

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

B. Tech (CSE) Course Structure - A15 Regulation
 (Applicable to 2015 and 2016 batches)

I YEAR I SEMESTER COURSE STRUCTURE

Sl. No	Component	Code	Subject	L	T	P/D	C	Max. Marks	
								Int.	Ext.
1.	HSS	5H101	English-I	2	-	-	2	25	75
2.	BS	5H111	Engineering Mathematics – I	3	1	-	3	25	75
3.	BS	5H121	Engineering Physics – I	3	1	-	3	25	75
4.	BS	5H131	Engineering Chemistry	2	1	-	2	25	75
5.	ES	5F101	Computer Programming	3	1	-	3	25	75
6.	ES	5B101	Engineering Drawing – I	1	1	4	3	25	75
7.	HSS	5H171	English language Communication skills lab	-	-	2	1	25	75
8.	BS	5H181	Engineering Physics Lab-I	-	-	2/2	1	25	75
9.	BS	5H186	Engineering Chemistry Lab	-	-	2/2	1	25	75
10.	ES	5F171	Computer Programming Lab	-	-	3	2	25	75
11.	ES	5B171	Engineering workshop-1	-	-	2/2	1	25	75
12.	ES	5F172	IT Workshop – I	-	-	2/2	1	25	75
13.	I/S	5E191	Seminar on current affairs /Technical Topic	-	-	2	1	100	-
Total :				14	5	15	24	400	900

I YEAR II SEMESTER COURSE STRUCTURE

Sl. No.	Component	Code	Subject	L	T	P/D	C	Max. Marks	
								Int.	Ext.
1.	HSS	5H202	English – II	2	2	-	2	25	75
2.	BS	5H213	Engineering Mathematics – II	3	1	-	3	25	75
3.	BS	5H222	Engineering Physics – II	3	1	-	3	25	75
4.	ES	5E201	Data Structures and C++	3	1	-	3	25	75
5.	ES	5B202	Engineering Drawing – II	1	1	2	2	25	75
6.	HSS	5H232	Environmental Chemistry and Ecology	2	1	-	2	25	75
7.	ES	5BC04	Elements of Mechanical Engineering	3	1	-	3	25	75
8.	HSS	5H233	Gender Sensitization, Values and Ethics	1	1	-	1	25	75
9.	ES	5E271	Data structure and C++Lab	-	-	3	2	25	75
10.	BS	5H282	Engineering Physics Lab – II	-	-	2/2	1	25	75
11.	ES	5F273	IT Workshop – II	-	-	2/2	1	25	75
12.	I/S	5E292	Seminar on Science and its impact	-	-	2	1	100	-
Total :				18	9	09	24	375	825

II YEAR I SEMESTER COURSE STRUCTURE

Sl. No	Component	Code	Subject	L	T	P/D	C	Max. Marks	
								Int.	Ext.
1.	BS	5H314	Engineering Mathematics III	3	1	-	3	25	75
2.	ES	5C347	Elements of Electronics Engineering	3	1	-	3	25	75
3.	ES	5CC02	Switching Theory and Logic Design	3	1	-	3	25	75
4.	ES	5AC41	Elements of Electrical Engineering	3	1	-	3	25	75
5.	PC	5E302	Object Oriented Programming through Java	3	1	-	3	25	75
6.	PC	5F302	Mathematical Foundations of Computer Science	3	1	-	3	25	75
7.	HSS	5H373	Functional Communicative Written English	1	2	-	1	25	75
8.	ES	5AC91	Electrical Engineering Lab	-	-	3/2	1	25	75
9.	ES	5C381	Electronics Engineering Lab	-	-	3/2	1	25	75
10.	PC	5E372	Object Oriented Programming through Java Lab	-	-	3	2	25	75
11.	I/S	5E393	Seminar on Technology and its Impact	-	-	2	1	100	-
Total :				19	8	08	24	350	750

