

**1<sup>st</sup> Semester****Theory Subjects:**

Code	Subject	Unit
TBT 1001	Bioprocess Engineering	1.0
TBT 1003	r-DNA Technology & Genetic Engineering	1.0
TBT 1005	Biophysics	1.0
	Elective 1	1.0
	Elective 2	1.0

**Sessional Courses::**

Code	Subject	Unit
TBT 1002	Lab I- Bioprocess Engineering	0.5
TBT 1004	Lab II- r-DNA Technology	0.5

**Non-credit Course**

TBT NC11	Data structure in C <sup>++</sup> or	
TBT NC12	Biostatistics	
	Seminar Assignment	

**2<sup>nd</sup> Semester****Theory Subjects:**

Code	Subject	Unit
TBT 2001	Bioprocess Plant Design	1.0
TBT 2003	Downstream Processing	1.0
TBT 2005	IPR, Biosafety & Bioethics	1.0
	Elective 3	1.0
	Elective 4	1.0

**Sessional Courses::**

Code	Subject	Unit
TBT 2002	Lab III- Bioprocess Plant Design	0.5
TBT 2004	Lab IV- Downstream Processing	0.5

**Non-credit Course**

TBT NC21	Bio-entrepreneurship	
	Seminar Assignment	

3 <sup>rd</sup> Semester		
Code	Subject	Unit
TBT 3002	Thesis 1	3.0

4 <sup>th</sup> Semester		
Code	Subject	Unit
TBT 4002	Thesis 2	5.0

#### List of Electives

Elective 1	TBT 1011	Animal Biotechnology
	TBT 1013	Agricultural Biotechnology
	TBT 1015	Pharmaceutical Biotechnology
	TBT 1017	Protein Engineering
Elective 2	TBT 1021	Immunotechnology
	TBT 1023	Nanobiotechnology
	TBT 1025	Metabolic Engineering
	TBT 1027	Reaction Engineering
Elective 3	TBT 2011	Computational Biology
	TBT 2013	Environmental Biotechnology
	TBT 2015	Biosensor and Bioelectronics
	TBT 2017	Biospectroscopy and Image Analysis
Elective 4	To be offered by the other Department and proposed later by the department	