## **B.Tech. Civil Engg (Spl in Smart Cities)**

Year:				
Subject	Code	Name of the Course	Type of Course	
				L
1		Communication Skills for Engineers	I	2
2		Multi Variable Calculus	I	3
3		Semi conductor Physics / Biology for Engineers	I	3
4		Basic Electrical & Electronics Engg. / Engineering Graphic	I	3
5		Programming for Problem Solving - C	С	3
6		YOGA / Environmental Impact Analysis	Mng	2
		Total		16
37				
Year: Subject	Code	Name of the Course	Type of Course	L
1		Linear Alashus & Differential Equations	T.	2
$\frac{1}{2}$	<del> </del>	Linear Algebra & Differential Equations Discrete Mathematics / Engineering Mechanics	<u>Т</u> Т	3
		Ü	I	3
3		Basic Electrical & Electronics Engg. / Engineering Graphic	I	3
4		Semi conductor Physics / Biology for Engineers		
5		Engineeering Workshop / Introduction of Digital System	I	2
6		OOPS	C	3
7		YOGA / Environmental Impact Analysis	Mng	2
37		Total		19
Year : Subject	Code	Name of the Course	Type of Course	L
1	C1UC321T	Mathematics-III (Functions of Complex Variables and Trar	T	3
2	G1UA301T	Environmental Monitoring and Analysis	T	2
3	G1UA302B	Mechanics of Materials	I	3
4	G1UA303B	Fluid Mechanics	I	3
5	G1UA304C	Surveying	С	3
6	G1UA305B	Computer designs in Civil Engineering	I	1
7	K1UC320B	Communication Competency & Aptitude Building -1	T	1
		Total		16
Year:				
Subject	Code	Name of the Course	Type of Course	L
1	C1UC421T	Probability and Statistics	Т	3
	104777740477	ID 1 0 0 1 011	T	3
3	G1UB401T G1UA401C	Demography for Smart Cities  Construction Engineering	C	3

