

B.Tech in Civil Engineering (Geographical Information Systems and Remote Sensing)

Year :								Semester I
Subject	Name of the Course	Type of Course	Teaching Scheme					Total Hrs
			L	T	P	S	Credits	
1	Communication Skills for Engineers	I	2	0	1	0	3	4
2	Multi Variable Calculus	I	3	0	1	0	4	5
3	Semi conductor Physics / Biology for Engineers	I	3	0	1	0	4	5
4	Basic Electrical & Electronics Engg. / Engineering Graphics and Introduction to Digital Fabrication	I	3	0	1	0	4	5
5	Programming for Problem Solving - C	C	3	0	1	1	5	8
6	Environmental Impact Analysis	Mng	2	0	0	0	0	2
	Total		16	0	5	1	20	29
Year :	2022-23 winter							Semester II
Subject	Name of the Course	Type of Course	Teaching Scheme					Total Hrs
			L	T	P	S	Credits	
1	Linear Algebra & Differential Equations	T	3	0	0	0	3	3
2	Discrete Mathematics / Engineering Mechanics	T	3	0	0	0	3	3
3	Basic Electrical & Electronics Engg. / Engineering Graphics and Introduction to Digital Fabrication	I	3	0	1	0	4	4
4	Semi conductor Physics / Biology for Engineers	I	3	0	1	0	4	5
5	Engineering Workshop / Introduction of Digital System	I	2	0	1	0	3	4
6	OOPS	C	3	0	1	1	5	8
	Total		17	0	4	1	22	27
Year :	2023-24 Fall							Semester III

<i>Subject</i>	<i>Name of the Course</i>	<i>Type of Course</i>	<i>Teaching Scheme</i>					<i>Total Hrs</i>
			<i>L</i>	<i>T</i>	<i>P</i>	<i>S</i>	<i>Credits</i>	
<i>1</i>	<i>Mathematics-III (Functions of Complex Variables and Transforms)</i>	<i>T</i>	<i>3</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>3</i>	<i>3</i>
<i>2</i>	<i>Environmental Monitoring and Analysis</i>	<i>T</i>	<i>2</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>2</i>	<i>2</i>
<i>3</i>	<i>Mechanics of Materials</i>	<i>I</i>	<i>3</i>	<i>0</i>	<i>1</i>	<i>0</i>	<i>4</i>	<i>5</i>
<i>4</i>	<i>Fluid Mechanics</i>	<i>I</i>	<i>3</i>	<i>0</i>	<i>1</i>	<i>0</i>	<i>4</i>	<i>5</i>
<i>5</i>	<i>Surveying</i>	<i>C</i>	<i>3</i>	<i>0</i>	<i>1</i>	<i>1</i>	<i>5</i>	<i>8</i>
<i>6</i>	<i>Computer designs in Civil Engineering</i>	<i>I</i>	<i>1</i>	<i>0</i>	<i>1</i>	<i>0</i>	<i>3</i>	<i>5</i>
<i>7</i>	<i>Communication Competency & Aptitude Building -1</i>	<i>T</i>	<i>1</i>	<i>0</i>	<i>1</i>	<i>0</i>	<i>2</i>	<i>3</i>
	<i>Total</i>		<i>16</i>	<i>0</i>	<i>5</i>	<i>1</i>	<i>23</i>	<i>28</i>
<i>Year :</i>	<i>2023-24 Winter</i>							<i>Semester IV</i>
<i>Subject</i>	<i>Name of the Course</i>	<i>Type of Course</i>	<i>Teaching Scheme</i>					<i>Total Hrs</i>
			<i>L</i>	<i>T</i>	<i>P</i>	<i>S</i>	<i>Credits</i>	
<i>1</i>	<i>Probability and Statistics</i>	<i>T</i>	<i>3</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>3</i>	<i>3</i>
<i>2</i>	<i>Hydrology and Hydraulic Systems</i>	<i>T</i>	<i>3</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>3</i>	<i>3</i>
<i>3</i>	<i>Construction Engineering</i>	<i>C</i>	<i>3</i>	<i>0</i>	<i>1</i>	<i>1</i>	<i>5</i>	<i>8</i>
<i>4</i>	<i>Geotechnical Engineering</i>	<i>I</i>	<i>3</i>	<i>0</i>	<i>1</i>	<i>0</i>	<i>4</i>	<i>5</i>
<i>5</i>	<i>Program Elective -1</i>	<i>I</i>	<i>3</i>	<i>0</i>	<i>1</i>	<i>0</i>	<i>4</i>	<i>5</i>
<i>6</i>	<i>Structural Analysis</i>	<i>I</i>	<i>3</i>	<i>0</i>	<i>1</i>	<i>0</i>	<i>4</i>	<i>5</i>
<i>7</i>	<i>Communication Competency & Aptitude Building -2</i>	<i>T</i>	<i>1</i>	<i>0</i>	<i>1</i>	<i>0</i>	<i>2</i>	<i>3</i>
	<i>Total</i>		<i>19</i>	<i>0</i>	<i>5</i>	<i>1</i>	<i>25</i>	<i>32</i>
<i>Year :</i>								<i>Semester V</i>
<i>Subject</i>	<i>Name of the Course</i>	<i>Type of Course</i>	<i>Teaching Scheme</i>					<i>Total Hrs</i>
			<i>L</i>	<i>T</i>	<i>P</i>	<i>S</i>	<i>Credits</i>	

