JAWAHARLALNEHRUTECHNOLOGICALUNIVERSITY-GURAJADA-VIZIANAGARAM
VIZIANAGARAM–535003Andhra Pradesh (India)
(Established by Andhra Pradesh ActNo.22of2021)

Group-B

B.TECH- Civil Engineering

I Year I Semester						
S.No.	**Course Code**	**Course Name**	**L**	**T**	**P**	**Credits**
1.	R23BS01	Linear Algebra & Calculus	3	0	0	3
2.	R23BS04	Engineering Chemistry	3	0	0	3
3.	R23ES07	Introduction to Programming	3	0	0	3
4.	R23ES03	Engineering Graphics	1	0	4	3
5.	R23ES04	Basic Electrical & Electronics Engineering	3	0	0	3
6.	R23BS04	Engineering Chemistry Lab	0	0	2	1
7.	R23ES07	Computer Programming Lab	0	0	3	1.5
8.	R23ES05	Electrical &Electronics Engineering Workshop	0	0	3	1.5
9.	R23MC02	NSS/NCC/Scouts &Guides/Community Service	0	0	1	0.5
		Total				**19.5**

I Year II Semester						
S.No.	**Course Code**	**Course Name**	**L**	**T**	**P**	**Credits**
1.	R23BS02	Differential Equations and Vector Calculus	3	0	0	3
2.	R23BS03	Engineering Physics	3	0	0	3
3.	R23HS01	Communicative English	2	0	0	2
4.	R23ES01	Basic Civil & Mechanical Engineering	3	0	0	3
5.	R23PC01	Engineering Mechanics	3	0	0	3
6.	R23HS01	Communicative English Lab	0	0	2	1
7.	R23BS03	Engineering Physics Lab	0	0	2	1
8.	R23ES06	IT workshop	0	0	2	1
9.	R23ES02	Engineering Workshop	0	0	3	1.5
10.	R23PC01	Engineering Mechanics & Building Practices Lab	0	0	3	1.5
11.	R23MC01	Health and Wellness, Yoga and Sports	0	0	1	0.5
		Total				**20.5**

B.TECH. – CIVIL ENGINEERING

B.Tech. –II Year I Semester

S.No.	Category	Title	L	T	P	Credits
1	BS	Numerical and Statistical Methods	3	0	0	3
2	HSMC	Universal Human Values– Understanding Harmony & Ethical Human Conduct	2	1	0	3
3	Engineering Science	Surveying	3	0	0	3
4	Professional Core	Strength of Materials	3	0	0	3
5	Professional Core	Fluid Mechanics	3	0	0	3
6	Professional Core	Surveying Lab	0	0	3	1.5
7	Professional Core	Strength of Materials Lab	0	0	3	1.5
8	Skill Enhancement Course	Building Planning and Drawing	0	1	2	2
9	Audit Course	Environmental Science	2	0	0	-
Total			**16**	**2**	**8**	**20**

B.Tech. II Year II Semester

S.No.	Category	Title	L	T	P	Credits
1	Management Elective-I	Managerial Economics and Financial Analysis	2	0	0	2
2	Engineering Science	Engineering Geology	3	0	0	3
3	Professional Core	Building Materials and Concrete Technology	3	0	0	3
4	Professional Core	Structural Analysis	3	0	0	3
5	Professional Core	Hydraulics &Hydraulic Machinery	3	0	0	3
6	Professional Core	Concrete Technology Lab	0	0	3	1.5
7	Professional Core	Engineering Geology lab	0	0	3	1.5
8	Skill Enhancement course	Remote Sensing &Geographical Information Systems	0	1	2	2
9	Engineering Science	Design Thinking & Innovation	1	0	2	2
Total			**15**	**1**	**10**	**21**
Mandatory Community Service Project Internship of 08 weeks duration during summer vacation						

B.TECH. – CIVIL ENGINEERING

B.Tech. –III Year I Semester

S.No.	Category	Title	L	T	P	Credits
1	Professional Core	Water Resources Engineering	3	0	0	3
2	Professional Core	Design of Reinforced Concrete Structures	3	0	0	3
3	Professional Core	Geotechnical Engineering	3	0	0	3
5	Professional Elective-I	1. Advanced Structural Analysis 2. Ground Improvement Techniques 3. Repair and Rehabilitation of Highway structures 4. Watershed Development and Management 5. Building Services	3	0	0	3
6	Open Elective-I	1.Green Buildings 2.Construction technology and management	3	0	0	3
7	Professional Core	Geotechnical Engineering Lab	0	0	3	1.5
8	Professional Core	Fluid Mechanics & Hydraulic Machines Lab	0	0	3	1.5
9	Skill Enhancement course	Estimation, Specifications & Contracts	0	1	2	2
10	Engineering Science	Tinkering Lab	0	0	2	1
11	Evaluation of Community Service Internship		-	-	-	2
Total			**15**	**1**	**10**	**23**

B.TECH. – CIVIL ENGINEERING

B.Tech. III Year II Semester

S.NO	Category	Title	L	T	P	Credits
1	Professional Core	Design and Drawing of Steel Structures	3	0	0	3
2	Professional Core	Transportation Engineering	3	0	0	3
3	Professional Core	Environmental Engineering	3	0	0	3
4	Professional Elective-II	a) Earthquake Resistant Design Of Structures b) Geotechnical Engineering-2 c) Transportation Safety And Environment d) Open channel flow e) Cost Effective Housing Techniques	3	0	0	3
5	Professional Elective-III	a) Bridge Engineering b) Water Resource Engineering	3	0	0	3
6	Open Elective-II	a) Disaster management b) Sustainability in Engineering practices	3	0	0	3
7	Professional Core	Environmental Engineering Lab	0	0	3	1.5
8	Professional Core	Transportation Engg. Lab	0	0	3	1.5
9	Skill Enhancement course	Building Information Modelling	0	1	2	2
10	Audit course	Technical paper writing & IPR	2	0	0	-
Total			**20**	**1**	**8**	**23**
Mandatory Industry Internship of 08 weeks duration during summer vacation						

B.Tech.–IV Year I Semester

S.No.	Category	Title	L	T	P	Credits
1	Professional Core	Finite Element Methods	3	0	0	3
2	Management Course-II	Construction Economics and Finance	2	0	0	2
3	Professional Elective-IV	a) Subsurface investigation and instrumentation b) Advanced Environmental Engineering c) Design & drawing of Irrigation Structures	3	0	0	3
4	Professional Elective-V	a) Advanced Structural Engineering b) Environmental Impact and Risk Assessment c) Foundation on Expansive Soils	3	0	0	3
5	Open Elective-III	a) Building technology for engineers b) Environmental impact assessment	3	0	0	3
6	Open Elective-IV	. a) Geo-Spatial Technologies b) Solid waste management	3	0	0	3
7	Skill Enhancement Course	Skills in Civil Engineering software. (STAADPRO/ETABS/CAD/REVIT/SAP)	0	1	2	2
8	Audit Course	Gender Sensitization	2	0	0	-
9	Internship	Evaluation of Industry Internship	-	-	-	2
Total			**19**	**1**	**02**	**21**

B. Tech. IV Year II Semester

S.No.	Category	Title	L	T	P	Credits
1	PR	Internship and Project	**-**	**-**	**24**	**12**