4	G1UA401B	Geotechnical Engineering	I	3
5	G1UA402B	Remote Sensing & Geographical Information System	I	3
6	G1UA403B	Structural Analysis	I	3
7	O1UA421B	Communication Competency & Aptitude Building -2	T	1
•	01011.215	Total	1	19
Year:		10001		10
Subject	Code	Name of the Course	Type of Course	L
1	G1UA501B	Design of Reinforced Concrete Structures	I	3
2	G1UA502T	Water Supply & Treatment Systems	Т	3
3	G1UA503C	Transportation Engineering	C	3
4	G1UA504T	Advanced Structural Analysis	I	3
5	G1UA505T	Advanced Materials for Smart Structures	Т	3
6	G1UA510T	Smart Infrastructure systems	T	3
7	G1UA508R	Summer Internship	T	0
8	K1UC523B	Communication Competency & Aptitude Building -3	T	1
9	G1UA306B	Design Thinking	I	1
		Total		20
Year:				
Subject	Code	Name of the Course	Type of Course	
				L
1	G1UB601T	Sustainable Transportation	Т	L 3
1 2	G1UB601T G1UB604T	Sustainable Transportation Urban Planning and Management	T T	
				3
2	G1UB604T	Urban Planning and Management	Т	3
2 3	G1UB604T G1UB602B	Urban Planning and Management GIS for Smart Cities	T	3 3
2 3 4	G1UB604T G1UB602B G1UB603B	Urban Planning and Management GIS for Smart Cities AI and ML for Smart Cities	T I I	3 3 3
2 3 4 5	G1UB604T G1UB602B G1UB603B G1UA610B	Urban Planning and Management GIS for Smart Cities AI and ML for Smart Cities Civionics	T I I	3 3 3 3
2 3 4 5 6	G1UB604T G1UB602B G1UB603B G1UA610B G1UA611B	Urban Planning and Management GIS for Smart Cities AI and ML for Smart Cities Civionics Civil-3D Designs	T I I I I I	3 3 3 1 1
2 3 4 5 6 7	G1UB604T G1UB602B G1UB603B G1UA610B G1UA611B G1UA612L	Urban Planning and Management GIS for Smart Cities AI and ML for Smart Cities Civionics Civil-3D Designs Technical Paper writing	T I I I PR	3 3 3 1 1
2 3 4 5 6 7 8	G1UB604T G1UB602B G1UB603B G1UA610B G1UA611B G1UA612L O1UA602B	Urban Planning and Management GIS for Smart Cities AI and ML for Smart Cities Civionics Civil-3D Designs Technical Paper writing Campus to Corporate	T I I I I PR I	3 3 3 1 1 0
2 3 4 5 6 7 8	G1UB604T G1UB602B G1UB603B G1UA610B G1UA611B G1UA612L O1UA602B	Urban Planning and Management GIS for Smart Cities AI and ML for Smart Cities Civionics Civil-3D Designs Technical Paper writing Campus to Corporate Design Thinking-II	T I I I I PR I	3 3 3 1 1 0 1
2 3 4 5 6 7 8 9	G1UB604T G1UB602B G1UB603B G1UA610B G1UA611B G1UA612L O1UA602B	Urban Planning and Management GIS for Smart Cities AI and ML for Smart Cities Civionics Civil-3D Designs Technical Paper writing Campus to Corporate Design Thinking-II	T I I I I PR I	3 3 3 1 1 0 1 1 16
2 3 4 5 6 7 8 9	G1UB604T G1UB602B G1UB603B G1UA610B G1UA611B G1UA612L O1UA602B G1UA613B	Urban Planning and Management GIS for Smart Cities AI and ML for Smart Cities Civionics Civil-3D Designs Technical Paper writing Campus to Corporate Design Thinking-II Total	T I I I I PR I I T Type of	3 3 3 1 1 0 1
2 3 4 5 6 7 8 9	G1UB604T G1UB602B G1UB603B G1UA610B G1UA611B G1UA612L O1UA602B G1UA613B  Code	Urban Planning and Management GIS for Smart Cities AI and ML for Smart Cities Civionics Civil-3D Designs Technical Paper writing Campus to Corporate Design Thinking-II Total  Name of the Course  Program Elective - III	T I I I I PR I I T Type of Course	3 3 3 1 1 0 1 1 16
2 3 4 5 6 7 8 9 Year:  Subject	G1UB604T G1UB602B G1UB603B G1UA610B G1UA611B G1UA612L O1UA602B G1UA613B  Code  Will be provide Will be provide	Urban Planning and Management GIS for Smart Cities AI and ML for Smart Cities Civionics Civil-3D Designs Technical Paper writing Campus to Corporate Design Thinking-II Total  Name of the Course  Program Elective - III Program Elective - IV	T I I I I PR I I T T T T	3 3 3 3 1 1 0 1 16
2 3 4 5 6 7 8 9  Year:  Subject	G1UB604T G1UB602B G1UB603B G1UA610B G1UA611B G1UA612L O1UA602B G1UA613B  Code  Will be provide Will be provide	Urban Planning and Management GIS for Smart Cities AI and ML for Smart Cities Civionics Civil-3D Designs Technical Paper writing Campus to Corporate Design Thinking-II Total  Name of the Course  Program Elective - III	T I I I I PR I I T Type of Course	3 3 3 1 1 0 1 1 16
2 3 4 5 6 7 8 9 Year:  Subject	G1UB604T G1UB602B G1UB603B G1UA610B G1UA611B G1UA612L O1UA602B G1UA613B  Code  Will be provide Will be provide	Urban Planning and Management GIS for Smart Cities AI and ML for Smart Cities Civionics Civil-3D Designs Technical Paper writing Campus to Corporate Design Thinking-II Total  Name of the Course  Program Elective - III Program Elective - IV	T I I I I PR I I T T T T	3 3 3 1 1 0 1 1 16
2 3 4 5 6 7 8 9  Year:  Subject  1 2 3	G1UB604T G1UB602B G1UB603B G1UA610B G1UA611B G1UA612L O1UA602B G1UA613B  Code  Will be provide Will be provide	Urban Planning and Management GIS for Smart Cities AI and ML for Smart Cities Civionics Civil-3D Designs Technical Paper writing Campus to Corporate Design Thinking-II Total  Name of the Course  Program Elective - III Program Elective - IV Program Elective - V	T I I I I PR I I T T T T T	3 3 3 1 1 0 1 16 L 3 3 3 3
2 3 4 5 6 7 8 9 Year:  Subject  1 2 3 4	G1UB604T G1UB602B G1UB603B G1UA610B G1UA611B G1UA612L O1UA602B G1UA613B  Code  Will be provide Will be provide Will be provide G1UA703T	Urban Planning and Management GIS for Smart Cities AI and ML for Smart Cities Civionics Civil-3D Designs Technical Paper writing Campus to Corporate Design Thinking-II Total  Name of the Course  Program Elective - III Program Elective - IV Construction Planning & Management	T I I I I I PR I I T T T T T T	3 3 3 1 1 0 1 16  L 3 3 3 3 3 3
2 3 4 5 6 7 8 9 Year:  Subject  1 2 3 4 5	G1UB604T G1UB602B G1UB603B G1UA610B G1UA611B G1UA612L O1UA602B G1UA613B  Code  Will be provide Will be provide Will be provide G1UA703T G1UA704C	Urban Planning and Management GIS for Smart Cities AI and ML for Smart Cities Civionics Civil-3D Designs Technical Paper writing Campus to Corporate Design Thinking-II Total  Name of the Course  Program Elective - III Program Elective - IV Program Elective - V Construction Planning & Management Design of Steel Structures	T I I I I PR I I T T T T T T	3 3 3 1 1 0 1 1 16  L 3 3 3 3 3 3 3

