

List of Courses

First semester

| S.No. | Course No. | Course Title | Unit | Prerequisite |
|------------|------------|-----------------------|-------------------|--------------|
| 1 | AL100 | Arabic Language | (3+3) 6 | |
| 2 | ME101 | Engineering Drawing I | (3+3) 6 | |
| 3 | ES101 | Mathematics I | (4+8) 12 | |
| 4 | EL101 | English I | (3+6) 9 | |
| 5 | ES110 | Political Science | (0+6) 6 | |
| 6 | ES111 | Physics I | (4+8) 12 | |
| 7 | ES121 | Chemistry I | (3+6) 9 | |
| 8 | ES181 | Physics Lab. I | (3+0) 3 | ES111* |
| Sum | | | (23+40) 63 | |

Second semester

| S.No. | Course No. | Course Title | Unit | Prerequisite |
|------------|------------|-------------------------|-------------------|------------------|
| 9 | ME102 | Engineering Drawing II | (3+3) 6 | ME101 |
| 10 | ES102 | Mathematics II | (4+8) 12 | ES101 |
| 11 | EL102 | English II | (3+6) 9 | EL101 |
| 12 | ES112 | Physics II | (4+8) 12 | ES111 |
| 13 | ES122 | Chemistry II | (3+6) 9 | ES121 |
| 14 | ES125 | Environmental Pollution | (3+3)6 | |
| 15 | ES182 | Physics Lab. II | (3+0) 3 | ES181, ES122* |
| Sum | | | (23+34) 57 | |

Third semester

| S.No. | Course No. | Course Title | Unit | Prerequisite |
|------------|------------|--|-------------------|------------------|
| 16 | ES215 | Engineering Mechanics I | (4+8) 12 | ES102, ES112 |
| 17 | ES201 | Differential Equations | (4+8) 12 | ES102 |
| 18 | ES261 | Introduction to Computer & Programming | (3+6) 9 | ES102 |
| 19 | CE215 | Surveying I | (4+8) 12 | ES102, ES112 |
| 20 | CE271 | Geology for Civil Engineering | (3+6) 9 | ES215*, ES122 |
| Sum | | | (21+36) 57 | |

Fourth Semester

| S.No. | Course No. | Course Title | Unit | Prerequisite |
|------------|------------|---------------------------|-------------------|----------------------|
| 21 | ES216 | Engineering Mechanics II | (4+8) 12 | ES215, ES201 |
| 22 | ES206 | Linear Algebra | (4+8) 12 | ES102 |
| 23 | CE216 | Surveying II | (9+6) 15 | CE215 |
| 24 | CE222 | Strength of Materials | (4+8) 12 | ES215, ES201, CE224* |
| 25 | CE226 | Building & Architecture | (3+3) 6 | ME102 |
| 26 | CE224 | Strength of Materials Lab | (3+0) 3 | CE222* |
| Sum | | | (27+33) 60 | |

Fifth Semester

| S.No. | Course No. | Course Title | Unit | Prerequisite |
|------------|------------|-----------------------|-------------------|----------------------|
| 27 | CE325 | Fluid Mechanics | (4+8) 12 | ES216, CE327* |
| 28 | CE323 | Structural Analysis I | (4+8) 12 | CE 222 |
| 29 | CE329 | Soil Mechanics | (4+8) 12 | CE222, CE271, CE331* |
| 30 | CE342 | Civil Eng. Materials | (3+6) 9 | CE222, CE344* |
| 31 | EE301 | Basic Electric Eng. | (3+6) 9 | ES201 |
| 32 | CE327 | Fluid Mechanics Lab | (3+0) 3 | CE325* |
| 33 | CE331 | Soil Mechanics Lab | (3+0) 3 | CE329* |
| 34 | CE344 | Materials Testing Lab | (3+0) 3 | CE342* |
| Sum | | | (27+36) 63 | |

