

## 2022 - Civil and Infrastructure Engineering

### Semester I

S. No	Course Code	Course Name	L	T	P	C
1	CH 102	Fundamental concepts and applications of chemistry	3	0	0	6
2	MA 109	Calculus I (1st Half)	3	1	0	4
3	MA 121	Calculus II (2nd Half)	3	1	0	4
4	PH 101	Quantum Physics and Applications	2	1	0	6
5	BB 103	Introduction to Modern Biology	3	0	0	6
6	CS 103	Introduction to Programming - 1 (Using C) (1st Half)	3	0	2	4
7	EE 103	Introduction to Programming - 2 (Using Python) (2nd Half)	3	0	2	4
8	PH 113	Hands on Science Laboratory - I	0	0	3	3
9	HS 103	Introduction to Fine Arts				PP/NP
10	HS 106	Design Thinking and Creativity				PP/NP
11	NO 101/ NO 103	National Sports Organization (NSO)/National Service Scheme (NSS)				PP/NP
		Total Credits				37

### Semester II

S. No	Course Code	Course Name	L	T	P	C
1	CE 101	Introduction to Civil Engineering	2	1	0	6
2	MA 206	Introduction to Numerical Methods (1st Half)	3	1	0	4
3	MA 103	Differential Equations - I (2nd Half)	3	1	0	4
4	ME 111	Engineering Graphics Laboratory	1	0	3	5
5	CS 201	Data Structures and Algorithms	3	0	0	6
6	CS 211	Data Structures and Algorithms Laboratory	0	0	3	3
7	ME 113	Hands on Engineering Laboratory	0	0	3	3
8	ME 201	Engineering Mechanics	2	1	0	6
9	NO 102/ NO 104	National Sports Organization (NSO)/National Service Scheme (NSS)				PP/NP
		Total Credits				37

### Semester III

S. No	Course Code	Course Name	L	T	P	C
1	ME 203	Fluid Mechanics	2	1	0	6

2	ME 222	Mechanics of Materials	2	1	0	6
3	CE 201	Building and Construction Materials	1	1	2	6
4	HS 201	Economics	2	1	0	6
5	CE 202	Surveying and Geomatics	2	1	0	6
6	CE 203	Building Planning and Drawing	2	0	2	6
		Total Credits				36

### Semester IV

S. No	Course Code	Course Name	L	T	P	C
1	CE 204	Hydraulic Engineering	2	1	0	6
2	CE 205	Structural Analysis	2	1	0	6
3	ME 312	Solid Mechanics Laboratory	0	0	3	3
4	ME 224	Fluid Mechanics Lab	0	0	3	3
5	CE 212	Surveying and Geomatics Laboratory	0	0	3	3
6	CE 301	Environmental Studies	3	0	0	6
7	CE 206	Water Resources Engineering	2	1	0	6
8		Institute Elective-I	2	1	0	6
		Total number of credits				39

### Semester V

S. No	Course Code	Course Name	L	T	P	C
1	CE 302	Design of Concrete Structures	2	1	0	6
2	CE 303	Geotechnical Engineering	2	1	0	6
3	CE 304	Transportation Engineering	2	1	0	6
4	CE 311	Transportation Engineering Laboratory	0	0	3	3
5	CE 312	Geotechnical Engineering Laboratory	0	0	3	3
6	CE 305	Environmental Engineering	2	1	0	6
7	CE 313	Environmental Engineering Laboratory	0	0	3	3
8	CE 314	Civil Engineering Software Laboratory	0	0	3	3
		Total Credits				36

### Semester VI

S. No	Course Code	Course Name	L	T	P	C
1	CE 306	Design of Steel Structures	2	1	0	6
2	CE 310	Sensors Technologies & Instrumentation in Civil Engineering	2	0	2	6
3	CE 308	Foundation Engineering	2	1	0	6

4	CE 315	Civil Engineering Credit Seminar	0	0	3	3
5	CE 309	Estimation and Costing in Civil Engineering	2	0	0	3
6		Institute Elective-II	2	1	0	6
7		HSS Elective-I [from Basket: 1 OR 2] (Professional/Applied Ethics)	2	1	0	6
		<b>Total Credits</b>				<b>36</b>

### Semester VII

<b>S. No</b>	<b>Course Code</b>	<b>Course Name</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1	CE 401	Construction Engineering & Management	2	1	0	6
2	CE 403	Civil and Infrastructure Engineering Design	1	0	1	3
3		Institute Elective-III	2	1	0	6
4		HSS Basket 1 or 2 (Elective-II)	2	1	0	6
5	CE 402	BTP-I	0	0	6	6
		<b>Total Credits</b>				<b>27</b>

### VIII Semester

<b>S. No</b>	<b>Course Code</b>	<b>Course Name</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1	CE 404/	BTP-II/Program Elective-II	2	1	0	6
2		Institute Elective-IV				6
		<b>Total Credits</b>				<b>12</b>
		<b>Total required</b>				<b>260</b>