

SREENIDHI INSTITUTE OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF CIVIL ENGINEERING

B.Tech Course Structure – Autonomous Regulation: A18 (166 Credits)

I Year I Semester

Sr. No	Subject Code	Subject	L	T	P/D	C	Max Marks	
							CIE	SEE
1	7HC03	Chemistry	3	1	0	4	30	70
2	7FC01	Problem solving using C	3	0	0	3	30	70
3	7HC06	Engineering Mathematics – I	3	1	0	4	30	70
4	7BC01	Workshop / Manufacturing practices	1	0	0	1	30	70
5	7HC01	English (reading, listening, and writing)	1	0	0	1	30	70
6	7HC63	Chemistry lab	0	0	3	1.5	30	70
7	7FC71	Problem solving using C lab	0	0	3	1.5	30	70
8	7HC61	English (reading, listening, and writing) lab	0	0	2	1.0	30	70
9	7BC61	Workshop / Manufacturing practices Lab	0	0	3	1.5	30	70
10	7K261	Technical Seminar – I	0	0	2	1.0	30	70
		Total :	11	2	13	19.5	300	700

I Year II Semester

Sr. No	Subject Code	Subject	L	T	P/D	C	Max Marks	
							CIE	SEE
1	7HC04	Applied Physics	3	1	0	4	30	70
2	7K201	Engineering Mechanics (civil engineering)	3	1	0	4	30	70
3	7HC08	Engineering Mathematics – II	3	1	0	4	30	70
4	7BC02	Engineering Graphics & Design	1	0	4	3	30	70
5	7HC02	English (Oral communication skills)	1	0	0	1	30	70
6	7HC64	Applied Physics lab	0	0	3	1.5	30	70
7	7HC62	English (Oral communication skills) Lab	0	0	2	1	30	70
8	7K291	Technical Seminar – II	0	0	2	1	30	70
		Total:	11	3	11	19.5	240	560

II Year I Semester

Sr. No	Subject Code	Subject	L	T	P/D	C	Max Marks	
							CIE	SEE
1	7BC04	Elements of Mechanical Engineering	2	1	0	2	30	70
2	7HC12	Engineering Mathematics- III	3	1	0	3	30	70
3	7K301	Introduction to Solid Mechanics	3	1	0	3	30	70
4	7K302	Surveying and Geomatics	3	1	0	3	30	70
5	7K303	Building Materials and Planning	3	0	0	2	30	70
6	7ZC01	Management Science & Financial Accounting	2	0	0	2	30	70
7	7K371	Mechanics of Solids LAB	0	0	3	1.5	30	70
8	7K372	Survey LAB	0	0	3	1.5	30	70
9	7K373	Computer Aided Drafting of Building LAB	0	0	3	1.5	30	70
10	7K391	Technical Seminar –III	0	0	2	1	100	-
		Total :	16	4	11	20.5	370	630

II Year II Semester

Sr. No	Subject Code	Subject	L	T	P/D	C	Max Marks	
							CIE	SEE
1	7AC48	Electrical & Electronics Engineering	3	0	0	3	30	70
2	7K404	Mechanics of Materials	3	1	0	3	30	70
3	7K405	Fluid Mechanics	3	1	0	3	30	70
4	7K406	Construction Engineering and Management	3	1	0	3	30	70
5	7K407	Hydrology and Water resources engineering	3	0	0	2	30	70
6	7K408	Engineering Geology	3	0	0	2	30	70
7	7AC95	Electrical & Electronics Engineering Lab	0	0	2	1	30	70
8	7K471	Fluid mechanics Lab	0	0	4	2	30	70
9	7K472	Engineering Geology Lab	0	0	3	1.5	30	70
10	7K491	Technical Seminar –IV	0	0	2	1	100	-
11	7K488	Comprehensive Viva voce –I	-	-	-	1	50	50
		Total	18	3	11	22.5	420	680

III Year I Semester

Sr. No	Subject Code	Subject	L	T	P/D	C	Max Marks	
							CIE	SEE
1	7K510	Hydraulic Engineering	3	1	0	4	30	70
2	7K511	Geotechnical Engineering	3	0	0	3	30	70
3	7K512	Transportation Engineering	3	0	0	3	30	70
4		Professional Elective – I	3	1	0	3	30	70
5		Open Elective – I	3	0	0	3	30	70
6	7K571	Hydraulics Engineering Lab	0	0	3	1.5	30	70
7	7K572	Geotechnical Engineering lab	0	0	3	1.5	30	70
8	7K573	Transportation Engineering Lab	0	0	3	1.5	30	70
9	7H518	Quantitative Aptitude	1	1	-	2	30	70
10	7K591	Technical Seminar –V				1	100	-
11	7K585	Summer Internship –I (Done after II_II)				1	100	-
			16	3	9	24.5	470	630

Professional Elective – I: List of Subjects (III-I)

Sr. No	Name of Stream	Subject Code	Subject Name
1	Structural Engineering	7KC51	Reinforced Concrete Design
2	Water Resources and Environmental Engineering Stream	7KC52	Pipe Line Engineering
3	Transportation Engineering Stream	7KC53	Railway Engineering
4	Geotechnical Engineering Stream	7KC54	Soil Mechanics - I

Open Elective – I: List of Subjects (III-I)

Sr. No	Name of Stream	Subject Code	Subject Name
1	Computer Science Stream	7EC01	Data Structures
2	Entrepreneurship Stream	7ZC22	Basics of Entrepreneurship
3	Finance Stream	7ZC05	Banking, Insurance, and Risk Management.
4	Social Sciences Stream	7ZC25	Indian Polity & Economy.