Sixth Semester

| S.No. | Course No. | Course Title | Unit | Prerequisite |
|------------|------------|-------------------------------|-------------------|---------------|
| 35 | CE 324 | Structural Analysis II | (4+8) 12 | CE 323 |
| 36 | CE 336 | Structural Design (Steel)I | (6+6) 12 | CE323, CE324* |
| 37 | CE 338 | Ground Water Hydrology | (3+6) 9 | CE325, CE329 |
| 38 | CE 333 | Highway & Transportation Eng. | (3+6) 9 | ES216, CE329 |
| 39 | CE 346 | Environmental Eng. I | (3+6) 9 | ES125, CE325 |
| 40 | +CE 451** | Structural Design II | (6+6) 12 | CE323, CE324* |
| Sum | | | (25+38) 63 | |

Seventh Semester

| S.No. | Course No. | Course Title | Unit | Prerequisite |
|------------|------------|--------------------------------|-------------------|---------------|
| 41 | CE453 | Structural Design III | (6+6) 12 | CE323, CE324* |
| 42 | CE455 | Environmental Eng. II | (3+6) 9 | CE 346 |
| 43 | CE458 | Specification & Quantities | (2+4) 6 | **** |
| 44 | CE473 | Foundation Engineering | (6+6) 12 | CE329, CE331 |
| 45 | CE335 | Highway Lab. | (3+0) 3 | |
| 46 | | One optional subject (Group 1) | (6+6) 12 | |
| 47 | | Introduction to project work | | |
| Sum | | | (26+28) 54 | |

Eighth Semester

| S.No. | Course No. | Course Title | Unit | Prerequisite |
|------------|------------|----------------------------|-------------------|--------------|
| 48 | CE452 | Project Work | (0+15) 15 | *** |
| 49 | CE456 | Professional Practice | (2+4) 6 | **** |
| 50 | | Optional Subject (group 2) | (6+6) 12 | |
| 51 | | Optional Subject (group 2) | (6+6) 12 | |
| Sum | | | (14+31) 45 | |

Optional Subject (Group 1)

| S.No. | Course No. | Course Title | Unit | Prerequisite |
|-------|------------|---------------------------------------|----------|---------------------|
| 1 | CE461 | Construction Management & Economics I | (6+6) 12 | |
| 2 | CE463 | Structural Engineering I (Analysis) | (6+6) 12 | CE324 |
| 3 | CE465 | Docks & Harbor Eng. I | (6+6) 12 | CE325 |
| 4 | CE467 | Public Health Eng. I | (6+6) 12 | CE455 |
| 5 | CE469 | Traffic & Urban Transportation | (6+6) 12 | CE333 |
| 6 | CE471 | Surface Hydrology | (6+6) 12 | CE325 |
| 7 | CE475 | Advance Surveying & Geodesy I | (6+6) 12 | CE216 |
| 8 | CE477 | Advance Mathematics & Computation I | (6+6) 12 | ES201, ES206, ES261 |

Optional Subject (Group 2)

| S.No. | Course No. | Course Title | Unit | Prerequisite |
|-------|------------|--|----------|--------------|
| 9 | CE462 | Construction Management & Economics II | (6+6) 12 | CE461 |
| 10 | CE464 | Structural Engineering II | (6+6) 12 | CE453, CE463 |
| 11 | CE466 | Docks & Harbor Eng. II | (6+6) 12 | CE325 |
| 12 | CE468 | Public Health Eng. II | (6+6) 12 | CE455 |
| 13 | CE472 | Airport Planning & Design | (6+6) 12 | CE333 |
| 14 | CE474 | Groundwater Recovery | (6+6) 12 | CE338 |
| 15 | CE476 | Advance Soil Mechanics | (6+6) 12 | CE473 |
| 16 | CE478 | Advance Surveying & Geodesy II | (6+6) 12 | CE475 |
| 17 | CE480 | Advance Mathematics & Computation II | (6+6) 12 | CE477 |

Notes:

- * This course will be taken at the same time
- ** Can be taken with CE 324 and CE 336 and cannot be taken with CE 453 at the same time
- *** Can be taken after the student has completed all required courses relevant to the project and has completed or will be concurrent completing all optional courses relevant to the project
- **** Only for senior semester student.
- + This subject is taken in the 6th semester, unless the student is reasonably got high score. Advice may be given to discourage the students from taking both design courses (CE 336 & CE 451).