

02 Yr M.Tech. Programme (Structural Engineering) with CBCS

| SEMESTER-I | | | | | |
|------------|--------------|-----------------------------------|---------------|------------|------|
| Sr. No. | Subject Code | Courses | L-T-P | Credits | |
| | | THEORY | | | |
| 1 | | Generic Elective | 3-1-0 | 4 | GE1 |
| 2 | CE541 | Advanced Construction Materials | 2-1-0 | 3 | C1 |
| 3 | CE543 | Applied Elasticity and Plasticity | 2-1-0 | 3 | C2 |
| 4 | CE545 | Structural Dynamics | 2-1-0 | 3 | C3 |
| 5 | | Elective - 1 | 2-1-0 | 3 | DSE1 |
| 6 | | Open Elective I | 3-0-0 | 3 | OEI |
| | | PRACTICALS | | | |
| 7 | CE553 | CAD Lab | 0-0-3 | 2 | C4 |
| 8 | CE511 | Seminar | 0-0-3 | 2 | SEC1 |
| 9 | GP | General Proficiency | - | Non Credit | |
| | | Total | 12-5-5 | 23 | |
| | | Total Contact Hours | 22 | | |

Elective - I

1. CE 547: Finite Element Method
2. CE 549: Solid Mechanics

Generic Elective (GE1)

1. MA 406 Operation Research
2. MA 507 Optimization Techniques
3. MA 402 Modeling and Simulation

Open Elective I

Courses offered from other schools

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| SEMESTER-II(Batch 2015 onwards) | | | | | |
|---------------------------------|--------------|------------------------------|---------|------------|------|
| Sr. No. | Subject Code | Courses | L-T-P | Credits | |
| | | <u>THEORY</u> | | | |
| 1 | CE542 | Prestressed Concrete | 3-1-0 | 4 | C5 |
| 2 | CE544 | Advanced Structural Analysis | 2-1-0 | 3 | C6 |
| 3 | CE546 | Advanced Concrete Design | 3-1-0 | 4 | C7 |
| 4 | CE548 | Bridge Design | 3-1-0 | 4 | C8 |
| 5 | | Specialization Elective - I | 3-1-0 | 4 | DSE2 |
| | | <u>PRACTICALS</u> | | | |
| 6 | CE556 | Structural Analysis Lab – I | 0-0-3 | 2 | C9 |
| 7 | CE516 | Project | 0-0-10 | 5 | DP1 |
| 8 | GP | General Proficiency | - | Non Credit | |
| | | Total | 12-5-13 | 26 | |
| | | Total Contact Hours | 30 | | |

Specialization Elective I (DSE 2)

- o CE 552: Design of Tall Buildings
- o CE 554: Earthquake Resistant Design of Structures

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| SEMESTER-III | | | | | |
|---------------------|--------------|------------------------------|----------|------------|------|
| Sr. No. | Subject Code | Courses | L-T-P | Credits | |
| <u>THEORY</u> | | | | | |
| 1 | CE641 | Plates and Shells | 2-1-0 | 3 | C10 |
| 2 | CE643 | Advanced Steel Design | 3-1-0 | 4 | C11 |
| 3 | | Specialization Elective - II | 3-1-0 | 4 | DSE3 |
| <u>PRACTICALE</u> | | | | | |
| 4 | CE617 | Dissertation Part - I | 2* -0-16 | 8 | DP2 |
| 5 | GP | General Proficiency | - | Non Credit | |
| Total | | | 8-3-16 | 19 | |
| Total Contact Hours | | | 27 | | |

* This will not be a usual lecture session, but this one is one to one interaction of each student with the concerned faculty member

Specialization Elective II(DSE 3)

- o CE645: Building Services
- o CE647: Hydraulic Structures
- o CE649: Rock Mechanics and Tunneling

| SEMESTER-IV | | | | | |
|---------------------|--------------|------------------------|-------|------------|-----|
| Sr. No. | Subject Code | Courses | L-T-P | Credits | |
| <u>THEORY</u> | | | | | |
| 1 | CE620 | Dissertation Part - II | | 22 | DP3 |
| 2 | GP | General Proficiency | - | Non Credit | |
| Total | | | | 22 | |
| Total Contact Hours | | | - | | |

Grand Total Credits: 90




