



SREE VIDYANIKETHAN ENGINEERING COLLEGE

(AUTONOMOUS)

Sree Sainath Nagar, A.Rangampet - 517 102

Department of Civil Engineering

Approved Course Structure

Program: B.Tech.-CIVIL ENGINEERING

Regulations: SVEC-20

Mandatory Induction Program	03 weeks duration
Induction program offered before commencement of the I-Semester coursework	Physical activity
	Creative Arts
	Universal Human Values
	Literary
	Proficiency Modules
	Lectures by Eminent People
	Visits to local Areas
	Familiarization to Department/Branch and Innovations

I B.Tech. – I Semester

Sl. No.	Course Code	Course Title	Contact Periods per week				C	Scheme of Examination Max. Marks		
			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
1.	20BT1BS01	Differential Equations and Multivariable Calculus	3	-	-	3	3	30	70	100
2.	20BT1BS02	Engineering Chemistry	3	-	-	3	3	30	70	100
3.	20BT1BS04	Applied Physics	3	-	-	3	3	30	70	100
4.	20BT10101	Engineering Mechanics	3	-	-	3	3	30	70	100
5.	20BT1BS31	Engineering Chemistry Lab	-	-	3	3	1.5	30	70	100
6.	20BT1BS33	Applied Physics Lab	-	-	3	3	1.5	30	70	100
7.	20BT10331	Computer Aided Engineering Drawing	-	1	4	5	3	30	70	100
8.	20BT10332	Engineering Workshop	-	-	3	3	1.5	30	70	100
9.	20BT1HSAC	Spoken English(Audit Course)	2	-	-	2	-	-	-	-
Total:			14	1	13	28	19.5	240	560	800

I B.Tech. – II Semester

Sl. No.	Course Code	Course Title	Contact Periods per week				C	Scheme of Examination Max. Marks		
			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
1.	20BT2BS01	Transformation Techniques and Linear Algebra	3	-	-	3	3	30	70	100
2.	20BT1HS01	Communicative English	3	-	-	3	3	30	70	100
3.	20BT10201	Basic Electrical and Electronics Engineering	3	-	-	3	3	30	70	100
4.	20BT20541	Programming in C and Data Structures	3	-	-	3	3	30	70	100
5.	20BT20101	Civil Engineering Materials and Concrete Technology	3	-	-	3	3	30	70	100
6.	20BT1HS31	Communicative English Lab	-	-	3	3	1.5	30	70	100
7.	20BT20551	Programming in C and Data Structures Lab	-	-	3	3	1.5	30	70	100
8.	20BT20131	Engineering Geology Lab	-	-	3	3	1.5	30	70	100
9.	20BT1MC01	Universal Human Values (Mandatory Course)	2	-	-	2	-	30	-	30
Total:			17	-	09	26	19.5	270	560	830

II B.Tech. – I Semester

S. No.	Course Code	Course Title	Contact Periods per Week				Credits (c)	Scheme of Examination Max. Marks		
			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
1.	20BT3BS01	Numerical Methods, Probability and Statistics	3	-	-	3	3	30	70	100
2.	20BT30101	Construction, Planning and Project Management	3	-	-	3	3	30	70	100
3.	20BT30102	Fluid Mechanics and Hydraulic Machinery	3	-	-	3	3	30	70	100
4.	20BT30103	Mechanics of Solids	3	-	-	3	3	30	70	100
5.	20BT30104	Surveying	3	-	-	3	3	30	70	100
6.	20BT30131	Civil Engineering Materials and Construction Technology Lab	-	-	3	3	1.5	30	70	100
7.	20BT30132	Fluid Mechanics and Hydraulic Machinery Lab	-	-	3	3	1.5	30	70	100
8.	20BT30133	Surveying Lab	-	-	3	3	1.5	30	70	100
9.	20BT3HS31	Soft Skills Lab	-	1	2	3	2	30	70	100
Total			15	0	9	27	21.5	270	630	900
10.	20BT3MC01	Environmental Science	2	-	-	2	-	30	-	30