1	Design of Reinforced Concrete Structures	I	3	0	0	0	3	5
2	Water Supply & Treatment Systems	T	3	0	0	0	3	3
3	Transportation Engineering	C	3	0	1	1	5	8
4	Advanced Structural Analysis	I	3	0	1	0	4	3
5	Program Elective - II	T	3	0	0	0	3	3
6	Program Elective - III	T	3	0	0	0	3	3
7	Summer Internship	T	0	0	0	0	1	0
7	Communication Competency & Aptitude Building -3	T	1	0	0	1	2	3
	Total		19	0	2	2	24	28
Year :	2024-25 Winter							Semeste VI
Subject	Name of the Course	Type of Course	Teaching Scheme					Total Hrs
			L	T	P	S	Credits	
1	Program Elective - IV	T	2	0	0	0	2	2
2	Program Elective - V	T	2	0	0	0	2	2
3	Construction Estimating and Costing	C	3	0	1	1	5	8
4	Program Elective - VI	T	3	0	0	0	3	3
5	Program Elective - VII	T	3	0	0	0	3	3
6	Civionics	I	1	0	1	0	2	3
7	Civil-3D Designs	I	1	0	1	0	2	6
8	Technical Paper writing		0	0	1	0	0	2
7	Campus to Corporate	T	1	0	1	0	2	3
	Total		16	0	5	1	21	32
Year :	2025-26 Fall							Semester VII
Subject	Name of the Course	Type of Course	Teaching Scheme					Total Hrs
			L	T	P	S	Credits	
1	Program Elective - VIII	T	3	0	0	0	3	3
2	Program Elective - IX	T	3	0	0	0	3	8
4	Construction Planning & Management	T	3	0	0	0	3	3

5	Design of Steel Structures	T	3	0	0	0	3	8
6	Capstone Phase-1		0	0	0	0	3	0
7	Industrial Internship		0	0	0	0	1	0
	Total		12	0	0	0	16	22
Year :	2025-26 Winter							Semester VIII
Subject	Name of the Course	Type of Course	Teaching Scheme					Total Hrs
			L	T	P	S	Credits	
1	Capstone Phase 2		0	0	0	0	9	0
	Total		0	0	0	0	9	0
Total Credits							160	

List of Program Electives

<i>B.Tech in Civil Engineering (Geographical Information Systems and Remote Sensing)</i>							
Sr.No.	Course Name	Course type	L	T	P	S	C
1	Digital Terrain Modeling	I	3	0	1	0	4
2	Remote Sensing & Image Processing	I	3	0	1	0	4
3	Photogrammetry & Drone mapping	T	3	0	0	0	3
4	Spatial data analysis	I	3	0	1	0	4
5	RS & GIS Applications	C	3	0	1	1	5
6	Applied Geoinformatics	T	3	0	0	0	3
7	Earth's Positioning Systems & Digital Cartography	T	3	0	0	0	3
8	Geotectonics and Geomorphology	T	3	0	0	0	3
9	Geo-Informatics in Transport Network Analysis	T	3	0	0	0	3
10	Principles of Satellite Remote Sensing	T	3	0	0	0	3
Total			35				