**Syllabus for B.Tech (Civil Engineering) Up to Third Year**

**Second Year Third Semester**

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| **A.THEORY** |
| **Sl No.** | **Subject Code** | **Theory** | **Contact Hours/Week** | **Credit****Points** |
|  |  |  | **L** | **T** | **P** | **Total** |  |
| **1** | HU301 | Values & Ethics in Profession | 3 | 0 | 0 | 3 | 3 |
| **2** | CH302 | Chemistry | 3 | 1 | 0 | 4 | 4 |
| **3** | CH301 | Basic Environmental Engineering &Elementary Biology | 3 | 0 | 0 | 3 | 3 |
| **4** | CE301 | Solid Mechanics | 3 | 0 | 0 | 3 | 3 |
| **5** | CE302 | Surveying | 3 | 1 | 0 | 4 | 4 |
| **6** | CE303 | Building Material & Construction | 3 | 1 | 0 | 4 | 4 |
| **Total of Theory** | **21** | **21** |
| **B. PRACTICAL** |
| **7** | CH382 | Chemistry Lab | 0 | 0 | 3 | 3 | 2 |
| **8** | CE391 | Solid Mechanics | 0 | 0 | 3 | 3 | 2 |
| **9** | CE392 | Surveying Practice I | 0 | 0 | 3 | 3 | 2 |
| **10** | CE393 | Building Design & Drawing | 0 | 0 | 3 | 3 | 2 |
| **Total of Practical** | **12** | **8** |
| **B. SESSIONAL** |
| **11** | GS381 | General Studies - III | 3 | 1 | 0 | 4 | 4 |
| **Total of Sessional** | **4** | **4** |
| **Total of Semester** | **37** | **33** |

**Second Year Fourth Semester**

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| **A.THEORY** |
| **Sl No.** | **Subject Code** | **Theory** | **Contact Hours/Week** | **Credit****Points** |
|  |  |  | **L** | **T** | **P** | **Total** |  |
| **1** | M(CS)401 | Numerical Methods | 2 | 1 | 0 | 3 | 2 |
| **2** | M402 | Mathematics – 3 | 3 | 1 | 0 | 4 | 4 |
| **3** | CE401 | Fluid Mechanics | 3 | 0 | 0 | 3 | 3 |
| **4** | CE402 | Structural Analysis | 3 | 1 | 0 | 4 | 4 |
| **5** | CE403 | Soil Mechanics | 3 | 1 | 0 | 4 | 4 |
| **Total of Theory** | **18** | **17** |
| **B. PRACTICAL** |
| **6** | **HU481** | Technical Report Writing & Language Lab Practice | 0 | 0 | 3 | 3 | 2 |
| **7** | M(CS)491 | Numerical Methods | 0 | 0 | 2 | 2 | 1 |
| **8** | CE491 | Fluid Mechanics | 0 | 0 | 3 | 3 | 2 |
| **9** | CE492 | Surveying Practice –II | 0 | 0 | 3 | 3 | 2 |
| **10** | CE493 | Soil Mechanics Lab – I | 0 | 0 | 3 | 3 | 2 |
| **Total of Practical** | **14** | **9** |
| **C. SESSIONAL** |
| **11** | GS481 | General Studies - IV | 3 | 1 | 0 | 4 | 4 |
| **Total of Sessional** | **4** | **4** |
| **Total of Semester** | **36** | **30** |

**Third Year – Fifth Semester**

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| **A.THEORY** |
| **Sl No.** | **Subject Code** | **Theory** | **Contact Hours/Week** | **Credit****Points** |
|  |  |  | **L** | **T** | **P** | **Total** |  |
| **1** | **HU501** | Economics for Engineers | 3 | 0 | 0 | 3 | 3 |
| **2** | CE501 | Foundation Engineering | 3 | 1 | 0 | 4 | 4 |
| **3** | CE502 | Design of RC Structures | 3 | 1 | 0 | 4 | 4 |
| **4** | CE503 | Concrete Technology | 3 | 0 | 0 | 3 | 3 |
| **5** | CE504 | Engineering Geology | 3 | 0 | 0 | 3 | 3 |
| **6** | CE505 | Free Elective-IA. Database Management SystemB. Operating SystemC.Microprocessors & Microcontrollers | 3 | 0 | 0 | 3 | 3 |
| **Total of Theory** | **20** | **20** |
| **B. PRACTICAL** |
| **7** | CE591 | Soil Mechanics Lab – II | 0 | 0 | 3 | 3 | 2 |
| **8** | CE592 | Concrete Laboratory | 0 | 0 | 3 | 3 | 2 |
| **9** | CE593 | Quantity Surveying, Specifications and Valuation | 0 | 0 | 3 | 3 | 2 |
| **10** | CE594 | Engineering Geology Laboratory | 0 | 0 | 3 | 3 | 2 |
| **11.** | CE595 | Free Elective-I LabA. Database Management System LabB. Operating System LabC. Microprocessors & Microcontrollers Lab | 0 | 0 | 3 | 3 | 2 |
| **Total of Practical** | **15** | **10** |
| **C. SESSIONAL** |
| **12** | GS581 | General Studies - V | 3 | 1 | 0 | 4 | 4 |
| **Total of Sessional** | **4** | **4** |
| **Total of Semester** | **39** | **34** |