III Year II Semester

Sr. No	Subject Code	Subject	L	T	P/D	C	Max Marks	
							CIE	SEE
1	7K613	Geographic Information System	3	0	0	3	30	70
2	7K614	Environmental Engineering	3	0	0	3	30	70
3	7K615	Concrete Technology	3	0	0	3	30	70
4		Professional Elective –II	3	1	0	3	30	70
5		Open Elective – II	3	0	0	3	30	70
6	7K671	Geographical Information Systems Lab	0	0	3	1.5	30	70
7	7K672	Environmental engineering Lab	0	0	3	1.5	30	70
8	7K673	Computer Applications in Civil Engineering Lab	0	0	3	1.5	30	70
9	7HC74	Soft Skills (English-3)	0	0	2	1	30	70
10	7H619	Logical Reasoning	1	1	0	2	30	70
11	7K680	Group Project	0	0	4	2	30	70
12	7K588	Comprehensive Viva voce –II	-	-	-	1	30	70
			16	2	15	25.5	380	820

Professional Elective – II: List of Subjects (III-II)

Sr. No	Name of Stream	Subject Code	Subject Name
1	Structural Engineering	7KC61	Design of Steel Structures
2	Water Resources and Environmental Engineering Stream	7KC62	Climate Change and Sustainable Development
3	Transportation Engineering Stream	7KC63	Airport Planning & Design
4	Geotechnical Engineering Stream	7KC64	Soil Mechanics - II

Open Elective – II: List of Subjects (III-II)

Sr. No	Name of Stream	Subject Code	Subject Name
1	Computer Science Stream	7FC03	Python Programming
2	Entrepreneurship Stream	7ZC24	Innovation and Design Thinking
3	Finance Stream	7ZC19	Entrepreneurship Project Management and Structured Finance
4	Social Sciences Stream	7ZC26	Ecology & Disaster Management

IV Year I Semester

Sr. No	Subject Code	Subject	L	T	P/D	C	Max Marks	
							CIE	SEE
1	7K717	Finite Element Method for Civil Engineers	3	1	0	3.5	30	70
2	7K718	Design and Detailing of Hydraulics Structures	3	0	0	3	30	70
3	7K719	Estimation, costing and valuation	3	0	0	3	30	70
4		Professional Elective – III	3	1	0	3	30	70
5		Open Elective – III	3	0	0	3	30	70
6	7K771	Concrete Technology Lab	0	0	3	1.5	30	70
7	7K772	Revit Laboratory	0	0	3	1.5	30	70
8	7K773	Estimation & Quantity Surveying Laboratory	0	0	3	1.5	30	70
9	7K780	Project – I	-	1	3	2	100	-
10	7K785	Summer Internship – II (Done after III_II)				1	100	
			15	3	12	23	440	560

Professional Elective – III : List of Subjects (IV-I)

Sr. No	Name of Stream	Subject Code	Subject Name
1	Structural Engineering	7KC71	Disaster Mitigation and Management
2	Water Resources and Environmental Engineering Stream	7KC72	Surface Water Hydrology
3	Transportation Engineering Stream	7KC73	Pavement Design
4	Geotechnical Engineering Stream	7KC74	Ground Improvement Techniques

Open Elective – III: List of Subjects (IV-I)

Sr. No	Name of Stream	Subject Code	Subject Name
1	Computer Science Stream	7FC17	IOT
2	Entrepreneurship Stream	7ZC30	Advanced Entrepreneurship
3	Finance Stream	7ZC15	Financial Institutions, Markets and Services
4	Social Sciences Stream	7ZC27	Indian History, Geography & Culture

IV Year II Semester

Sr. No	Subject Code	Subject	L	T	P/D	C	Max Marks	
							CIE	SEE
1		Professional Elective – IV	3	1	0	3	30	70
2		Professional Elective – V	3	1	0	3	30	70
3	7K880	Project – II	-	-	20	5	60	140
4								
Total			6	2	20	11	120	280

Professional Elective – IV: List of Subjects (IV-II)

Sr. No	Name of Stream	Subject Code	Subject Name
1	Structural Engineering	7KC81	Structural Engineering
2	Water Resources and Environmental Engineering Stream	7KC82	Ground water Hydrology
3	Transportation Engineering Stream	7KC83	Urban Transportation Planning
4	Geotechnical Engineering Stream	7KC84	Landfill Engineering

Professional Elective – V : List of Subjects (IV-II)

Sr. No	Name of Stream	Subject Code	Subject Name
1	Structural Engineering	7KC86	Foundation Analysis and Design
2	Water Resources and Environmental Engineering Stream	7KC87	Water Quality Engineering
3	Transportation Engineering Stream	7KC88	Intelligent Transportation Systems
4	Geotechnical Engineering Stream	7KC89	Environmental Geo technology

L: Lecture T: Tutorial P/D: Practical / Drawing C: Credits
CIE: Continuous Internal Evaluation SEE: Semester End Examination