

**B.TECH. COMPUTER SCIENCE AND ENGINEERING -Computer Stream**

Year	FIRST SEMESTER						SECOND SEMESTER						
	Course Code	Course Name	L	T	P	C	Course Code	Course Name	L	T	P	C	
I	MAT 1102	Computational Mathematics - I	3	1	0	4	MAT 1202	Computational Mathematics - II	3	1	0	4	
	PHY 1002	Applied Physics for Engineers	3	0	0	3	CHM1002	Applied Chemistry for Engineers	3	0	0	3	
	ECE 1002	Fundamentals of Electronics	2	1	0	3	ELE 1002	Fundamentals of Electrical Engineering	3	0	0	3	
	CSS 1001	Programming for Problem Solving	2	1	0	3	CIV 1002	Engineering Mechanics and Smart Buildings	2	1	0	3	
	MME 1002	Basic Mechanical Engineering Science	3	0	0	3	CSS 1002	Introduction to Object Oriented Programming	3	0	0	3	
	HUM 1001	Communication Skills in English	1	0	2	2	CIV 1003	Environmental Studies	1	0	2	2	
	HUM 1002	Universal Human Values and Professional Ethics (MLC)	1	0	0	1	CSS 1012	Data Visualization	1	0	3	2	
	HUM 1003	Human Rights and Constitution (MLC)	1	0	0	1	CSS 1013	Introduction to Object Oriented Programming Lab	0	0	3	1	
	MME 1011	Workshop Practice	0	0	3	1	MME 1012	Computer Aided Engineering Graphics	0	0	3	1	
	CSS 1011	Programming for Problem Solving Lab	0	0	3	1							
<b>Total Contact Hours (L + T + P)</b>			<b>16</b>	<b>3</b>	<b>8</b>	<b>22</b>	<b>Total Contact Hours (L + T+ P)</b>			<b>15</b>	<b>3</b>	<b>12</b>	<b>22</b>
			<b>27</b>						<b>27</b>				

Year	THIRD SEMESTER						FOURTH SEMESTER					
	Course Code	Course Name	L	T	P	C	Course Code	Course Name	L	T	P	C
II	MAT ****	Discrete Mathematical Structures	3	0	0	3	MAT ****	Probability and Optimization	3	0	0	3
	CSE ****	Data Structures	3	1	0	4	CSE ****	Database Systems	3	1	0	4
	CSE ****	Data Communication and Computer Networks	3	1	0	4	CSE ****	Design & Analysis of Algorithms	3	1	0	4
	CSE ****	Data Analytics	3	1	0	4	CSE ****	Introduction to Artificial Intelligence	3	0	0	3
	CSE ****	Digital Systems and Computer Organization	4	0	0	4	CSE ****	Operating Systems	3	0	0	3
	CSE ****	Data Structures Lab	0	0	3	1	CSE ****	Operating Systems Lab	0	0	3	1
	CSE ****	Digital Systems lab	0	0	3	1	CSE ****	Database Lab	0	0	6	2
	CSE ****	Discrete Mathematical Structures	3	0	0	3	CSE ****	Object-Oriented Software Development Lab	0	1	3	2
	<b>Total Contact Hours (L + T + P)</b>		<b>16</b>	<b>3</b>	<b>6</b>	<b>21</b>	<b>Total Contact Hours (L + T+ P)</b>		<b>15</b>	<b>3</b>	<b>12</b>	<b>22</b>
	<b>25</b>						<b>30</b>					
	<b>FIFTH SEMESTER</b>						<b>SIXTH SEMESTER</b>					
III	HUM ****	Essentials of Management	3	0	0	3	HUM ****	Engineering Economics and Financial Management	3	0	0	3
	CSE ****	Finite Automata and Compiler Design	3	1	0	4	CSE ****	Machine Learning	3	0	3	4
	CSE ****	Software Engineering	3	0	3	4	CSE ****	Parallel Computer Architecture and Programming	3	0	3	4
	CSE ****	Principles of Cryptography	3	0	3	4	CSE ****	Program Elective -I (Minor Specialization )	3	0	0	3
	CSE ****	Cloud Computing and DevOps	3	0	3	4	CSE ****	Program Elective -II(Minor Specialization )	3	0	0	3
	IOE 4302	Open Elective -I Creativity, Problem Solving and Innovation	3	0	0	3	IOE ****	Open Elective II	3	0	0	3
	<b>Total Contact Hours (L + T + P)</b>		<b>18</b>	<b>1</b>	<b>9</b>	<b>22</b>	<b>Total Contact Hours (L + T + P)</b>		<b>18</b>	<b>0</b>	<b>6</b>	<b>20</b>
	<b>28</b>						<b>24</b>					
	<b>SEVENTH SEMESTER</b>						<b>EIGHTH SEMESTER</b>					
IV	CSE ****	Program Elective – III / (Minor Specialization)	3	0	0	3	CSE ****	Industrial Training				1
	CSE ****	Program Elective – IV/ (Minor Specialization)	3	0	0	3	CSE ****	Project Work / Practice School				12
	CSE ****	Program Elective – V	3	0	0	3	CSE ****	Project Work (B. Tech Honors) **				20
	CSE ****	Program Elective - VI	3	0	0	3	CSE ****	B Tech Honors (Theory 1)** (V Semester)				4
	CSE ****	Program Elective - VII	3	0	0	3	CSE ****	B Tech Honors (Theory 2)** (VI Semester)				4
	*** ****	Open Elective-III	3	0	0	3	CSE ****	B Tech Honors (Theory 3)** (VII Semester)				4
	CSE ****	Mini Project (Minor Specialization) *				8						
	<b>Total Contact Hours (L + T + P)</b>		<b>18</b>	<b>0</b>	<b>0</b>	<b>18/26</b>	<b>Total Contact Hours (L + T + P)</b>					<b>13/33</b>
	<b>18</b>											

\*Applicable to students who opted for minor specialization

\*\*Applicable to eligible students who opted for and successfully completed the B Tech – Honors requirement

