

**SREENIDHI INSTITUTE OF SCIENCE AND TECHNOLOGY**  
**Department of Computer Science and Engineering**

**B. Tech (CSE) Course Structure A18 Regulation**  
**(Applicable to 2018, 2019 and 2020 batches)**

**B. Tech. I Year I Semester**

Sl.No.	Course Category	Course Code	Course	L	T	P	C	Max. Marks	
								Int.	Int.
1.	BS	7HC03	Chemistry	3	1	0	4	30	70
2.	ES	7FC01	Problem Solving using C	3	0	0	3	30	70
3.	BS	7HC07	Mathematics – I	3	1	0	4	30	70
4.	ES	7BC01	Workshop/Manufacturing practices	1	0	0	1	30	70
5.	HS	7HC01	English ( Reading, Listening and Writing skills)	1	0	0	1	30	70
6	HS	7HC20 (Mandatory)	Human values and professional ethics In higher education	3	0	0	0	30	70
								Grade Evaluation	
7	BS	7HC63	Chemistry Lab	0	0	3	1.5	30	70
8	ES	7FC71	Problem Solving using C Lab	0	0	3	1.5	30	70
9	ES	7BC61	Workshop/Manufacturing practices Lab	0	0	3	1.5	30	70
10	HS	7HC61	English ( Reading, Listening and Writing skills) Lab	0	0	2	1	30	70
11	PS	7E191	Technical Seminar - I	0	0	2	1	100	--
<b>Total</b>				<b>11</b>	<b>2</b>	<b>13</b>	<b>19.5</b>	<b>400</b>	<b>700</b>

**B. Tech.(CSE) - I Year II Semester**

Sl. No.	Course Category	Course Code	Course	L	T	P	C	Max. Marks	
								Int.	Int.
1.	BS	7HC05	Engineering Physics	3	1	0	4	30	70
2.	PC	7EC01	Data Structures	3	0	0	3	30	70
3.	BS	7HC09	Probability and Statistics	3	1	0	4	30	70
4.	ES	7BC02	Engineering Graphics & Design	1	0	4	3	30	70
5.	HS	7HC02	English (Oral communication skills)	1	0	0	1	30	70
6.	BS	7HC65	Engineering Physics Lab	0	0	3	1.5	30	70
7.	PC	7EC71	Data Structures (C,C++) Lab	0	0	2	1	30	70
8.	HS	7HC62	English (Oral communication skills) Lab	0	0	2	1	30	70
9.	PS	7E292	Technical Seminar - II	0	0	2	1	100	--
<b>Total</b>				<b>11</b>	<b>2</b>	<b>13</b>	<b>19.5</b>	<b>340</b>	<b>560</b>

## II YEAR I SEMESTER COURSE STRUCTURE

Sl. No	Course Category	Course Code	Course	L	T	P/D	C	Max. Marks	
								Int.	Int.
1.	ES	7AC41	Basic Electrical Engineering	3	0	0	3	30	70
2.	ES	7C354	Analog Electronic Circuits	2	1	0	3	30	70
3.	PC	7EC02	Object Oriented Programming through Java	2	1	0	3	30	70
4.	HS	7ZC01	Management Science and Financial Accounting	2	0	0	2	30	70
5.	PC	7F302	Discrete Mathematics	2	0	0	2	30	70
6.	PC	7FC03	Python Programming	3	0	0	3	30	70
7.	PC	7EC72	Object oriented programming through Java Lab	0	0	3	1.5	30	70
8.	ES	7AC91	Basic Electrical Engineering and Analog Electronics Circuits Lab	0	0	3	1.5	30	70
9.	PC	7F372	IT Workshop and Python Programming Lab	0	0	3	1.5	30	70
10.	PS	7E393	Technical Seminar - III	0	0	2	1	100	--
			<b>Total :</b>	<b>14</b>	<b>2</b>	<b>11</b>	<b>21.5</b>	<b>370</b>	<b>630</b>

