

**Semester-wise Pattern for BPD students admitted to
B.E. (Hons.) – Biotechnology Program**

Yr.	First Semester	Units	Second Semester	Units
I	BIO C111 General Biology	3	ES C112 Thermodynamics	3
	TA C111 Engineering Graphics [@]	4	TA C112 Workshop Practice [@]	4
	MATH C191 Mathematics I	3	MATH C192 Mathematics II	3
	PHY C131 Physics I	3	PHY C132 Physics II	3
	CHEM C141 Chemistry I	3	CHEM C142 Chemistry II	3
	AAOC C111 Probability and Statistics	3	TA C162 Computer Programming I [#]	3
	ENGL C123 English Language Skills	3		
		22		19
II	MGTS C211 Principles of Management	3	ES C242 Structure and Properties of Materials	3
	TA C211 Measurement Techniques I [@]	2	TA C222 Measurement Techniques II [@]	4
	ES C241 Electrical Sciences I	3	ES C272 Electrical Sciences II	3
	MATH C241 Mathematics III	3	TA C312 Technical Report Writing	3
	TA C252 Computer Programming II [#]	3	BIOT C216 Introductory Molecular Biology	3
	BIO C211 Biological Chemistry	3	BIO C241 Microbiology [@]	3
		17		19
Summer		BITS C221 Practice School I (for PS option only)		5
III	AAOC C222 Optimisation	3	AAOC C312 Operations Research	3
	BIO C391 Instrumental Methods of Analysis [#]	4	AAOC C341 Numerical Analysis	3
	BIOT C332 Genetics	3	BIOT C337 Industrial Microbiology & Bioprocess Engineering [@]	4
	BIOT C336 Cell Physiology	3	BIOT C338 Introduction to Environmental Biotechnology	3
	BIOT C339 Biophysical Chemistry	3	BIOT C346 Experiments in Biotechnology [@]	3
	BIOT C418 Genetic Engineering Techniques [@]	4	BIOT C461 Recombinant DNA Technology	3
		20		19
IV	Electives* 6	18	BITS C412 Practice School II OR BITS C422T Thesis - BITS C442T Seminar (Pair of Courses)	20 OR 15-1
		18		20/16

Note: This is a currently operative pattern as approved by the Senate-appointed committee, subject to change if the situation warrants.

* The units mentioned for electives are minimum units and in actual cases they may be more, depending upon the nature of the courses.

Course taught with exposure to practical.

@ A lab-based course.

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