



## B.Tech Biotechnology

The Programme is designed to provide necessary skills and knowledge in the rapidly expanding field of biotechnology. The programme aims to cater to a range of biotech sectors comprising academics, research and industry.

<b>Course duration</b>	8 Semester- 4 years
<b>Eligibility</b>	Qualify AIET to be conducted by the University* *- Refer admission prospectus
<b>Intake capacity</b>	120

### Course structure

<b>Semester - I</b>		<b>Semester - II</b>	
<b>Paper Code</b>	<b>Subject</b>	<b>Paper Code</b>	<b>Subject</b>
BBT - 101	Cell Biology	BBT - 201	Applied Chemistry - II
BBT - 102	Biomathematics	BBT - 202	Genetics & Evolution
BBT - 103	Engineering Mechanics	BBT - 203	Engineering Drawing
BBT - 104	Ecology & Biodiversity	BBT - 204	Developmental Biology
BBT - 105	Applied Physics	BBT - 205	Electronics Engineering
BBT - 106	Applied Chemistry	BBT - 206	Biostatistics
<b>Semester - III</b>		<b>Semester - IV</b>	
<b>Paper Code</b>	<b>Subject</b>	<b>Paper Code</b>	<b>Subject</b>
BBT - 301	Microbiology	BBT - 401	Intermediary Metabolism - I
BBT - 302	Molecules of life	BBT - 402	Enzymology & Enzyme Technology

BBT - 303	Biological & Biochemical Techniques
BBT - 304	Mammalian Anatomy
BBT - 305	Mammalian Physiology
BBT - 306	Biophysics

**Semester - V**

<b>Paper Code</b>	<b>Subject</b>
BBT - 501	Molecular Cell Signaling
BBT - 502	Intermediary Metabolism II
BBT - 503	Commercial Aspects of Biotechnology
BBT - 504	Plant Biotechnology
BBT - 505	Genetic Engineering- I (Principles)
BBT - 506	Bioinformatics I (Principles)

**Semester - VII**

<b>Paper Code</b>	<b>Subject</b>
BBT - 701	Principles of Drug Action, Modeling & Design
BBT - 702	Biotechnology Management
BBT - 703	Down Stream Processing
BBT - 704	IPR Biosafety & Bioethics Entrepreneurship
BBT - 705	Functional Genomics / High Throughput Research Tools
BBT - 706	Research Methodology & Scientific Writing

BBT - 403	Molecular Biology of Prokaryotes
BBT - 404	Molecular Biology of Eukaryotes
BBT - 405	Advanced Analytical Techniques
BBT - 406	Immunology & Virology

**Semester - VI**

<b>Paper Code</b>	<b>Subject</b>
BBT - 601	Neurobiology and Behavioral Sciences
BBT - 602	Environmental Technology
BBT - 603	Bioprocess Technology
BBT - 604	Animal Biotechnology
BBT - 605	Applied Genetic Engineering- II (Application)
BBT - 606	Bioinformatics II (Application)

**Semester - VIII**

<b>Paper Code</b>	<b>Subject</b>
	<b>PROJECT ( 6 Months )</b>

Each semester consists of two practical of 3 hrs each per week except final semester