

Bachelor of Technology in Biotechnology

Duration: 4 Years (8 Semesters)

Note: Subject codes vary by university. The following is a standard university-style B.Tech Biotechnology syllabus with sample subject codes.

Semester I

Subject Code	Subject Name
BT101	Engineering Mathematics-I
BT102	Engineering Physics
BT103	Engineering Chemistry
BT104	Basic Electrical Engineering
BT105	Engineering Graphics
BT106	Communication Skills
BT107P	Physics & Chemistry Laboratory
BT108P	Engineering Workshop

Semester II

Subject Code	Subject Name
BT201	Engineering Mathematics-II
BT202	Programming for Engineers
BT203	Environmental Science
BT204	Basic Mechanical Engineering
BT205	Biology for Engineers

Subject Code	Subject Name
BT206	Technical Communication
BT207P	Programming Laboratory
BT208P	Biology Laboratory

Semester III

Subject Code	Subject Name
BT301	Cell Biology
BT302	Biochemistry
BT303	Microbiology
BT304	Genetics
BT305	Thermodynamics
BT306	Biostatistics
BT307P	Cell Biology Lab
BT308P	Microbiology Lab

Semester IV

Subject Code	Subject Name
BT401	Molecular Biology
BT402	Immunology
BT403	Enzyme Technology
BT404	Bioinformatics

Subject Code	Subject Name
BT405	Chemical Process Calculations
BT406	Analytical Techniques in Biotechnology
BT407P	Molecular Biology Lab
BT408P	Bioinformatics Lab

Semester V

Subject Code	Subject Name
BT501	Genetic Engineering
BT502	Bioprocess Engineering
BT503	Plant Biotechnology
BT504	Animal Biotechnology
BT505	Environmental Biotechnology
BT506	Industrial Biotechnology
BT507P	Genetic Engineering Lab
BT508P	Bioprocess Engineering Lab

Semester VI

Subject Code	Subject Name
BT601	Recombinant DNA Technology
BT602	Downstream Processing
BT603	Food Biotechnology

Subject Code	Subject Name
BT604	Pharmaceutical Biotechnology
BT605	Intellectual Property Rights
BT606	Entrepreneurship Development
BT607P	Downstream Processing Lab
BT608P	Industrial Training Report

Semester VII

Subject Code	Subject Name
BT701	Nan biotechnology
BT702	Stem Cell Technology
BT703	Biosensors and Bioelectronics
BT704	Omics Technology
BT705	Research Methodology
BT706	Elective-I
BT707P	Project Phase-I
BT708P	Seminar

Semester VIII

Subject Code	Subject Name
BT801	Biomedical Engineering
BT802	Advanced Biotechnology

Subject Code	Subject Name
BT803	Regulatory Affairs & Bio safety
BT804	Elective-II
BT805	Elective-III
BT806P	Major Project Phase-II
BT807P	Internship & Viva Voce