SIR PADAMPAT SINGHANIA UNIVERSITY

Course Structure of 4-Year B. Tech Programme

Semester & Session – Even Semester 2022-23

**Department of Civil Engineering**

**Semester - II (CE-II A) Number of Students: 01**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S. No.** | **Course Code** | **Category** | **Course Title** | **L** | **T** | **P** | **S** | **Credit (s)** | **Hrs/ Week** |
| 1 | HUC2201 | Comm. Skills | Written Communication | 2 | 0 | 0 | 0 | 2 | 2 |
| 2 | ECE2201 | Prof. skills | Professional ethics & social responsibility | 1 | 0 | 0 | 0 | 1 | 1 |
| 3 | CSE2207 | BS | Python programming | 2 | 0 | 1 | 0 | 3 | 4 |
| 4 | MAS2202 | BS | Engineering Mathematics –II | 3 | 0 | 0 | 0 | 3 | 3 |
| 5 | CHS2201 | BS | Chemistry | 3 | 0 | 0 | 0 | 3 | 3 |
| 6 | CHS2202 | BS | Chemistry Lab | 0 | 0 | 1 | 0 | 1 | 2 |
| 7 | MEE2201 | ES | Engineering Mechanics | 3 | 0 | 0 | 0 | 3 | 3 |
| 8 | MEE2202 | ES | Workshop Practice | 0 | 0 | 1 | 0 | 1 | 2 |
| 9 | MEE2203 | ES | Engineering Graphics | 3 | 0 | 0 | 0 | 3 | 3 |
| 10 | MEE2204 | ES | Engineering Graphics lab | 0 | 0 | 1 | 0 | 1 | 2 |
| Total Credits | | | | | | | | | 21 |
| Total Contact hours/week | | | | | | | | | 25 |

**Semester - IV (CE-IV A) Number of Students: 00**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S. No.** | **Course Code** | **Category** | **Course Title** | **L** | **T** | **P** | **S** | **Credit (s)** | **Hrs/ Week** |
| 1 |  |  |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |  |  |
| 10 |  |  |  |  |  |  |  |  |  |
| Total Credits | | | | | | | | |  |
| Total Contact hours/week | | | | | | | | |  |

**Semester - VI (CE-VI A) Number of Students:01**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S. No.** | **Course Code** | **Category** | **Course Title** | **L** | **T** | **P** | **S** | **Credit (s)** | **Hrs/ Week** |
| 1 | CE-3308 | PCC | Design and Drawing of Steel Structures | 3 | 0 | 0 | 1 | 4 | 3 |
| 2 | CE-3309 | PCC | Design and Drawing of Steel Structures Lab | 0 | 0 | 1 | 0 | 1 | 2 |
| 3 | CE-2310 | PCC | Environmental Engineering | 3 | 0 | 0 | 0 | 3 | 3 |
| 4 | CE-2311 | PCC | Environmental Engineering Lab | 0 | 0 | 1 | 0 | 1 | 2 |
| 5 | CE-3312 | PCC | Water Resource Engineering | 3 | 1 | 0 | 0 | 4 | 4 |
| 6 | CE-2313 | ESC | Software Applications in Civil Engineering | 0 | 0 | 1 | 0 | 1 | 2 |
| 7 | CE-3033 | PEC | Department Level Optional Course – III (Pavement Design) | 3 | 0 | 0 | 0 | 3 | 3 |
| 8 | CE-4100 | PRJ | Minor Project | 0 | 0 | 0 | 3 | 3 | - |
| 9 | HU-3015 | OEC | Interview Skills | 3 | 0 | 0 | 0 | 3 | 3 |
| 10 | AM-2006 | VC | Anandam-an exercise of trusteeship | - | - | - | 2 | 2 | - |
| Total Credits | | | | | | | | | 25 |
| Total Contact hours/week | | | | | | | | | 22 |

**Semester - VIII (CE-VIII A) Number of Students:04**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S. No.** | **Course Code** | **Category** | **Course Title** | **L** | **T** | **P** | **S** | **Credit (s)** | **Hrs/ Week** |
| 1 | CE-4007 |  | Design and Drawing of Reinforced Concrete Structures | 4 | 1 | 0 |  | 5 | 5 |
| 2 | CE-4008 |  | Construction Management | 4 | 1 | 0 |  | 5 | 5 |
| 3 | CE-4124 |  | Pavement Design and Construction (DE – IV) | 4 | 0 | 0 |  | 4 | 4 |
| 4 | CE-4125 |  | Pavement Design and Construction Lab (DE - IV Lab) | 0 | 0 | 1 |  | 1 | 2 |
| 5 | EC-4154 |  | IPR & Patenting | 3 | 0 | 0 |  | 3 | 3 |
| 6 | CE-4300 |  | Major Project | 0 | 0 | 6 |  | 6 | 12 |
| 7 | EP-4999 |  | Endeavour Project (Beyond the Syllabus) |  |  |  |  | 3 |  |
| Total Credits | | | | | | | | | 24 |
| Total Contact hours/week | | | | | | | | | 31 |

