

## Curriculum of B.Tech Computer Science and Engineering

<b>Semester 1</b>				
<b>Course Name</b>	<b>I</b>	<b>P</b>	<b>C</b>	<b>Category</b>
Calculus	3	0	3	BSC
Engineering Mechanics	3	0	3	BSC
Computational Engineering	3	0	3	BEC
Basic Electrical & Electronics Engineering	3	0	3	BEC
English for Communication	2	0	2	HMC
Earth, Environment & Design	2		P/F	DES
Engineering Skills Practice	0	3	2	BEC
Materials & Mechanics Practice	0	3	2	BSC
Computational Engineering Practice	0	3	2	BEC
Engineering Graphics	1	3	3	BEC
<b>Total</b>	<b>17</b>	<b>12</b>	<b>23</b>	
<b>Semester 2</b>				
Differential Equations	3	0	3	BSC
Engineering Electromagnetics	3	0	3	BSC
Science and Engineering of Materials	3	0	3	BEC
Concepts in Engineering Design	3	0	3	DES
Design History	2	0	2	DES
Professional Ethics for Engineers	2	0	P/F	HMC
Measurement & Data Analysis Practice	0	3	2	BSC
Engineering Electromagnetics Practice	0	3	2	BSC
Industrial Design Sketching	0	3	2	DES
Design Realization	0	3	2	DES
<b>Total</b>	<b>16</b>	<b>12</b>	<b>22</b>	
<b>Semester 3</b>				
<b>Course Name</b>	<b>I</b>	<b>P</b>	<b>C</b>	<b>Category</b>
Linear Algebra	3	0	3	BSC
Engineering Economics	3	0	3	HMC
Discrete Structures for Computing	3	0	3	PEC
Digital and Analog Circuits Design	3	0	3	PEC
Signals, Systems and Communication	3	0	3	PEC
Programming and Data structures	3	0	3	PEC
Digital and Analog Circuits Design Practice	0	3	2	PEC
Data Structures Practice using C-programming	0	3	2	PEC
<b>Total</b>	<b>18</b>	<b>6</b>	<b>22</b>	
<b>Semester 4</b>				
<b>Course Name</b>	<b>I</b>	<b>P</b>	<b>C</b>	<b>Category</b>
Probability Theory	3	0	3	BSC
Sociology of Design	3	0	3	DES
Design and Analysis of Algorithms	3	0	3	PEC
Database Systems	3	0	3	PEC
Computer Organization & Design	3	0	3	PEC
Object Oriented Algorithm Design and Analysis Practice	0	3	2	PEC
Database Systems Practice	0	3	2	PEC
Computer Organization & Design Practice	0	3	2	PEC
<b>Total</b>	<b>15</b>	<b>9</b>	<b>21</b>	

<b>Semester 5</b>				
<b>Course Name</b>	<b>I</b>	<b>P</b>	<b>C</b>	<b>Category</b>
Entrepreneurship and Management Functions	3	0	3	HMC
Operating Systems	3	0	3	PEC
Computer Networking	3	0	3	PEC
Compiler Design	3	0	3	PEC
Formal Languages & Automata Theory	3	0	3	PEC
Computer Networking Practice	0	3	2	PEC
Operating Systems Practice	0	3	2	PEC
Compiler Design Practice	0	3	2	PEC
<b>Total</b>	<b>15</b>	<b>9</b>	<b>21</b>	
<b>Semester 6</b>				
<b>Course Name</b>	<b>I</b>	<b>P</b>	<b>C</b>	<b>Category</b>
Design for Quality and reliability	3	0	3	DES
Artificial Intelligence	3	0	3	PEC
Computer Architecture	3	0	3	PEC
Elective - I	3	0	3	ELE
Elective – II	3	0	3	ELE
Computer Architecture Practice	0	3	2	PEC
Embedded Systems Practice	1	3	3	PEC
Artificial Intelligence Practice	0	3	2	PEC
<b>Total</b>	<b>16</b>	<b>9</b>	<b>22</b>	
<b>Semester 7</b>				
<b>Course Name</b>	<b>I</b>	<b>P</b>	<b>C</b>	<b>Category</b>
Industry Internship	0	-	5	PCD
Free Elective - I	3	0	3	ELE
Project-I	0	6	5	PCD
<b>Total</b>	<b>3</b>	<b>6</b>	<b>13</b>	
<b>Semester 8</b>				
<b>Course Name</b>	<b>I</b>	<b>P</b>	<b>C</b>	<b>Category</b>
Elective – III	3	0	3	ELE
Free Elective-II	3	0	3	ELE
Management Elective	3	0	3	HMC
Project-II	0	-	10	PCD
<b>Total</b>	<b>9</b>		<b>19</b>	

Note:

Elective courses such as Product Management, Innovation Management, Operations Research, Data Analytics will be offered as a group to choose in Management Elective

\*Internship is for a period of 5 months