## II YEAR II SEMESTER COURSE STRUCTURE

Sl. No	Course Category	Course Code	Course	L	T	P/D	C	Max. Marks	
								Int.	Int.
1.	BS	7HC16	Mathematics –II (Differential calculus)	2	0	0	2	30	70
2.	ES	7CC55	Digital Electronics	3	0	0	3	30	70
3.	PC	7D408	Computer Organization	2	0	0	2	30	70
4.	PC	7EC03	Database Management Systems	2	1	0	3	30	70
5.	PC	7F404	Software Engineering and OOAD	3	0	0	3	30	70
6.	ES	7CC57	Data Communications	3	0	0	3	30	70
7.	HS	7HC21 (Mandatory)	Environmental Science And Ecology	3	0	0	0	30	70
8.	PC	7EC73	Database Management Systems Lab	0	0	3	1.5	30	70
9.	PC	7F473	Computer Aided Software Engineering (CASE) Tools Lab	0	0	4/2*	1	30	70
10.	PC	7D475	Computer Organization Lab	0	0	4/2*	1	30	70
11.	PS	7E494	Technical Seminar – IV	0	0	2	1	100	--
12.	PC	7E495	Comprehensive Viva –Voce I	0	0	0	1	30	70
13.	PS	7E480	Summer Industry Internship-I (Evaluation will be done along with 3-1 courses)						
			<b>Total :</b>	<b>18</b>	<b>1</b>	<b>5</b>	<b>21.5</b>	<b>430</b>	<b>770</b>

\* Bi weekly lab

### III YEAR I SEMESTER COURSE STRUCTURE

Sl. No	Course Category	Dept Course-Code	Course	L	T	P/D	C	Max. Marks	
								Int.	Ext.
1.	OE		Open Elective-I	3	0	0	3	30	70
2.	PE		Professional Elective - I	3	0	0	3	30	70
3.	PC	7F505	Design and Analysis of Algorithms	2	1	0	3	30	70
4.	PC	7EC04	Data Warehousing and Data Mining	3	1	0	4	30	70
5.	PC	7EC05	Computer Networks	3	0	0	3	30	70
6.	HS	7HC63	Soft Skills	0	0	2	1	30	70
7.	BS	7H518	Quantitative Aptitude	1	1	-	2	30	70
8.	PC	7E574	Data Warehousing and Data Mining Lab	0	0	4	2	30	70
9.	PC	7EC75	Computer Networks Lab	0	0	4/2*	1	30	70
10.	PS	7F574	Design and Analysis of Algorithms Lab	0		4/2*	1	30	70
11.	PS	7E596	Technical Seminar – V	0	0	2	1	100	--
12.	PS	7E480	Summer Industry Internship-I	0	0	0	1	30	70
<b>Total :</b>				<b>15</b>	<b>3</b>	<b>12</b>	<b>25</b>	<b>430</b>	<b>770</b>

\* Bi weekly lab

### III YEAR II SEMESTER COURSE STRUCTURE

Sl. No	Course Category	Dept Course-Code	Course	L	T	P/D	C	Max. Marks	
								Int.	Ext.
1.	OE		Open Elective - II	3	0	0	3	30	70
2.	PE		Professional Elective – II	3	0	0	3	30	70
3.	PC	7F606	Automata and Compiler Design	3	1	0	4	30	70
4.	PC	7E606	Operating Systems	2	1	0	3	30	70
5.	PC	7E607	Web Technologies	2	1	0	3	30	70
6.	BS	7H619	Logical Reasoning	1	1	-	2	30	70
7.	PC	7F675	Compiler Design Lab	0	0	4/2*	1	30	70
8.	PC	7E676	Operating System Lab	0	0	4/2*	1	30	70
9.	PC	7EC77	Web Technologies Lab	0	0	4	2	30	70
10.	PS	7E681	Group Project	0	0	4	2	30	70
11.	PC	7E697	Comprehensive Viva -Voce II	0	0	0	1	30	70
12.	PS	7E682	Summer Industry Internship-II (Evaluation will be done along with 4-1 courses)						
<b>Total :</b>				<b>15</b>	<b>4</b>	<b>12</b>	<b>25</b>	<b>330</b>	<b>770</b>