Year:				
Subject	Code Name of the Course		Type of Course	
Subject	Code	Name of the Course		L
1	Will be provided	Capstone Phase 2		0
		Total		0

Total Credits 162

## **List of Program Electives**

## B.Tech Civil Engg (With Specilization in Smart Cities)

Sr.No.	Course Code	Course Name	Course type	L
1	New course	Sustainable Transportation	T	3
2	New course	Demography for Smart City	T	3
3	New course	Value Engineering and Valuation	T	3
4	New course	Infrastructure Development	T	3
5	New course	Metropolitan Planning, Development and Management	T	3
6	New course	GIS for Smart Cities	I	3
7	New course	AI & ML for Smart Cities	I	3
8	New course	Smart Infrastructure Systems	T	3
9	New course	Advanced Materials for Smart Structures	T	3
10	New course	Urban Planning and Management	T	3

Total

				Semester I
		Demester 1		
T	eachin	Total Hrs		
Т	P	S	Credits	Total lifs
0	1	0	3	4
0	1	0	4	5
0	1	0	4	5
0	1	0	4	5
0	1	1	5	8
0	0	0	0	2
0	5	1	20	29
				O TT
				Semester II
r	eachin'	g Scheme		Total Hrs
Т	P	s	Credits	
0	0	0	3	3
0	0	0	3	3
0	1	0	4	4
0	1	0	4	5
0	1	0	3	4
0	1	1	5	8
0	0	0	0	2
0	4	1	22	29
		Semester III		
T	eachin'	g Scheme		
Т	P	S	Credits	Total Hrs
0	0	0	3	3
0	0	0	2	2
0	1	0	4	5
0	1	0	4	5
0	1	1	5	8
0	1	0	3	5
0	1	0	2	3
0	5	1	23	28
				Semester IV
7	eachin	Total Hrs		
Т	P	S	Credits	
0	0	0	3	3
0	0	0	3	3
0	1	1	5	8

