

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

DEPARTMENT: DEPARTMENT OF EARTHQUAKE ENGINEERING

**PROGRAM CODE: M.TECH. SOIL DYNAMICS**

**MODEL: MODEL-2**

**FIRST YEAR - 1ST SEM (AUTUMN)**

**MODE OF IN-TAKE: OPTIONB**[illegible]

**FIRST YEAR - 2ND SEM (SPRING)**

[illegible]

**SECOND YEAR -1ST SEM (AUTUMN)**

| S.No. | COURSE CODE            | COURSE TITLE                           | COURSE AREA | SUB-AREA | CREDIT    | L | T | P  | THEORY | PRACTICAL | CWS | PRS | MTE | ETE | PRE |
|-------|------------------------|----------------------------------------|-------------|----------|-----------|---|---|----|--------|-----------|-----|-----|-----|-----|-----|
| 1     | ISA_120_525_30pRK      | Internship                             | ISA         |          | 2         | 0 | 0 | 28 |        |           |     |     |     |     |     |
| 2     | ISA_120_525_NNhOB      | Industry-Academia Interaction Seminars | ISA         |          | 1         | 0 | 0 | 14 |        |           |     |     |     |     |     |
| 3     | THESIS-I_120_525_wmUNy | Topic to be chosen by the student      | THESIS-I    |          | 10        | - | - | -  |        |           |     |     |     |     |     |
|       |                        | <b>TOTAL</b>                           |             |          | <b>13</b> |   |   |    |        |           |     |     |     |     |     |

**SECOND YEAR -2ND SEM (SPRING)**

| S.No. | COURSE CODE             | COURSE TITLE | COURSE AREA | SUB-AREA | CREDIT    | L | T | P | THEORY | PRACTICAL | CWS | PRS | MTE | ETE | PRE |
|-------|-------------------------|--------------|-------------|----------|-----------|---|---|---|--------|-----------|-----|-----|-----|-----|-----|
| 1     | THESIS-II_121_525_LNEHS | Thesis-II    | THESIS-II   |          | 14        | - | - | - |        |           |     |     |     |     |     |
|       |                         | <b>TOTAL</b> |             |          | <b>14</b> |   |   |   |        |           |     |     |     |     |     |

**OFFERED COURSES LIST**

| S.No. | COURSE CODE         | COURSE TITLE                                          | COURSE AREA | CREDIT | L | T | P | THEORY | PRACTICAL | CWS   | PRS | MTE   | ETE   | PRE |
|-------|---------------------|-------------------------------------------------------|-------------|--------|---|---|---|--------|-----------|-------|-----|-------|-------|-----|
| 1     | PEC_undefined_GZqgG | Dynamic Soil Structure Interaction                    | PEC         | 4      | 3 | 1 |   | 3      |           | 20-30 |     | 20-30 | 40-50 |     |
| 2     | PEC_525_AHABk       | Ground Improvement Techniques                         | PEC         | 4      | 3 | 1 |   | 3      |           | 20-30 |     | 20-30 | 40-50 |     |
| 3     | PEC_525_7prtq       | Machine Foundation                                    | PEC         | 4      | 3 | 1 |   | 3      |           | 20-30 |     | 20-30 | 40-50 |     |
| 4     | PEC_525_KDDbw       | Seismic Slope Stability: Earth Dams & Retaining Walls | PEC         | 4      | 3 | 1 |   | 3      |           | 20-30 |     | 20-30 | 40-50 |     |
| 5     | PEC_525_athTP       | Constitutive Modeling in Soil Dynamics                | PEC         | 4      | 3 | 1 |   | 3      |           | 20-30 |     | 20-30 | 40-50 |     |
| 6     | PEC_525_7gFZq       | Offshore Geotechnical Engineering                     | PEC         | 4      | 3 | 1 |   | 3      |           | 20-30 |     | 20-30 | 40-50 |     |