

M.Sc. in Biotechnology

List of Courses

Code	Title	Credits	Option
First Semester			
AB 5107	Microbial Genetics	2	Compulsory
AB 5116	Plant Biochemistry	2	Compulsory
AB 5119	Molecular Biology	1	Compulsory
AB 5122	Gene Manipulation	2	Compulsory
AB 5196	Practicum in Biotechnology I	1	Compulsory
AB 5101	Cell Biology	2	Optional
AB 5105	Cellular Genetics	2	Optional
AB 5106	Exploring the Genomes: Principles & Techniques	2	Optional
AB 5114	Biosensing	2	Optional
AB 5118	Polygenic Inheritance	2	Optional
AB 5125	Protein Engineering	1	Optional
AB 5126	Enzyme Production Technology	2	Optional
AB 5155	Molecular & Functional Glycobiology	2	Optional
CS 5123	Plant Tissue Culture - Micropropagation	2	Optional
Second Semester			
AB 5222	Gene Expression & Developmental Genetics	2	Compulsory
AB 5228	Molecular Breeding & DNA Fingerprinting	2	Compulsory
AB 5229	Genetically Modified Organisms, Food, Feed and Processed Products and Biosafety	1	Compulsory
AB 5236	Production of Transgenics	1	Compulsory
AB 5252	Bioinformatics	2	Compulsory
AB 5296	Practicum in Biotechnology II	1	Compulsory
AB 5298*	Directed Study	2	Compulsory
AB 5299	Seminar	1	Compulsory
AB 5202	Advanced Genetic Analysis: Genes, Genomes and Networks	2	Optional
AB 5204	In vitro Techniques for Biotechnology	2	Optional

AB 5220	Marine Biotechnology	1	Optional
AB 5223	Cereal Biotechnology	1	Optional
AB 5224	Secondary Metabolite Production	1	Optional
AB 5227	Cellular Immunology	1	Optional
AB 5230	Plant Variety Protection, Intellectual Property Rights & Policy Issues	1	Optional
AB 5233	Nanotechnology in Agriculture	1	Optional
AB 5235	Scientific Communication in Biology	1	Optional
CS 5225	Advanced Plant Tissue Culture	2	Optional

* Students can follow either AB 5298 Directed Study OR AB 5297 Project which is compulsory to complete the degree