

SREENIDHI INSTITUTE OF SCIENCE AND TECHNOLOGY
Information Technology
B.Tech Course Structure
Autonomous Regulation: 2017

I YEAR I SEMESTER COURSE STRUCTURE

Sl. No	Code	Subject	L	T	P/D	C	Max. Marks	
							CIE	SEE
1.	6H101	English-I	2	-	-	2	25	75
2.	6H111	Engineering Mathematics – I	3	1	-	3	25	75
3.	6H121	Engineering Physics – I	3	1	-	3	25	75
4.	6H131	Engineering Chemistry	2	1	-	2	25	75
5.	6F101	Computer Programming	3	1	-	3	25	75
6.	6B101	Engineering Drawing – I	1	1	4	3	25	75
7.	6H171	English language Communication skills lab	-	-	2	1	25	75
8.	6H181	Engineering Physics Lab-I	-	-	2	1	25	75
9.	6H186	Engineering Chemistry Lab	-	-	2	1	25	75
10.	6F171	C Programming Lab	-	-	4	2	25	75
11.	6B171	Engineering workshop-I	-	-	2	1	25	75
12.	6F172	IT Workshop – I	-	-	2	1	25	75
13.	6E191	Seminar on current affairs /Technical Topic	-	-	2	1	100	-
Total :			14	5	20	24	400	900

CIE – Continuous Internal Evaluation

SEE – Semester End Examination

I YEAR II SEMESTER COURSE STRUCTURE

Sl. No.	Code	Subject	L	T	P/D	C	Max. Marks	
							CIE	SEE
1.	6H202	English – II	2	2	-	2	25	75
2.	6H213	Engineering Mathematics – II	3	1	-	3	25	75
3.	6H222	Engineering Physics – II	3	1	-	3	25	75
4.	6E201	Data Structures	3	1	-	3	25	75
5.	6B202	Engineering Drawing – II	1	1	2	2	25	75
6.	6H232	Environmental and Applied Chemistry	2	1	-	2	25	75
7.	6BC04	Elements of Mechanical Engineering	3	1	-	3	25	75
8.	6ZC03	Gender Sensitization, Values, Ethics and Yoga	1	1	-	1	25	75
9.	6E271	Data structure Lab (C,C++)	-	-	4	2	25	75
10.	6H282	Engineering Physics Lab – II	-	-	2	1	25	75
11.	6F273	IT Workshop – II	-	-	2	1	25	75
12.	6E292	Seminar on Science and its impact / Technical Topic	-	-	2	1	100	-
Total :			18	9	12	24	375	825

II YEAR I SEMESTER COURSE STRUCTURE

Sl. No	Code	Subject	L	T	P/D	C	Max. Marks	
							CIE	SEE
1.	6H373	Functional Communicative English	1	2	-	1	25	75
2.	6H316	Engineering Mathematics - III	3	1	-	3	25	75
3.	6CC09	Elements of Electronics Engineering	3	1	-	3	25	75
4.	6CC02	Switching Theory and Logic Design	3	1	-	3	25	75
5.	6D308	Computer Organization and Microprocessor Interfacing	3	1	-	3	25	75
6.	6E302	Object Oriented Programming through Java	3	1	-	3	25	75
7.	6F302	Mathematical Foundations of Computer Science	3	1	-	3	25	75
8.	6DC87	Computer Organization and Microprocessor Interfacing Lab	-	-	4	2	25	75
9.	6CC76	Electronics Engineering Lab	-	-	2	1	25	75
10.	6E372	Object Oriented Programming through Java Lab	-	-	4	2	25	75
11.	6E393	Seminar on Technology and its Impact/Technical topic	-	-	2	1	100	-
Total :			19	8	12	25	350	750

II YEAR II SEMESTER COURSE STRUCTURE

Sl. No	Code	Subject	L	T	P/D	C	Max. Marks	
							CIE	SEE
1.	6HC18	Probability and Statistics	3	1	-	3	25	75
2.	6ZC01	Managerial Economics and Financial Analysis	2	2	-	2	25	75
3.	6AC41	Elements of Electrical Engineering	3	1	-	3	25	75
4.	6FC04	Design and Analysis of Algorithms	3	1	-	3	25	75
5.	6EC03	Operating Systems	3	1	-	3	25	75
6.	6FC03	Database Management Systems	3	1	-	3	25	75
7.	6E475	Operating Systems Lab	-	-	2	1	25	75
8.	6AC91	Electrical Engineering Lab	-	-	2	1	25	75
9.	6F474	Database Management Systems Lab	-	-	4	2	25	75
10.	6E473	Comprehensive Viva Voce – I	-	-	-	1	50	50
11.	6E494	Technical Seminar	-	-	2	1	100	-
Total :			17	7	10	23	375	725

III YEAR I SEMESTER COURSE STRUCTURE

Sl. No	Code	Subject	L	T	P/D	C	Max. Marks	
							CIE	SEE
1.		Professional Elective- I	3	-	-	3	25	75
2.		Professional Elective- II	3	-	-	3	25	75
3.	6FC07	Software Engineering and OOAD	2	-	-	2	25	75
4.	6CC48	Data Communications	2	-	-	2	25	75
5.	6EC29	Data Warehousing and Data Mining	2	1	-	3	25	75
6.	6FC08	Python Programming	2	1	-	3	25	75
7.	6HC74	Effective English Communication and Soft Skills	1	-	-	1	25	75
8.	6H576	Quantitative Aptitude	-	-	2	1	25	75
9.	6F575	Group Project	-	-	2	1	25	75
10.	6F589	Object Oriented and Analysis Design and Python Programming	-	-	4	2	25	75
11.	6E579	Data Warehousing and Data Mining	-	-	4	2	25	75
12.	6F595	Technical Literature Review and Seminar-I	-	-	2	1	100	-
		Total :	15	3	14	24	375	825