**Third Year – Sixth Semester**

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| **A.THEORY** |
| **Sl No.** | **Subject Code** | **Theory** | **Contact Hours/Week** | **Credit****Points** |
|  |  |  | **L** | **T** | **P** | **Total** |  |
| **1** | **HU601** | Principles of Management | 2 | 0 | 0 | 2 | 2 |
| **2** | CE601 | Highway & Transportation Engineering | 3 | 0 | 0 | 3 | 3 |
| **3** | CE602 | Design of Steel Structure | 3 | 0 | 0 | 3 | 3 |
| **4** | CE603 | Construction Planning and Management | 3 | 0 | 0 | 3 | 3 |
| **5** | CE604 | Professional Elective – I | 3 | 0 | 0 | 3 | 3 |
| **6** | CE605 | Free Elective – IIA. Control SystemB. Software EngineeringC. Operation Research | 3 | 0 | 0 | 3 | 3 |
| **Total of Theory** | **17** | **17** |
| **B. PRACTICAL** |
| **7** | CE691 | Highway & Transportation Engineering Lab | 0 | 0 | 3 | 3 | 2 |
| **8** | CE692 | Detailing of RC and Steel Structures | 0 | 0 | 3 | 3 | 2 |
| **9** | CE693 | CAD Laboratory | 0 | 0 | 3 | 3 | 2 |
| **10** | CE681 | **Seminar** | 0 | 0 | 3 | 3 | 2 |
| **Total of Practical** | **12** | **8** |
| **C. SESSIONAL** |
| **11** | GS681 | General Studies - VI | 3 | 1 | 0 | 4 | 4 |
| **Total of Sessional** | **4** | **4** |
| **Total of Semester** | **29** | **25** |

**Fourth Year – Seventh Semester**

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| **A.THEORY** |
| **Sl No.** | **Subject Code** | **Theory** | **Contact Hours/Week** | **Credit****Points** |
|  |  |  | **L** | **T** | **P** | **Total** |  |
| **1** | CE701 | Environmental Engineering | 3 | 0 | 0 | 3 | 3 |
| **2** | CE702 | Water Resource Engineering | 3 | 0 | 0 | 3 | 3 |
| **3** | CE703 | Professional Elective II | 3 | 0 | 0 | 3 | 3 |
| **4** | CE704 | Professional Elective III | 3 | 0 | 0 | 3 | 3 |
| **5** | CE705 | Free Elective II | 3 | 0 | 0 | 3 | 3 |
| **Total of Theory** | **15** | **15** |
| **B. PRACTICAL** |
| **6** | HU781 | Group Discussion | 0 | 0 | 3 | 3 | 2 |
| **7** | CE791 | Environmental Engineering Lab | 0 | 0 | 3 | 3 | 2 |
| **8** | CE792 | Civil Engineering Practice Sessional | 0 | 0 | 3 | 3 | 2 |
| **9** | CE793 | Free Elective Laboratory | 0 | 0 | 3 | 3 | 2 |
| **10** | CE782 | Industrial training | 4 weeks during 6th -7 thSem-break | 2 |
| **11** | CE783 | Project Part I |  |  |  | 6 | 2 |
| **Total of Practical** | **18** | **12** |
| **C. SESSIONAL** |
| **12** | GS781 | General Studies - VII | 3 | 1 | 0 | 4 | 4 |
| **Total of Sessional** | **4** | **4** |
| **Total of Semester** | **37** | **31** |

**Fourth Year – Eighth Semester**

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| **A.THEORY** |
| **Sl No.** | **Subject Code** | **Theory** | **Contact Hours/Week** | **Credit****Points** |
|  |  |  | **L** | **T** | **P** | **Total** |  |
| **1** | HU801AHU801B | Organizational Behaviour/Project Management | 2 | 0 | 0 | 2 | 2 |
| **2** | CE801 | Professional Elective IV | 3 | 0 | 0 | 3 | 3 |
| **3** | CE802 | Professional Elective V | 3 | 0 | 0 | 3 | 3 |
| **Total of Theory** | **8** | **8** |
| **B. PRACTICAL** |
| **4** | CE891 | Structural Engineering Design Practice | 0 | 0 | 6 | 6 | 4 |
| **5** | CE881 | Project Part II | 0 | 0 | 12 | 12 | 6 |
| **6** | CE882 | Grand Viva |  |  |  |  | 3 |
| **Total of Practical** | **18** | **13** |
| **C. SESSIONAL** |
| **7** | GS881 | General Studies - VIII | 3 | 1 | 0 | 4 | 4 |
| **Total of Sessional** | **4** | **4** |
| **Total of Semester** | **30** | **25** |