II YEAR II SEMESTER COURSE STRUCTURE

Sl. No	Component	Code	Subject	L	T	P/	C	Max. Marks	
								Int.	Ext.
1.	PC	5FC04	Design and Analysis of Algorithms	3	1	-	3	25	75
2.	HSS	5ZC01	Managerial Economics and Financial Analysis	2	1	-	2	25	75
3.	PC	5FC03	Database Management Systems	3	1	-	3	25	75
4.	PC	5C448	Data Communications	3	1	-	3	25	75
5.	PC	5D408	Computer Organization and Microprocessor and Interfacing	3	1	-	3	25	75
6.	BS	5H416	Probability and Statistics	3	1	-	3	25	75
7.	HSS	5H474	Effective English Communication and soft skills	-	1	2	1	25	75
8.	PC	5E473	Comprehensive Viva Voce – I	-	-	-	1	25	75
9.	PC	5F474	Database Management Systems Lab	-	-	3	2	25	75
10.	PC	5D474	Microprocessor and Interfacing Lab	-	-	3	2	25	75
11.	I/S	5E494	Technical Seminar	-	-	2	1	100	-
Total :				17	7	10	24	350	750

III YEAR I SEMESTER COURSE STRUCTURE

Sl. No	Component	Code	Subject	L	T	P/D	C	Max. Marks	
								Int.	Ext.
1.	PE		Professional Elective - I	3	1	-	3	25	75
2.	PE		Professional Elective - II	3	1	-	3	25	75
3.	PC	5FC07	Software Engineering and OOAD	2	1	-	2	25	75
4.	PC	5EC06	Computer Networks	3	-	-	3	25	75
5.	PC	5E517	Theory of Computation	3	1	-	3	25	75
6.	PC	5FC09	Web Technologies	3	1	-	3	25	75
7.	BS	5HC75	Quantitative Aptitude	-	-	2	1	25	75
8.	P	5E575	Group Project	-	-	2	1	25	75
9.	PC	5EC73	Computer Networks and Case tools Lab	-	-	4	2	25	75
10.	PC	5FC80	Web Technologies Lab.	-	-	4	2	25	75
11.	I/S	5E595	Technical literature Review and Seminar – I	-	-	2	1	100	-
Total :				17	5	14	24	350	675

Elective Streams	PE- I (3-1)		PE- II (3-1)	
	Code	Subject	Code	Subject
Software Engineering	5EC05	Software Requirements and Estimation	5EC08	Software Project Management
Database Streams	5FC13	Distributed Databases	5FC15	Information Retrieval Systems
Computer Languages & Applications Development Stream	5DC12	Principles of Programming Language	5FC16	C# and DotNet Framework
Advanced Courses	5FC10/ 5FC08	Computer Graphics/ Python Programming	5EC15/ 5EC17	Artificial Intelligence /. Human Computer Interaction
Cloud Computing Stream	5EC30	Introduction to Virtualization and Cloud	5EC33	Cloud Computing Architecture and Deployment Models
Big Data Analytics Stream	5FC25	Cloud Computing for Business Analytics	5FC26	Business Intelligence (Tableau based exercises)

III YEAR II SEMESTER COURSE STRUCTURE

Sl. No	Component	Code	Subject	L	T	P/D	C	Max. Marks	
								Int.	Ext.
1.	PE		Professional Elective - III	3	1	-	3	25	75
2.	PE		Professional Elective – IV	3	1	-	3	25	75
3.	OE		Open Elective- I	2	1	-	2	25	75
4.	PC	5EC03	Operating Systems	3	-	-	3	25	75
5.	PC	5E607	Compiler Design	3	1	-	3	25	75
6.	PC	5FC06	Linux Programming	3	1	-	3	25	75
7.	BS	5HC77	Logical Reasoning	-	-	2	1	25	75
8.	PC	5E677	Comprehensive Viva Voce – II	-	-	-	1	50	50
9.	PC	5E674	Compiler Design and Operating Systems Lab	-	-	4	2	25	75
10.	PC	5FC75	Linux Programming Lab	-	-	4	2	25	75
11	I/S	5E696	Technical literature Review and Seminar – II	-	-	2	1	100	-
Total :				17	5	12	24	350	675

Elective Streams	Professional Elective – III (3-2)		Professional Elective – IV (3-2)	
	Code	Subjects	Code	Subjects
Software Engineering	5EC13	Software Architecture and Design Patterns	5EC12	Service Oriented Architecture
Database	5FC21	Database Security	5FC24/ 5FC29	Advanced Database Systems / Introduction to Data Science
Computer Languages & Applications Development	5EC20	Scripting Languages	5FC19	Multimedia and Application Development
Advanced Courses	5DC57/ 5FC14	Introduction to Internet of Things/ Cloud Computing	5EC16/ 5EC23	Image Processing/ Machine Learning
	5EC19	Cyber Security and Cyber laws	5EC18	Distributed Computing
Cloud Computing	5EC31	Management and Security in Cloud	5EC32	Social, Web and Mobile Analytics
Big Data Analytics	5FC27	Hadoop and Big Data Analytics		

