

## Civil and Infrastructure Engineering 2023

### SEMESTER - I (Common for all B.Tech Courses)

S.No	Old Code	New	Course	L	T	P	C
1	MA 101	MA 101	Calculus	3	1	0	8
2	PH 101	PH101T	Quantum Physics and Applications	2	1	0	6
3	CH 102	CH101T	Fundamental Concepts and Applications of Chemistry	3	0	0	6
4	BB 103	BB101T	Introduction to Modern biology	3	0	0	6
5	PH 113	PH101L	Hands on Science Laboratory - I	0	0	3	3
6	CS 101	CS 101	Computer Programming	3	0	2	8
7	HS 106	HS101T	Design Thinking and Creativity	1	0	0	PP/NP
8	HS 103	HS 120O	Introduction to Fine Arts	0	0	1	PP/NP
9	NO107/	NO107/	NSO/NSS/NCC/NCA	0	0	2	2
First Semester Total Credits							39

### Semester II

S.No	Old Code	New	Course Name	L	T	P	Total Credits
1	CE 101	CE101T	Introduction to Civil Engineering	2	1	0	6
2	CS 201	CS101T	Data Structures & Algorithms	3	0	0	6
3	CS 211	CS101L	Data Structures & Algorithms Lab	0	0	3	3
4	MA 103	MS103T	Differential Equations I (2nd Half Semester)	3	1	0	4
5	MA 406	MA203T	Introduction to Numerical Methods (1st Half	3	1	0	4
6	ME 201	ME201T	Engineering Mechanics	2	1	0	6
7	ME 111	ME101C	Engineering Graphics Lab	1	0	3	5
8	ME 113	ME101L	Hands-on Engineering Lab	0	0	3	3
9	NO107/	NO107/	NSO/NSS/NCC/NCA	1	0	0	2
Total Number of Credits							39

### Semester III

<u>S.No</u>	<u>Old Code</u>	<u>New</u>	<u>Course Name</u>	<u>L</u>	<u>T</u>	<u>P</u>	<u>C</u>
1	ME 203	ME203T	Fluid Mechanics	2	1	0	6
2	ME 222	ME205T	Mechanics of Materials	2	1	0	6
3	CE 201	CE201C	Building and Construction Materials	1	1	2	6
4	HS 201	HS201T	Economics	2	1	0	6
5	CE 204	CE201T	Hydraulics Engineering	2	1	0	6
6	CE 203	CE202C	Building Planning and Drawing	2	0	2	6
Total Credits							36

### Semester IV

<u>S.No</u>	<u>Old Code</u>	<u>New</u>	<u>Course Name</u>	<u>L</u>	<u>T</u>	<u>P</u>	<u>C</u>
1	CE 202	CE202T	Surveying and Geomatics	2	1	0	6
2	CE 212	CE202L	Surveying and Geomatics Laboratory	0	0	3	3
3	CE 205	CE203T	Structural Analysis	2	1	0	6
4	ME 312	ME204L	Solid Mechanics Laboratory	0	0	3	3
5	ME 224	ME202L	Fluid Mechanics Laboratory	0	0	3	3
6	CE 301	CE301T	Environmental Studies	3	0	0	6

7	CE 206	CE204T	Water Resources Engineering	2	1	0	6
			Institute Elective-I	2	1	0	6
			Total Credits				39
<b>Semester V</b>							
<b>S.No</b>	<b>Old Code</b>	<b>New</b>	<b>Course Name</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1	CE 302	CE302T	Design of Concrete Structures	2	1	0	6
2	CE 303	CE303T	Geotechnical Engineering	2	1	0	6
3	CE 304	CE304T	Transportation Engineering	2	1	0	6
4	CE 311	CE302L	Transportation Engineering Laboratory	0	0	3	3
5	CE 312	CE303L	Geotechnical Engineering Laboratory	0	0	3	3
6	CE 305	CE305T	Environmental Engineering	2	1	0	6
7	CE 313	CE304L	Environmental Engineering Laboratory	0	0	3	3
8	CE 314	CE305L	Civil Engineering Software Laboratory	0	0	3	3
			Total Credits				36
<b>Semester VI</b>							
<b>S.No</b>	<b>Old Code</b>	<b>New</b>	<b>Course Name</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1	CE 306	CE306T	Design of Steel Structures	2	1	0	6
2	CE 310	CE310C	Sensors Technologies & Instrumentation in Civil	2	0	2	6
3	CE 308	CE307T	Foundation Engineering	2	1	0	6
4	CE 309	CE308T	Estimation and Costing in Civil Engineering	2	1	0	6
5			Institute Elective-II	2	1	0	6
6			HSS Elective-I [from Basket: 1 OR 2]	2	1	0	6
			Total Credits				36
<b>Semester VII</b>							
<b>S.No</b>	<b>Old Code</b>	<b>New</b>	<b>Course Name</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1	CE 401	CE309T	Construction Engineering & Management	3	0	0	6
2	CE 403	CE401C	Civil and Infrastructure Engineering Design	1	0	1	3
3	CE 402	CE401P	BTP-I	0	0	6	6
4			Institute Elective-III	2	1	0	6
5			HSS Elective-II	2	1	0	6
			Total Credits				27
<b>Semester VIII</b>							
<b>S.No</b>	<b>Old Code</b>	<b>New</b>	<b>Course Name</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1	CE 404	CE 402P	BTP-II/Program Elective-II	2	1	0	6
2			Institute Elective-IV	0	0	0	6
			Total Credits				12
			Overall Credits Required (Minimum)				<b>260</b>