

6. Course Layout of the Faculty of Biotechnology & Genetic Engineering

Level-1 Semester-1			Level-1 Semester-2		
Course Code	Course Title	Credit hours	Course Code	Course Title	Credit hours
MGE 111	Introduction to Biotechnology & Genetic Engineering (T)	3	BCC 121	Chemistry of Biomolecules (T)	2
LPM 111	Fundamentals of Animal Science (T)	2	BCC 122	Chemistry of Biomolecules (P)	1
LPM 112	Fundamentals of Animal Science (P)	1	AEP 121	Agricultural Economics (T)	2
PEB 111	Crop Science (T)	3	BCC 123	Nuclear Chemistry (T)	2
PEB 112	Crop Science (P)	1	PHY 121	Animal Physiology (T)	3
MII 111	General Microbiology (T)	2	PHY 122	Animal Physiology (P)	1
MII 112	General Microbiology (P)	1	COB 121	Plant Anatomy & Physiology (T)	3
BCC 111	Chemistry (T)	3	COB 122	Plant Anatomy & Physiology (P)	1
BCC 112	Chemistry (P)	1	CSE 122	Introduction to computer Language (P)	2
BSL 111	Applied English Language (T)	2	GAB 121	Principles of Genetics (T)	3
RSD 111	Rural Sociology (T)	2	MGE 121	Molecular Biology (T)	2
			BGE 120	Seminar and Oral	1
	Sub-total	21		Sub-total	23
Level-2 Semester-1			Level-2 Semester-2		
Course Code	Course Title	Credit hours	Course Code	Course Title	Credit hours
GPP 211	General Parasitology (T)	2	AFB 221	Animal & Fish Cell Culture (T)	3
GPP 212	General Parasitology (P)	1	AFB 222	Animal & Fish Cell Culture (P)	1
PEB 211	Environmental Science & Climate Change (T)	2	FBG 221	Fish Breeding and Genetics (T)	2
GPB 211	Principles of Plant Breeding (T)	2	FBG 222	Fish Breeding and Genetics (P)	1
GPB 212	Principles of Plant Breeding (P)	1	PIB 221	Industrial Biotechnology (T)	3
BCC 211	Metabolism Nutrition and Bioenergetics (T)	3	MGE 223	Cell Biology (T)	2
BCC 212	Metabolism Nutrition and Bioenergetics (P)	1	PEB 221	Biosafety and Biohazard Management (T)	2
MGE 211	Techniques in Molecular Biology (T)	2	MIB 221	Microbial Genetics (T)	2
MGE 212	Techniques in Molecular Biology (P)	1	MGE 221	Bioreactor & Bioreaction Engineering (T)	3
GPH 211	General Pharmacology (T)	2	BGE 220	Seminar and Oral	1
BCC 213	Enzymology (T)	3			
	Sub-total	20		Sub-total	20

Level-3 Semester-1		
Course Code	Course Title	Credit hours
PEB 311	Plant Cell and Tissue Culture (T)	3
PEB 312	Plant Cell and Tissue Culture (P)	1
MGE 311	Recombinant DNA Technology (T)	3
MGE 312	Recombinant DNA Technology (P)	1
MII 311	Molecular Virology (T)	2
PEB 313	Crop Protection (T)	2
PEB 314	Crop Protection (P)	1
PIB 313	Pharmaceutical Biotechnology (T)	3
PIB 311	Food & Beverage Biotechnology (T)	3
PIB 312	Food & Beverage Biotechnology (P)	1
GAB 311	Animal Breeding (T)	2
GAB 312	Animal Breeding (P)	1
BGE 310	Field Work	1
Sub-total		24

Level-3 Semester-2		
Course Code	Course Title	Credit hours
AFB 321	Fisheries Biotechnology (T)	3
AFB 322	Fisheries Biotechnology (P)	1
DST 321	Gynaecology, Obstetrics and Andrology (T)	3
PIB 321	Downstream Processing of Biotechnology Products (T)	3
MGE 321	Applied Genetic Engineering (T)	2
MGE 322	Applied Genetic Engineering (P)	1
AST 321	Biometry & Biostatistics (T)	2
AST 322	Biometry & Biostatistics (P)	1
MIB 321	Biofertilizer& Renewable Energy (T)	3
MIB 322	Biofertilizer& Renewable Energy (P)	1
BGE 320	Seminar and Oral	1
Sub-total		21

Level-4 Semester-1		
Course Code	Course Title	Credit hours
PEB 411	Plant Biotechnology (T)	3
PEB 412	Plant Biotechnology (P)	1
MIB 411	Immunology & Recombinant Vaccine (T)	2
MIB 412	Immunology & Recombinant Vaccine (P)	1
PIB 411	Fermentation Technology (T)	2
PIB 412	Fermentation Technology (P)	1
MIB 413	Microbial Biotechnology (T)	3
MIB 414	Microbial Biotechnology (P)	1
PEB 413	Biomining and Environmental Biotechnology (T)	2
PEB 414	Biomining and Environmental Biotechnology (P)	1
MGE 411	Proteomics, Genomics & Bioinformatics (T)	3
MGE 412	Proteomics, Genomics & Bioinformatics (P)	1
BGE 410	Study Tour	1
Sub-total		22

Level-4 Semester-2		
Course Code	Course Title	Credit hours
AFB 421	Animal Biotechnology (T)	3
AFB 422	Animal Biotechnology (P)	1
PIB 421	Pharmacognosy (T)	2
MGE 421	Oncology & Molecular Diagnostics (T)	3
MGE 422	Oncology & Molecular Diagnostics (P)	1
AEX 421	Agricultural Extension (T)	2
AMB 421	Enterprise Development (T)	2
BGE 420	Project Work and Oral	3
Sub-total		17

Grand Total (Credit hours) = 21+23+20+20+24+21+22+17=168