Open Elective - I (3-2)		
Elective Streams	Code	Subject
Management	5ZC03/ 5ZC22/ 5ZC29	Banking Operations, Insurance and Risk Management / Basics of Entrepreneurship(Non Wadhvani Model)/ Basics of Entrepreneurship(Wadhvani Model)/
Electronics	5CC53	Electronic Circuit Analysis and Design
Mechanical	5BC61	Fundamentals of Smart materials
Biotechnology	5GC51	Biology for Engineers
Electrical	5AC46	Control System Engineering
Foreign Language	5HC46	German
SAP Stream	5EC26	SAP – I: SAP ABAP Workbench Fundamentals
TEP	5ZC20/5ZC05	Product and Services/ General Management and Entrepreneurship

IV YEAR I SEMESTER COURSE STRUCTURE

Sl. No	Component	Code	Subject	L	T	P/D	C	Max. Marks	
								Int.	Ext.
1.	OE		Open Elective- II	2	1	-	2	25	75
2.	OE		Open Elective - III	2	1	-	2	25	75
3.	PE		Professional Elective - V	3	1	-	3	25	75
4.	HS	5GC49	Intellectual Property Rights	1	1	-	1	25	75
5.	PC	5FC05	Data Warehousing and Data Mining	3	1	-	3	25	75
6.	PC	5EC11	Software Automation and Testing	3	-	-	3	25	75
7.	PC	5FC11	Information Security	3	1	-	3	25	75
8.	PC	5EC75	Software Testing and Information Security Lab	-	-	4	2	25	75
9.	PC	5F779	Data Warehousing and Data Mining Lab	-	-	4	2	25	75
10.	I/S	5E781	Internship And Industry Oriented Mini Project	-	-	-	2	25	75
11.	P	5E780	Project – I	-	1	3	3	100	-
12.	I/S	5E797	Technical literature Review and Seminar–III	-	-	2	1	100	-
Total :				17	7	13	27	450	750

Open Elective- II (4-1)			Open Elective- III (4-1)	
Open Elective Streams	Code	Subject	Code	Subject
Management	5ZC19	Entrepreneurship, Project Management and Structured Finance	5ZC08/ 5ZC30/ 5ZC23	Enterprise Resource Planning / Advanced Entrepreneurship (Wadhvani MODEL) / Advanced Entrepreneurship (Non- Wadhvani MODEL)
SAP	5EC27	SAP – II: SAP ABAP Workbench Concepts		
Electronics	5CC49	Fundamentals of Communication Engineering	5CC50	Fundamentals of VLSI and Embedded Systems
Mechanical	5BC63	Principles of Operations Research	5BC62	Basic Manufacturing Processes
Biotechnology	5GC47	Fundamentals of Bio Informatics	5GC50	Computational biology
Electrical	5AC44	Fundamentals of Measurements and Instrumentation	5AC45	Fundamentals of Renewable Energy Sources
Foreign Language	5HC41	French	5HC51	Spanish

Professional Elective – V (4-1)		
Elective Streams	Code	Subject
Software Engineering	5EC24	Agile Software Development
Computer Languages & Applications Development Stream	5EC22	Semantic Web and Social Networks (SWSN)
Advanced Courses	5EC21/ 5EC25	Neural Networks (NN) / Soft Computing (SC)
SAP Stream / Database Stream	5FC17	Big Data Analytics (BDA)

IV YEAR II SEMESTER COURSE STRUCTURE

Sl. No	Component	Code	Subject	L	T	P/D	C	Max.	
								Int.	Ext.
1.	PC	5EC14	Mobile Computing	4	-	-	4	25	75
2.	HS	5ZC02	Management Science	3	1	-	3	25	75
3.	P	5E884	Project – II	-	-	20	12	50	150
4.	PC	5E885	Comprehensive Viva Voce - III	-	-	-	1	50	50
5.	I/S	5E898	Technical literature Review and Seminar – IV	-	-	2	1	100	-
Total :				7	-	22	21	225	375

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