# DR. A.P.J ABDUL KALAM TECHNICAL UNIVERSITY, LUCKNOW

# EVALUATION SCHEME & SYLLABUS

# FOR

# B. TECH. THIRD YEAR

(CIVIL ENGINEERING)

# (Effective from session 2020-21)

**FIFTH SEMESTER CIVIL ENGINEERING SESSION 2020-21**

| S.No | Subject Code | Subject | Periods | | | Evaluation Scheme | | | | End Semester | | Total | Credit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | L | T | P | CT | TA | Total | PS | TE | PE | | |
| **1** | KCE 501 | Geotechnical Engineering | 3 | 1 | 0 | 30 | 20 | 50 | | 100 | | 150 | 4 |
| **2** | KCE 502 | Structural Analysis | 3 | 1 | 0 | 30 | 20 | 50 | | 100 | | 150 | 4 |
| **3** | KCE 503 | Quantity Estimation and Construction Management | 3 | 1 | 0 | 30 | 20 | 50 | | 100 | | 150 | 4 |
| **4** | | Departmental Elective-I | 3 | 0 | 0 | 30 | 20 | 50 | | 100 | | 150 | 3 |
| | KCE 051 | Concrete Technology | | | | | | | | | | | |
| | KCE 052 | Modern Construction Materials | | | | | | | | | | | |
| | KCE 053 | Open Channel Flow | | | | | | | | | | | |
| | KCE 054 | Engineering Geology | | | | | | | | | | | |
| **5** | | Departmental Elective-II | 3 | 0 | 0 | 30 | 20 | 50 | | 100 | | 150 | 3 |
| | KCE-055 | Engineering Hydrology | | | | | | | | | | | |
| | KCE-056 | Sensor and Instrumentation Technologies for Civil Engineering Applications | | | | | | | | | | | |
| | KCE-057 | Air and Noise Pollution Control | | | | | | | | | | | |
| | KCE-058 | GIS and Advance Remote Sensing | | | | | | | | | | | |
| **6** | KCE-551 | CAD Lab | 0 | 0 | 2 | | | | 25 | | 25 | 50 | 1 |
| **7** | KCE-552 | Geotechnical Engineering Lab | 0 | 0 | 2 | | | | 25 | | 25 | 50 | 1 |
| **8** | KCE-553 | Quantity Estimation and Management Lab | 0 | 0 | 2 | | | | 25 | | 25 | 50 | 1 |
| **9** | KCE-554 | Mini Project or Internship Assessment* | 0 | 0 | 2 | | | | 50 | | | 50 | 1 |
| **10** | | Constitution of India/Essence of Indian Traditional Knowledge | 2 | 0 | 0 | | | | | | | | |
| **11** | | MOOCs (Essential for Hons. Degree) | | | | | | | | | | | |
| | | Total | 17 | 3 | 8 | | | | | | | 950 | 22 |

* The Mini Project or Internship (4 weeks) conducted during semester break after IV semester and will be assessed during V semester.

**NOTE:**

**1. Regular classroom interaction with industry experts is to be ensured in all theory courses (minimum two expert talks from relevant Industry).**
**2. Working on experiments using virtual labs is to be ensured in lab courses.**
**3. Student's visit to Industry/Industry Expert's project site must be arranged as & when possible.**

**SIXTH SEMESTER CIVIL ENGINEERING SESSION 2020-21**

| S.No | Subject Code | Subject | Periods | | | Evaluation Scheme | | | | End Semester | | Total | Credit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | L | T | P | CT | TA | Total | PS | TE | PE | | |
| **1** | KCE 601 | Design of Concrete Structures | 3 | 1 | 0 | 30 | 20 | 50 | | 100 | | 150 | 4 |
| **2** | KCE 602 | Transportation Engineering | 3 | 1 | 0 | 30 | 20 | 50 | | 100 | | 150 | 4 |
| **3** | KCE 603 | Environmental Engineering | 3 | 1 | 0 | 30 | 20 | 50 | | 100 | | 150 | 4 |
| **4** | | Departmental Elective-III | 3 | 0 | 0 | 30 | 20 | 50 | | 100 | | 150 | 3 |
| | KCE 061 | Advance Structural Analysis | | | | | | | | | | | |
| | KCE 062 | River Engineering | | | | | | | | | | | |
| | KCE 063 | Repair and Rehabilitation of Structures | | | | | | | | | | | |
| | KCE 064 | Foundation Engineering | | | | | | | | | | | |
| **5** | | Open Elective-I | 3 | 0 | 0 | 30 | 20 | 50 | | 100 | | 150 | 3 |
| **6** | KCE 651 | Transportation Engineering Lab | 0 | 0 | 2 | | | | 25 | | 25 | 50 | 1 |
| **7** | KCE 652 | Environmental Engineering Lab | 0 | 0 | 2 | | | | 25 | | 25 | 50 | 1 |
| **8** | KCE 653 | Structural Detailing Lab | 0 | 0 | 2 | | | | 25 | | 25 | 50 | 1 |
| **9** | NC* | Essence of Indian Traditional Knowledge/Constitution of India | 2 | 0 | 0 | 15 | 10 | 25 | | 50 | | | |
| **10** | | MOOCs (Essential for Hons. Degree) | | | | | | | | | | | |
| | | Total | 17 | 3 | 6 | | | | | | | 900 | 21 |

**NOTE:**

**1. Regular classroom interaction with industry experts is to be ensured in all theory courses (minimum two expert talks from relevant Industry).**
**2. Working on experiments using virtual labs is to be ensured in lab courses.**
**3. Student's visit to Industry/Industry Expert's project site must be arranged as & when possible.**