## NIRMA UNIVERSITY

INSTITUTE OF TECHNOLOGY

## Proposed Teaching \& Examination Scheme

## B. Tech. Civil Engineering

## Semester-VII

w. e. f. Academic Year 2025-26

| Course Code | Course Title | Teaching Scheme (hours/week) |  |  |  | Examination Scheme |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | L | T | P | C | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Duratio } \\ n \\ \text { Hours } \end{array} \\ \hline \text { SEE } \\ \hline \end{array}$ | Component Weightage |  |  |
|  |  |  |  |  |  |  | CE | $\begin{aligned} & \hline \mathbf{L P} \\ & \mathbf{W} \\ & \hline \end{aligned}$ | $\begin{gathered} \hline \mathbf{S E} \\ \mathbf{E} \\ \hline \end{gathered}$ |
|  | Professional Practice | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
|  | Research Methodology* | 0 | 0 | 4 | 4 | - | - | 0.5 | - |
|  Department Elective- <br> III  |  | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
|  |  | 3 | 0 | 2 |  |  | 0.3 | 0.3 | 0.4 |
|  |  | 2 | 1 | 2 |  |  | 0.3 | 0.3 | 0.4 |
|  | Department ElectiveIV | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
|  |  | 3 | 0 | 2 |  |  | 0.3 | 0.3 | 0.4 |
|  |  | 2 | 1 | 2 |  |  | 0.3 | 0.3 | 0.4 |
|  | Elective Course-II under Minor | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
|  |  | 3 | 0 | 2 |  |  | 0.3 | 0.3 | 0.4 |
|  |  | 2 | 1 | 2 |  |  | 0.3 | 0.3 | 0.4 |
|  | Total | - | - | - | 20 | - | - | - | - |

*The course will be spread over two semesters (semester 6 and semester 7 ). 4 credits will be awarded on successful completion of examination components at the end of semester 7 .
w.e.f. for first year students admitted in 2022-23 and Diploma to Degree students admitted in 2023-24 onwards

## Department Elective-III

| Sr. <br> No. | Course <br> Code | Course Title | L | T | P | C |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: |
| 1. |  | Prestressed Concrete | 3 | 1 | 0 | 4 |
| 2. | Earthquake Resistant Design of Structures | 3 | 1 | 0 | 4 |  |
| 3. | Building Services | 3 | 1 | 0 | 4 |  |
| 4. | Formwork Technologies | 3 | 1 | 0 | 4 |  |
| 5. | Ground Improvement Techniques | 3 | 0 | 2 | 4 |  |
| 6. | Pavement Engineering | 3 | 1 | 0 | 4 |  |
| 7. | Air and Noise Pollution | 3 | 1 | 0 | 4 |  |

## Department Elective-IV

| Sr. <br> No. | Course <br> Code | Course Title | L | T | P | C |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- |
| 1. | Advanced Design of Steel Structures | 3 | 0 | 2 | 4 |  |
| 2. | Advanced Solid Mechanics | 3 | 1 | 0 | 4 |  |
| 3. | Advances in Construction Management* | 3 | 1 | 0 | 4 |  |
| 4. | Soil Exploration | 2 | 1 | 2 | 4 |  |
| 5. | Infrastructure Management | 3 | 1 | 0 | 4 |  |
| 6. | Urban Transportation Planning | 3 | 1 | 0 | 4 |  |
| 7. | Hydraulic Structures | 3 | 1 | 0 | 4 |  |

* Advances in Construction Management will not be offered to the students who have opted for Minor in Construction Technology and Management

