1	0	4
4	Core	CC	Molecular Biology Lab	0	0	4	4
5	Core	CC	Biochemistry and Metabolism	2	1	0	3
6	Elective	CE	Core Elective	2	0	1	3
Semester Total				13	4	5	22

SEMESTER - II							
S. No	Category	Sub- Category	Course Title	L	T/D	P/Pr	C
1	SEC	S SEC	Introduction to R and Python	3	0	1	4
2	SEC	S SEC	Research methodology	3	0	0	3
3	Core	CC	RNA Biology	3	1	0	4
4	Core	CC	Bioinformatics	2	1	0	3
5	Core	CC	Genetic Engineering	3	1	0	4
6	Core	CC	Biotechnology Lab	0	0	4	4
7	Core	CC	Microbial biotechnology	2	1	0	3
Semester Total				16	4	5	25

SEMESTER - III							
S. No	Category	Sub- Category	Course Title	L	T/D	P/Pr	C
1	AEC	S AEC	Research seminar and Report writing	3	0	0	3
2	AEC	S AEC	Design thinking	2	0	0	2
3	Core	CC	Plant and Animal Biotechnology	3	1	0	4
4	Core	CC	Bioinformatics lab	0	0	2	2
5	Core	CC	Immunology	2	1	0	3
6	Elective	CE	Core Elective	2	1	0	3
7	Elective	CE	Core Elective	2	1	0	3
8	RDIP	RDIP	Summer Internship	0	0	2	2
Semester Total				14	4	4	22

SEMESTER - IV							
S. No	Category	Sub- Category	Course Title	L	T/D	P/Pr	C
1	RDIP	RDIP	Research Degree Project (Academia/Industry)	0	0	14	14
Semester Total				0	0	14	14

Electives							
S. No	Category	Sub- Category	Course Title	L	T/D	P/Pr	C
1	Elective	CE	Cell Biology	2	1	0	3
2	Elective	CE	Microbiology	2	1	0	3
3	Elective	CE	Programming and Computational Biology	2	1	0	3
4	Elective	CE	Molecular Mechanisms of Diseases	2	1	0	3
5	Elective	CE	Genomics and Proteomics	2	1	0	3
6	Elective	CE	Bionanotechnology	2	1	0	3
7	Elective	CE	Biosafety and IPR	2	1	0	3