0	1	0	4	5
0	1	0	4	5
0	1	0	4	5
0	1	0	2	3
0	5	1	$\frac{2}{25}$	32
U	Э	1	20	Semester V
				Semester v
T	'eachin	Total Hrs		
Т	P	S	Credits	
0	1	0	4	5
0	0	0	3	3
0	1	1	5	8
0	0	0	3	3
0	0	0	3	3
0	0	0	3	3
0	0	0	1	0
0	0	1	2	3
0	1	0	0	3
0	3	2	24	31
				Semeste VI
т	'aaahin	g Scheme		
_	eaciiii	M-4-1 II		
				Total Hra
Т	P	S	Credits	Total Hrs
<b>T</b>	<b>P</b>	s o	Credits	Total Hrs
		_		
0	0	0	3	3
0	0	0	3	3
0 0	0 0 1	0 0 0	3 3 4	3 3 5
0 0 0	0 0 1 1	0 0 0	3 3 4 4	3 3 5 5
0 0 0 0	0 0 1 1	0 0 0 0	3 3 4 4 2	3 3 5 5
0 0 0 0 0	0 0 1 1 1	0 0 0 0 0	3 3 4 4 2 2	3 3 5 5 3 3
0 0 0 0 0 0	0 0 1 1 1 1	0 0 0 0 0 0	3 3 4 4 2 2 0	3 3 5 5 3 3 2
0 0 0 0 0 0	0 0 1 1 1 1 1	0 0 0 0 0 0	3 3 4 4 2 2 2 0	3 3 5 5 3 3 2 3
0 0 0 0 0 0 0	0 0 1 1 1 1 1 1	0 0 0 0 0 0 0	3 3 4 4 2 2 0 2 0 2	3 3 5 5 5 3 3 2 3 3 3
0 0 0 0 0 0 0	0 0 1 1 1 1 1 1 7	0 0 0 0 0 0 0	3 3 4 4 2 2 0 2 0 2	3 3 5 5 5 3 3 2 3 3 3 Semester VII
0 0 0 0 0 0 0	0 0 1 1 1 1 1 1 7	0 0 0 0 0 0 0	3 3 4 4 2 2 0 2 0 2	3 3 5 5 5 3 3 2 3 3 3
0 0 0 0 0 0 0 0 0	0 0 1 1 1 1 1 7	0 0 0 0 0 0 0 0 0	3 3 4 4 2 2 0 2 0 20  Credits	3 3 5 5 5 3 3 2 3 3 30 Semester VII  Total Hrs
0 0 0 0 0 0 0 0 0	0 0 1 1 1 1 1 7	0 0 0 0 0 0 0 0 0 0	3 3 4 4 2 2 0 2 0 2 0 20  Credits 3 3	3 3 5 5 5 3 3 2 3 3 30 Semester VII  Total Hrs
0 0 0 0 0 0 0 0 0	0 0 1 1 1 1 1 7	0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 3 4 4 4 2 2 0 2 0 20  Credits 3 3 3	3 3 5 5 5 3 3 2 3 3 30 Semester VII  Total Hrs
0 0 0 0 0 0 0 0 0 T	0 0 1 1 1 1 1 7	0 0 0 0 0 0 0 0 0 0	3 3 4 4 2 2 0 2 0 2 0 20  Credits 3 3	3 3 5 5 5 3 3 2 3 3 30 Semester VII  Total Hrs
0 0 0 0 0 0 0 0 0	0 0 1 1 1 1 1 7	0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 3 4 4 4 2 2 0 2 0 20  Credits 3 3 3	3 3 5 5 5 3 3 2 3 3 30 Semester VII  Total Hrs
0 0 0 0 0 0 0 0 0 T	0 0 1 1 1 1 1 7 Peachin P 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 3 4 4 4 2 2 0 2 0 20  Credits 3 3 3 3	3 3 5 5 5 3 3 2 3 3 30 Semester VII  Total Hrs  3 8 3 3 3 3 3
0 0 0 0 0 0 0 0 0 0	0 0 1 1 1 1 1 7 Peachin	0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 3 4 4 4 2 2 0 2 0 20  Credits 3 3 3 3 3	3 3 5 5 5 3 3 3 2 3 3 30 Semester VII  Total Hrs  3 8 3 8 3 8

		Semester VIII		
r	eachin'	Total Hrs		
Т	P	s	Credits	Total firs
0	0	0	9	0
0	0	0	9	0

T	Р	S	С
0	0	0	3
0	0	0	3
0	0	0	3
0	0	0	3
0	0	0	3
0	1	0	4
0	1	0	4
0	0	0	3
0	0	0	3
0	0	0	3