SIR PADAMPAT SINGHANIA UNIVERSITY

Course Structure of 2-Year M. Tech Programme

Semester & Session – Even Semester 2022-23

**Department of Civil Engineering**

**Regular Batch**

**Semester-II M. Tech. (CE-Environmental Engineering) No. of Students:08**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S. No.** | **Course Code** | **Category** | **Course Title** | **L** | **T** | **P** | **S** | **Credit (s)** | **Hrs/ Week** | |
| 1 | CEE4201 |  | Environmental System Optimization & Modeling | 3 | 1 | 0 |  | 4 | 4 | |
| 2 | CEE4202 |  | Research Methodology and IPR | 3 | 0 | 0 |  | 3 | 3 | |
| 3 | CEE4203 |  | Environmental Policies & Legislation | 3 | 0 | 0 |  | 3 | 3 | |
| 4 | PE-II (CEE4241) |  | Professional Elective – II (Design of Water Treatment Systems) | 3 | 0 | 0 |  | 3 | 3 | |
| 5 | PE-III (CEE4244) |  | Professional Elective – III (Bioremediation) | 3 | 0 | 0 |  | 3 | 3 | |
| 6 | PE-IV (CEE4248) |  | Professional Elective – IV (Rural Sanitation Engineering) | 3 | 0 | 0 |  | 3 | 3 | |
| Total Credits | | | | | | | | | | 19 | |
| Total Contact hours/week | | | | | | | | | | 19 | |

**Semester-IV M. Tech. (CE-Environmental Engineering) No. of Students:07**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S. No.** | **Course Code** | **Category** | **Course Title** | **L** | **T** | **P** | **S** | **Credit (s)** | **Hrs/ Week** | |
| 1 | CE-4600 |  | Dissertation - II | 0 | 0 | 9 |  | 9 | 18 | |
| 2 | CE-3400 |  | Dissertation Viva Voce | - | - | - |  | 3 | - | |
| Total Credits | | | | | | | | | | 12 | |
| Total Contact hours/week | | | | | | | | | | 18 | |

**Regular Batch**

**Semester-II M. Tech. (CE-Structural Engineering) No. of Students: 07**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S. No.** | **Course Code** | **Category** | **Course Title** | **L** | **T** | **P** | **S** | **Credit (s)** | **Hrs/ Week** | |
| 1 | CEE4204 |  | Dynamics of Structures | 3 | 1 | 0 |  | 4 | 4 | |
| 2 | CEE4202 |  | Research Methodology and IPR | 3 | 0 | 0 |  | 3 | 3 | |
| 3 | CEE4205 |  | Advanced Construction Techniques & Management | 3 | 0 | 0 |  | 3 | 3 | |
| 4 | PE-II (CEE4252) |  | Professional Elective – II (Ground Improvement Techniques) | 3 | 0 | 0 |  | 3 | 3 | |
| 5 | PE-III (CEE4254) |  | Professional Elective – III (Advanced Bridge Engineering) | 3 | 0 | 0 |  | 3 | 3 | |
| 6 | PE-IV (CEE4260) |  | Professional Elective – IV (Cost Management of Engineering Projects) | 3 | 0 | 0 |  | 3 | 3 | |
| Total Credits | | | | | | | | | | 19 | |
| Total Contact hours/week | | | | | | | | | | 19 | |

**Semester-IV M. Tech. (CE- Structural Engineering) No. of Students: 09**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S. No.** | **Course Code** | **Category** | **Course Title** | **L** | **T** | **P** | **S** | **Credit (s)** | **Hrs/ Week** | |
| 1 | CE-4600 |  | Dissertation - II | 0 | 0 | 9 |  | 9 | 18 | |
| 2 | CE-3400 |  | Dissertation Viva Voce | - | - | - |  | 3 | - | |
| Total Credits | | | | | | | | | | 12 | |
| Total Contact hours/week | | | | | | | | | | 18 | |

**Regular Batch**

**Semester-II M. Tech. (CE-Transportation Engineering) No. of Students: 01**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S. No.** | **Course Code** | **Category** | **Course Title** | **L** | **T** | **P** | **S** | **Credit (s)** | **Hrs/ Week** | |
| 1 | CEE4206 |  | Pavement Analysis and Design | 3 | 1 | 0 |  | 4 | 4 | |
| 2 | CEE4202 |  | Research Methodology and IPR | 3 | 0 | 0 |  | 3 | 3 | |
| 3 | CEE4207 |  | Urban Transportation Planning | 3 | 0 | 0 |  | 3 | 3 | |
| 4 | PE-II (CEE4252) |  | Professional Elective – II (Ground Improvement Techniques) | 3 | 0 | 0 |  | 3 | 3 | |
| 5 | PE-III (CEE4254) |  | Professional Elective – III (Advanced Bridge Engineering) | 3 | 0 | 0 |  | 3 | 3 | |
| 6 | PE-IV (CEE4260) |  | Professional Elective – IV (Cost Management of Engineering Projects) | 3 | 0 | 0 |  | 3 | 3 | |
| Total Credits | | | | | | | | | | 19 | |
| Total Contact hours/week | | | | | | | | | | 19 | |

**Part Time Batch**

**Semester-II M. Tech. (CE-Structural Engineering) No. of Students: 06**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S. No.** | **Course Code** | **Category** | **Course Title** | **L** | **T** | **P** | **S** | **Credit (s)** | **Hrs/ Week** | |
| 1 | CEE4204 |  | Dynamics of Structures | 3 | 1 | 0 |  | 4 | 4 | |
| 2 | CEE4202 |  | Research Methodology and IPR | 3 | 0 | 0 |  | 3 | 3 | |
| 3 | CEE4205 |  | Advanced Construction Techniques & Management | 3 | 0 | 0 |  | 3 | 3 | |
| Total Credits | | | | | | | | | | 10 | |
| Total Contact hours/week | | | | | | | | | | 10 | |