II B.Tech. – II Semester

S. No.	Course Code	Course Title	Contact Periods per Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
1.	20BT40101	Engineering Hydrology	3	-	-	3	3	30	70	100
2.	20BT40102	Environmental Engineering	3	-	-	3	3	30	70	100
3.	20BT40103	Soil Mechanics	3	-	-	3	3	30	70	100
4.	20BT40104	Structural Analysis	3	-	-	3	3	30	70	100
5.	Open Elective-1		3	-	-	3	3	30	70	100
6.	20BT40131	Environmental Engineering Lab	-	-	3	3	1.5	30	70	100
7.	20BT40132	Geotechnical Engineering Lab	-	-	3	3	1.5	30	70	100
8.	20BT40133	Strength of Materials Lab	-	-	3	3	1.5	30	70	100
9.	20BT40134	Advanced Surveying Practice	-	1	2	3	2	30	70	100
Total			15	1	11	24	21.5	270	630	900
10.	20BT315AC	Design Thinking	2	-	-	2	-	-	-	-

III B.Tech.- I Semester

S. No.	Course Code	Course Title	Contact Periods per Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
1.	20BT50101	Foundation Engineering	3	-	-	3	3	30	70	100
2.	20BT50102	Reinforced Cement Concrete Structures	3	-	-	3	3	30	70	100
3.	20BT50103	Transportation Engineering	3	-	-	3	3	30	70	100
4.	Open Elective-2		3	-	-	3	3	30	70	100
5.	Interdisciplinary Elective-1		3	-	-	3	3	30	70	100
	20BT50442	Principles of Image Processing								
	20BT50202	Energy Audit, Conservation and Management								
	20BT70302	Computational Fluid Dynamics								
	20BT50104	Construction Equipment and Automation								
	20BT50105	Pipeline Engineering								

		Structures								
	20BT70111	Environmental Hydraulics								
	20BT70112	Pavement Analysis and Design								
	20BT70113	Prestressed Concrete								
	20BT70114	River Engineering and River Basin Management								
	20BT70115	Structural Health Monitoring								
	Professional Elective- 5									
	20BT70116	Analysis and Design of Composite Structures								
	20BT70117	Bridge Engineering								
	20BT70118	Civil Infrastructure for Smart City Development								
5.	20BT70119	Environmental Impact Assessment and Management	3	-	-	3	3	30	70	100
	20BT70120	Geotechnics for Underground Structures								
	20BT70121	Traffic Engineering and Management								
	20BT70122	Water Resources Systems Planning and Management								
6.	20BT70131	Computer Aided Design and Detailing Lab	-	-	3	3	1.5	30	70	100
7.	20BT70132	Remote Sensing and Geographical Information Systems Lab	-	-	3	3	1.5	30	70	100
8.	20BT70123	Geospatial Technologies	2	-	-	2	2	30	70	100
9.	20BT70133	Summer Internship-2	-	-	-	-	1.5	-	100	100
Total			17	-	6	23	21.5	240	660	900
10.	20BT701AC	Spread Sheet Applications in Civil Engineering	2	-	-	2	-	-	-	-

IV B.Tech. II-Semester

S. No.	Course Code	Course Title	Contact Periods per Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
1.	20BT80131	Project Work	-	-	-	-	12	100	100	200
2.	20BT80132	Internship	-	-	-	-	-	-	-	-
Total			-	-	-	-	12	100	100	200

LIST OF COURSES FOR**OPEN ELECTIVE-1 AND OPEN ELECTIVE-2**

Course Code	Open Elective -1	Course Code	Open Elective -2
20BT4BS01	Material Science	20BT4HS01	Banking and Insurance
20BT4HS02	Business Communication and Career Skills	20BT4HS03	Cost Accounting and Financial Management
20BT4HS04	Entrepreneurship for Micro, Small and Medium Enterprises	20BT4HS05	Gender and Environment
20BT4HS06	German Language	20BT4HS07	Indian Economy
20BT4HS08	Indian History	20BT4HS09	Life Skills
20BT4HS10	Personality Development	20BT4HS11	Indian Tradition and Culture
20BT4HS12	Women Empowerment	20BT4HS13	Constitution of India
20BT40205	Reliability and Safety Engineering	20BT50106	Disaster Mitigation and Management
20BT40105	Environmental Pollution and Control	20BT50107	Sustainable Engineering
20BT40106	Planning for Sustainable Development	20BT50108	Contract Laws and Regulations
20BT40107	Rural Technology	20BT50310	Global Strategy and Technology
20BT40305	Human Resource Management	20BT50311	Management Science
20BT50506	Ethical Hacking	20BT40502	Cyber Laws and Security
20BT51205	AI in Healthcare	20BT50206	Intellectual Property Rights
20BT51501	Bioinformatics	20BT50406	Green Technologies



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