



**B.TECH. FOUR YEAR DEGREE COURSE
(CIVIL ENGINEERING)
R 19 - COURSE STRUCTURE**

I YEAR B-TECH - I SEMESTER

S.No	Course Code	Course Title	Course Category	Hours per Week			Total Contact Hour	Credits	Scheme of Examination (Maximum Marks)		
				L	T	P			Internal (CIE)	External (SEE)	Total
1	1910001	Mathematics - I	BSC	3	1	0	4	4	30	70	100
2	1910007	Engineering Physics	BSC	3	1	0	4	4	30	70	100
3	1910501	Programming for Problem Solving	ESC	3	1	0	4	4	30	70	100
4	1910371	Engineering Graphics	ESC	1	0	4	5	3	30	70	100
5	1910072	Engineering Physics Lab	BSC	0	0	3	3	1.5	30	70	100
6	1910571	Programming for Problem Solving Lab	ESC	0	0	3	3	1.5	30	70	100
7	*1910021	Environmental Science	MC	3	0	0	3	0	30	70	100
8		Induction Programme	-	-	-	-	0	-	30	70	100
TOTAL				13	3	10	26	18	240	560	800

I YEAR B-TECH - II SEMESTER

S.No	Course Code	Course Title	Course Category	Hours per Week			Total Contact Hour	Credits	Scheme of Examination (Maximum Marks)		
				L	T	P			Internal (CIE)	External (SEE)	Total
1	1920002	Mathematics - II	BSC	3	1	0	4	4	30	70	100
2	1920008	Chemistry	BSC	3	1	0	4	4	30	70	100
3	1920301	Engineering Mechanics	ESC	3	1	0	4	4	30	70	100
4	1920372	Engineering Workshop	ESC	1	0	3	4	2.5	30	70	100
5	1920009	English	HSMC	2	0	0	2	2	30	70	100
6	1920073	Engineering Chemistry Lab	BSC	0	0	3	3	1.5	30	70	100
7	1920074	English Language and Communication Skills Lab	HSMC	0	0	2	2	1	30	70	100
TOTAL				12	3	8	23	19	210	490	700



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II YEAR B-TECH - I SEMESTER

S.No	Course Code	Course Title	Course Category	Hours per Week			Total Contact Hour	Credits	Scheme of Examination (Maximum Marks)		
				L	T	P			Internal (CIE)	External (SEE)	Total
1	1930111	Surveying and Geomatics	ESC	3	0	0	3	3	30	70	100
2	1930112	Engineering Geology	PCC	2	0	0	2	2	30	70	100
3	1930113	Strength of Materials - I	PCC	3	1	0	4	4	30	70	100
4	1930004	Probability and Statistics	BSC	3	1	0	4	4	30	70	100
5	1930114	Fluid Mechanics	PCC	3	1	0	4	4	30	70	100
6	1930171	Surveying Lab	ESC	0	0	3	3	1.5	30	70	100
7	1930172	Strength of Materials Lab	PCC	0	0	3	3	1.5	30	70	100
8	1930173	Engineering Geology Lab	PCC	0	0	2	2	1	30	70	100
9	*1930023	Constitution of India	MC	3	0	0	3	0	-	-	-
TOTAL				17	3	8	28	21	240	560	800

II YEAR B-TECH - II SEMESTER

S.No	Course Code	Course Title	Course Category	Hours per Week			Total Contact Hour	Credits	Scheme of Examination (Maximum Marks)		
				L	T	P			Internal (CIE)	External (SEE)	Total
1	1940202	Basic Electrical and Electronics Engineering	ESC	3	0	0	3	3	30	70	100
2	1940330	Basic Mechanical Engineering for Civil Engineers	PCC	2	0	0	2	2	30	70	100
3	1940115	Building Materials, Construction and Planning	PCC	3	0	0	3	3	30	70	100
4	1940116	Strength of Materials - II	PCC	3	0	0	3	3	30	70	100
5	1940117	Hydraulics and Hydraulic Machinery	PCC	3	0	0	3	3	30	70	100
6	1940118	Structural Analysis - I	PCC	3	0	0	3	3	30	70	100
7	1940174	Computer Aided Civil Engineering Drawing	ESC	0	0	3	3	1.5	30	70	100
8	1940272	Basic Electrical and Electronics Engineering Lab	PCC	0	0	2	2	1	30	70	100
9	1940175	Hydraulics and Hydraulic Machinery Lab	PCC	0	0	3	3	1.5	30	70	100
10	*1940022	Gender Sensitization Lab	MC	0	0	2	2	0	-	-	-
TOTAL				17	0	10	27	21	270	630	900



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III YEAR B-TECH - I SEMESTER