III YEAR II SEMESTER COURSE STRUCTURE

Sl. No	Code	Subject	L	T	P/D	C	Max. Marks	
							CIE	SEE
12.		Professional Elective- III	3	-	-	3	25	75
13.		Professional Elective- IV	3	-	-	3	25	75
14.		Open Elective-I	2	-	-	2	25	75
15.	6FC34	Automata Compiler Design	2	1	-	3	25	75
16.	6FC09	Web Technologies	2	1	-	3	25	75
17.	6EC06	Computer Networks	3	-	-	3	25	75
18.	6H677	Logical Reasoning	-	-	2	1	25	75
19.	6F577	Comprehensive Viva-Voce II	-	-	2	1	50	50
20.	6EC74	Computer Networks Lab	-	-	4	2	25	75
21.	6FC82	Web Technologies Lab	-	-	4	2	25	75
11.	6F596	Technical Literature Review and Seminar-II	-	-	2	1	100	-
		Total :	16	2	14	24	375	725

IV YEAR I SEMESTER COURSE STRUCTURE

Sl. No	Code	Subject	L	T	P/D	C	Max. Marks	
							CIE	SEE
22.		Professional Elective- V	3	-	-	3	25	75
23.		Open Elective-II	2	-	-	2	25	75
24.		Open Elective-III	2	-	-	2	25	75
25.	6FC12	Mobile Application Development	2	1	-	3	25	75
26.	6FC11	Information Security	2	1	-	3	25	75
27.	6GC49	Intellectual Property Rights	1	1	-	1	25	75
28.	6EC11	Software Automation Testing	2	1	-	3	25	75
29.	6F780	Project-I	-	-	6	3	100	0
30.	6F781	Industry Oriented Mini Project	-	-	-	2	25	75
31.	6FC90	Software Testing and Information Security Lab	-	-	4	2	25	75
32.	6F777	Mobile Application Development Lab	-	-	4	2	25	75
11.	6F596	Technical Literature Review and Seminar-III	-	-	2	1	100	-
		Total :	14	4	16	27	375	825

IV YEAR II SEMESTER COURSE STRUCTURE

Sl. No	Code	Subject	L	T	P/D	C	Max. Marks	
							Int.	Ext.
1.	6EC14	Mobile Computing	3	1	-	4	25	75
2.	6ZC02	Management Science	3	-	-	3	25	75
3.	6F884	Project – II	-	-	24	12	50	150
4.	6F885	Comprehensive Viva-Voce III	-	-	-	1	50	50
5.	6F898	Technical Literature Review and Seminar - IV	-	-	2	1	100	-
		Total :	6	1	26	21	250	350

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

T – Tutorial

L- Theory

P/D – Practical/Drawing

C- Credits

CIE- Continuous Internal Evaluation

SEE – Semester End Evaluation

Course Structure – Professional Electives

Professional Elective Streams	Code	Professional Elective – I (3-1)	Code	Professional Elective – II (3-1)	Code	Professional Elective – III (3-2)	Code	Professional Elective – IV (3-2)	Code	Professional Elective – V (4-1)
Software Engineering	6EC04	Software Requirements and Estimation	6EC05	Software Project Management	6EC07	Software Architecture and Design Patterns	6EC08	Agile Software Development	6EC09	Advanced Software Engineering
Data Science	6HC17	Statistical Computation methods for Data Science	6EC10	Introduction to Data Science	6EC12	Big Data Analytics	6EC13	Machine Learning	6EC15	Artificial Intelligence and Deep Learning
Advanced Technologies	6FC15	Information Retrieval Systems	6EC16	Robotic Process Automation	6FC18	Image Processing	6DC55	Internet of Things	6FC14	Cloud Computing
			6FC10	Computer Graphics						
Advanced Software Languages	6FC05	Scripting Languages	6FC16	C# and .NET Framework	6FC25	Network Programming	6FC12	Mobile Application Development	6FC26	Semantic Web & Social Networks

Course Structure –Open Electives

Open Elective Streams	Code	Open Elective – I (3-2)	Code	Open Elective – II (4-1)	Code	Open Elective – III (4-1)
Entrepreneurship Stream	6ZC22	Basics of Entrepreneurship	6ZC24	Innovations and Design Thinking	6ZC23	Advanced Entrepreneurship
Social Sciences Stream	6ZC25	Basics of Indian Economy	6ZC26	Basics of Polity and Ecology	6ZC27	Indian History, Culture and Geography
Technology Entrepreneurship	6ZC20	Product and Services	6ZC24	Innovation and Design Thinking	6ZC21	General Management and Entrepreneurship
Finance Stream	6ZC05	Banking Operations, Insurance and Risk Management	6ZC19	Entrepreneurship Project Management and Structured Finance	6ZC15	Financial Institutions, Markets and Services
Mechanical	6BC11	Smart Materials	6BC63	Principles of Operation Research	6BC62	Principles of Manufacturing Processes
Electrical	6AC46	Control System Engineering	6AC44	Fundamentals of Measurements and Instrumentation	6AC45	Fundamentals of Renewable Energy Sources
Electronics	6DC52	Embedded Systems	6DC53	Introduction To VLSI Design	6CC44	Electronics Circuit Design and Analysis