\* Bi weekly lab

### IV YEAR I SEMESTER COURSE STRUCTURE

Sl. No	Course Category	Dept Course	Course	L	T	P/D	C	Max.	
								Int.	Ext.
1.	PE		Professional Elective – III	3	0	0	3	30	70
2.	PE		Professional Elective-IV	3	0	0	3	30	70
3.	PC	7E708	Software Automation and	2	1	0	3	30	70
4.	PC	7E709	Information Security	2	1	0	3	30	70
5.	PC	7F708	Linux Programming	3	0	0	3	30	70
6.	PC	7E778	Software Automation and Testing Lab	0	0	4	2	30	70
7.	PC	7F777	Linux Programming Lab	0	0	3	1.5	30	70
8.	PC	7E779	Information Security Lab	0	0	3	1.5	30	70
9.	PS	7E783	Project - I	0	0	4	2	30	70
10.	PS	7E682	Summer Industry Internship-II	-	-	-	1	30	70
			<b>Total :</b>	<b>13</b>	<b>2</b>	<b>14</b>	<b>23</b>	<b>300</b>	<b>700</b>

### IV YEAR II SEMESTER COURSE STRUCTURE

Sl. No	Course Category	Dept Course	Course	L	T	P/D	C	Max.	
								Int.	Ext.
1.	OE		Open Elective- III	3	0	0	3	30	70
2.	PE		Professional Elective – V	3	0	0	3	30	70
3.	PS	7E884	Project – II	-	-	10	5	30	70
			<b>Total :</b>	<b>6</b>	<b>0</b>	<b>10</b>	<b>11</b>	<b>90</b>	<b>210</b>

Note: All End Examinations (Theory and Practical) are of **Three** hours duration.

**T – Tutorial**

**L- Theory**

**P/D – Practical/Drawing**

**C- Credits**

**Int. - Internal Exam**

**Ext. - External Exam**

#### Course code Definitions

BS- Basic Science Courses

ES- Engineering Science Courses

HS- Humanities and Social Sciences including Management courses

PC-CSE Professional core courses

PE -CSE Professional Elective courses

OE-CSE Open Elective courses

PS- Summer Industry Internship, Projects, Comprehensive Viva Voce, technical Seminars

SNIST (Auto) B.Tech.(CSE) Reg A2018  
**Course Structure – Professional Electives**

Professional Elective Streams		Professional Elective – I (3-1)		Professional Elective – II (3-2)		Professional Elective – III (4-1)		Professional Elective – IV (4-1)		Professional Elective – V (4-2)
Network Security	7FC09	Semantic Web & Social Networks	7FC10	Cyber Security and Cyber Laws Semantic	7FC11	E-Commerce	7FC12	Information Security, Management and Standards	7EC10	Mobile Adhoc and Sensor Networks
Software Engineering	7EC11	Software Architecture and Design Patterns	7EC12	Software Project Management	7EC13	Software Requirements and Estimation	7EC14	Agile Software Development	7EC15	Soft Computing
Data Science	7EC16	Introduction to Data Science	7EC17	Machine Learning	7FC13	Big Data Analytics	7EC18	Artificial Intelligence and Deep Learning	7FC14	Cloud Computing
Advanced Technologies	7EC19	Computer Graphics (CSE Board)	7EC20	Image Processing (CSE Board)	7FC15	Block Chain Technologies	7FC16	Augmented and Virtual Reality	7DC55	Internet of Things
Advanced Courses	7EC21	Advanced Software Engineering	7EC22	Advanced Computer Architecture	7EC23	Advanced Operating Systems	7EC25	Advanced Computer Networks	7EC26	Human Computer Interaction
					7EC24	Distributed Systems				

**Course Structure –Open Electives**

Open Elective Streams		Open Elective – I (3-1)		Open Elective – II (3-2)		Open Elective – III (4-2)
Entrepreneurship Stream	7ZC22	Basics of Entrepreneurship	7ZC30	Advanced Entrepreneurship	7ZC24	Innovation and Design Thinking
Social Sciences Stream	7ZC25	Indian Polity and Economy	7ZC26	Ecology and Disaster Management	7ZC27	Indian History, Geography and Culture
Finance Stream	7ZC05	Banking, Insurance and Risk Management	7ZC19	Entrepreneurship, Project Management and Structured Finance	7ZC15	Financial Institutions, Markets and Services
Mechanical	7BC51	Smart materials	7BC55	Principals of Automation and Robotics	7BC53	Principles of Operations Research
Electrical	7AC46	Control System Engineering	7AC44	Fundamentals of Measurements and Instrumentation	7AC45	Fundamentals of Renewable Energy Sources
Electronics	7CC33	Fundamentals of Signal Processing	7CC34	Communication Theory	7CC35	Introduction to VLSI and Embedded Systems