S.No	Course Code	Course Title	Course Category	Hours per Week			Total Contact Hour	Credits	Scheme of Examination (Maximum Marks)		
				L	T	P			Internal (CIE)	External (SEE)	Total
1	1950119	Structural Analysis - II	PCC	3	0	0	3	3	30	70	100
2	1950120	Geotechnical Engineering	PCC	3	0	0	3	3	30	70	100
3	1950121	Structural Engineering - I (RCC)	PCC	3	1	0	4	4	30	70	100
4	1950122	Transportation Engineering	PCC	3	0	0	3	3	30	70	100
5	-	Professional Elective - I	PEC	3	0	0	3	3	30	70	100
6		Engineering Economics and Accountancy	HSMC	2	0	0	2	2	30	70	100
7	1950176	Highway Engineering and Concrete Technology Lab	PCC	0	0	3	3	1.5	30	70	100
8	1950177	Geotechnical Engineering Lab	PCC	0	0	3	3	1.5	30	70	100
9	1950075	Advanced Communication Skills Lab	HSMC	0	0	2	2	1	30	70	100
10	*1950024	Intellectual Property Rights	MC	3	0	0	3	0	-	-	-
TOTAL				20	1	8	29	22	270	630	900

III YEAR B-TECH - II SEMESTER

S.No	Course Code	Course Title	Course Category	Hours per Week			Total Contact Hour	Credits	Scheme of Examination (Maximum Marks)		
				L	T	P			Internal (CIE)	External (SEE)	Total
1	1960123	Hydrology & Water Resources Engineering	PCC	3	1	0	4	4	30	70	100
2	1960124	Environmental Engineering	PCC	3	0	0	3	3	30	70	100
3	1960125	Foundation Engineering	PCC	3	0	0	3	3	30	70	100
4	1960126	Structural Engineering –II (Steel)	PCC	3	1	0	4	4	30	70	100
5	-	Professional Elective - II	PEC	3	0	0	3	3	30	70	100
6	-	Open Elective - I	OEC	3	0	0	3	3	30	70	100
7	1960179	Environmental Engineering Lab	PCC	0	0	2	2	1	30	70	100
8	1960180	Computer Aided Design Lab	PCC	0	0	2	2	1	30	70	100
9	*1960021	Environmental Science	MC	3	0	0	3	0	-	-	-
TOTAL				21	2	4	27	22	240	560	800



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IV YEAR B-TECH - I SEMESTER

S.No	Course Code	Course Title	Course Category	Hours per Week			Total Contact Hour	Credits	Scheme of Examination		
				L	T	P			Internal (CIE)	External (SEE)	Total
1	1970127	Estimation, Costing and Project Management	PCC	3	1	0	4	4	30	70	100
2	-	Professional Elective - III	PEC	3	0	0	3	3	30	70	100
3	-	Professional Elective - IV	PEC	3	0	0	3	3	30	70	100
4	-	Open Elective - II	OEC	3	0	0	3	3	30	70	100
5		Professional Practice law & Ethics	HSMC	2	0	0	2	2	30	70	100
6	1970191	Industrial Oriented Mini Project/ Summer Intern	PROJ	0	0	0	0	2	100	0	100
7	1970192	Seminar	PROJ	0	0	2	2	1	30	70	100
8	1970193	Project Stage - I	PROJ	0	0	6	6	3	30	70	100
TOTAL				14	1	8	23	21	310	490	800

IV YEAR B-TECH - II SEMESTER

S.No	Course Code	Course Title	Course Category	Hours per Week			Total Contact Hour	Credits	Scheme of Examination		
				L	T	P			Internal (CIE)	External (SEE)	Total
1	-	Professional Elective - V	PEC	3	0	0	3	3	30	70	100
2	-	Professional Elective - VI	PEC	3	0	0	3	3	30	70	100
3	-	Open Elective - III	OEC	3	0	0	3	3	30	70	100
4	1980194	Project Stage - II	PROJ	0	0	14	14	7	30	70	100
TOTAL				9	0	14	23	16	120	280	400



MARRI LAXMAN REDDY
Institute of Technology & Management
(Autonomous)



B.TECH. FOUR YEAR DEGREE COURSE
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R19 - LIST OF PROFESSIONAL ELECTIVES

S.No	Course Code	Professional Elective I - (III - I)
1	1950141	Concrete Technology
2	1950142	Theory of Elasticity
3	1950143	Rock Mechanics
S.No	Course Code	Professional Elective II - (III - II)
1	1960144	Prestressed Concrete
2	1960145	Elements of Earth Quake Engineering
3	1960146	Advanced Structural Analysis
S.No	Course Code	Professional Elective III - (IV - I)
1	1970147	Remote Sensing & GIS
2	1970148	Ground Improvement Techniques
3	1970149	Advanced Structural Design
S.No	Course Code	Professional Elective IV - (IV - I)
1	1970150	Irrigation and Hydraulic Structures
2	1970151	Pipeline Engineering
3	1970152	Ground Water Hydrology
S.No	Course Code	Professional Elective V - (IV - II)
1	1980153	Solid Waste Management
2	1980154	Environmental Impact Assessment
3	1980155	Air Pollution
S.No	Course Code	Professional Elective VI - (IV - II)
1	1980156	Airports, Railways and Waterways
2	1980157	Urban Transportation Planning
3	1980158	Finite Element Methods for Civil Engineering

S.No	Course Code	Open Electives
1	1960101	Disaster Preparedness & Planning Management
2	1970102	Remote Sensing & GIS
3	1980103	Environmental Impact Assessment