

**SYMBIOSIS INSTITUTE OF TECHNOLOGY**  
**BACHELOR OF TECHNOLOGY**  
**PROGRAM STRUCTURE 2014-18**

- 1. OBJECTIVE**
- The B.Tech. program is a full-time four-year graduation program, which aims at transforming a student into a technically sound professional. The syllabus contains courses on basic sciences, technical arts, humanities and liberal arts and professional courses. The mix of these courses has been evolved with an aim to produce professionals who have knowledge not only of Engineering but who are good managers to contribute in a cross-functional team and have human values. Being a professional program it ensures a healthy balance between theoretical foundation and practical exposure to the present day world. The emphasis is to develop all round personality that would enable the students to take up the challenges of the corporate world and also become responsible citizens of the society.
- 2. DURATION** Four Years Full Time
- 3. INTAKE** 420 Students
- 4. RESERVATION**
- I. Within the sanctioned intake:
- a) Scheduled Castes – 15%
  - b) Scheduled Tribes – 7.5%
  - c) Differently Able - 3%
- II. Over and above the sanctioned intake:
- a) Kashmiri Migrants - 2 Seats
  - b) International Students – 15%
- 5. ELIGIBILITY**
- Passed 10+2 examination with Physics and Mathematics as compulsory subjects along with one of Chemistry/Biotechnology/Biology/Technical Vocational subject.  
 Obtained at least 50% marks (45% in case of candidates belonging to SC/ST category) in the above subjects taken together.

6. **SELECTION PROCEDURE** Merit list by valid score of Symbiosis Entrance Test (SET) or Joint Entrance Examination (JEE - Main)
7. **MEDIUM OF INSTRUCTION** English
8. **PROGRAM PATTERN** Semester Pattern - 8 Semesters
9. **COURSES & SPECIALIZATION** Computer Science and Engineering, Electronics and Telecommunication Engineering, Information Technology, Mechanical and Civil.  
As per Annexure A
10. **FEE**
- |                               |                       |
|-------------------------------|-----------------------|
| <b>Indian Students</b>        |                       |
| Academic Fee p.a.             | Rs. 1, 95, 000        |
| Institute Deposit             | Rs. 10,000            |
| <b>Total</b>                  | <b>Rs. 2, 05, 000</b> |
| <b>International Students</b> |                       |
| Academic Fee p.a.             | Rs. 2, 95, 500        |
| Institute Deposit             | Rs. 10,000            |
| <b>Total</b>                  | <b>Rs. 3, 05, 500</b> |
11. **ASSESSMENT** All internal courses will have 100% component as internal evaluation at the institute level. All external courses will have 40% internal component and 60% component as external [University] examination. The internal and external will be separate heads of passing.
12. **STANDARD OF PASSING** The assessment of students for each examination is done, based on relative performance. Maximum Grade Point (GP) is 4.000 corresponding to A+. For all courses, a student is required to pass both internal and external examination separately with a minimum Grade Point of 2.000 corresponding to Grade D. Students securing less than 40% absolute marks in each head of passing will be declared FAIL. The University awards a degree to the

student who has achieved a minimum CGPA of 2.000 out of maximum of 4.000 for the program.

**13. AWARD OF DEGREE**

**Bachelor of Technology (B Tech)** will be awarded in any one of the specializations: Civil Engineering, Computer Science and Engineering, Electronics and Telecommunication Engineering, Information Technology, Mechanical Engineering based on the cumulative performance of all semester examinations taken together after obtaining minimum 2.00 CGPA out of 4.000.

**First Year (common for all branches)  
Semester I**

GROUP : A												
Temporary Course Code	Course Code	Course Title	Nature	Teaching Scheme			Practical		Examination Scheme Marks		Total Credits	Total Marks
				L	T	Lab	Int	Ext	CA	ESE		
T7385	070121101 FY	Engineering Mathematics I	ES	4	2	-	-	-	50	75	5	125
T7604	070121102 FYA	Basic Mechanical Engineering	C	3	-	-	-	-	30	45	3	75
T7418	070121103 FYA	Environmental and Civil Engineering	C	3	-	-	-	-	30	45	3	75
T7391	070121104 FYA	Physics	ES	3	-	-	-	-	30	45	3	75
T7484	070121105 FYA	Computer Programming	C	2	-	-	-	-	20	30	2	50
T7605	070121106 FYA	Basic Mechanical Engineering Lab	C	-	-	2	10	15	-	-	1	25
T7458	070121107 FYA	Environmental and Civil Engineering Lab	C	-	-	2	10	15	-	-	1	25
T7392	070121108 FYA	Physics Lab	ES	-	-	2	10	15	-	-	1	25
T7485	070121109 FYA	Computer Programming Lab	C	-	-	2	10	15	-	-	1	25
T7658	070121110 FYA	Workshop Practice	C	-	-	4	20	30	-	-	2	50
T7674	070121111 FYA	Cyber Security	ID	2	-	-	-	-	50	-	2	50
<b>Total</b>				<b>17</b>	<b>2</b>	<b>12</b>	<b>60</b>	<b>90</b>	<b>210</b>	<b>240</b>	<b>24</b>	<b>600</b>

GROUP : B												
Temporary Course Code	Course Code	Course Title	Nature	Teaching Scheme			Practical		Examination Scheme Marks		Total Credits	Total Marks
				L	T	Lab	Int	Ext	CA	ESE		
T7385	070121101 FY	Engineering Mathematics I	ES	4	2	-	-	-	50	75	5	125
T7540	070121112 FYB	Basic Electrical and Electronics Engineering	C	3	-	-	-	-	30	45	3	75
T7414	070121113 FYB	Engineering Mechanics	C	3	-	-	-	-	30	45	3	75
T7381	070121114 FYB	Chemistry	ES	3	-	-	-	-	30	45	3	75
T7609	070121115 FYB	Engineering Graphics	C	2	4	-	-	-	40	60	4	100
T7383	070121116 FYB	Communication Skills	GP	2	-	-	-	-	50	-	2	50
T7593	070121117 FYB	Basic Electrical and Electronics Engineering Lab	C	-	-	2	10	15	-	-	1	25
T7415	070121118 FYB	Engineering Mechanics Lab	C	-	-	2	10	15	-	-	1	25
T7382	070121119 FYB	Chemistry Lab	ES	-	-	2	10	15	-	-	1	25
T7384	070121120 FYB	Communication Skills Lab	GP	-	-	2	10	15	-	-	1	25
<b>Total</b>				<b>17</b>	<b>6</b>	<b>8</b>	<b>40</b>	<b>60</b>	<b>230</b>	<b>270</b>	<b>24</b>	<b>600</b>

## Semester II

GROUP : A												
Temporary Course Code	Course Code	Course Title	Nature	Teaching Scheme			Practical		Examination Scheme Marks		Total Credits	Total Marks
				L	T	Lab	Int	Ext	CA	ESE		
T7387	070121201 FY	Engineering Mathematics II	ES	4	2	-	-	-	50	75	5	125
T7540	070121212 FYA	Basic Electrical and Electronics Engineering	C	3	-	-	-	-	30	45	3	75
T7414	070121213 FYA	Engineering Mechanics	C	3	-	-	-	-	30	45	3	75
T7381	070121214 FYA	Chemistry	ES	3	-	-	-	-	30	45	3	75
T7609	070121215 FYA	Engineering Graphics	C	2	4	-	-	-	40	60	4	100
T7383	070121216 FYA	Communication Skills	GP	2	-	-	-	-	50	-	2	50
T7593	070121217 FYA	Basic Electrical and Electronics Engineering Lab	C	-	-	2	10	15	-	-	1	25
T7415	070121218 FYA	Engineering Mechanics Lab	C	-	-	2	10	15	-	-	1	25
T7382	070121219 FYA	Chemistry Lab	ES	-	-	2	10	15	-	-	1	25
T7384	070121220 FYA	Communication Skills Lab	GP	-	-	2	10	15	-	-	1	25
<b>Total</b>				<b>17</b>	<b>6</b>	<b>8</b>	<b>40</b>	<b>60</b>	<b>230</b>	<b>270</b>	<b>24</b>	<b>600</b>

GROUP : B												
Temporary Course Code	Course Code	Course Title	Nature	Teaching Scheme			Practical		Examination Scheme Marks		Total Credits	Total Marks
				L	T	Lab	Int	Ext	CA	ESE		
T7387	070121201 FY	Engineering Mathematics II	ES	4	2	-	-	-	50	75	5	125
T7604	070121202 FYB	Basic Mechanical Engineering	C	3	-	-	-	-	30	45	3	75
T7418	070121203 FYB	Environmental and Civil Engineering	C	3	-	-	-	-	30	45	3	75
T7391	070121204 FYB	Physics	ES	3	-	-	-	-	30	45	3	75
T7484	070121205 FYB	Computer Programming	C	2	-	-	-	-	20	30	2	50
T7605	070121206 FYB	Basic Mechanical Engineering Lab	C	-	-	2	10	15	-	-	1	25
T7458	070121207 FYB	Environmental and Civil Engineering Lab	C	-	-	2	10	15	-	-	1	25
T7392	070121208 FYB	Physics Lab	ES	-	-	2	10	15	-	-	1	25
T7485	070121209 FYB	Computer Programming Lab	C	-	-	2	10	15	-	-	1	25
T7658	070121210 FYB	Workshop Practice	C	-	-	4	20	30	-	-	2	50
T7674	070121211 FYB	Cyber Security	ID	2	-	-	-	-	50	-	2	50
<b>Total</b>				<b>17</b>	<b>2</b>	<b>12</b>	<b>60</b>	<b>90</b>	<b>210</b>	<b>240</b>	<b>24</b>	<b>600</b>