INDIAN INSTITUTE OF TECHNOLOGY TIRUPATI

M. Tech. Curriculum: Microelectronics and VLSI From the Academic Year 2021-22

Semester-I

| S.No. | Course Code | Course Name | L-T-P-C | Course Code (prior to Jul 2022) | Senate |
|---------------|----------------|---|---------|------------------------------------|--------|
| 1. | EE542L | Physics and Modelling of Semiconductor Devices | 3-1-0-4 | EE5039 | 16 |
| 2. | EE547L | VLSI Fabrication Principles | 3-0-0-3 | EE5036 | 16 |
| 3. | EE535L | Digital VLSI Design | 3-0-0-3 | EE5109 | 16 |
| 4. | EE534P | Device Simulation Laboratory | 0-0-3-2 | EE5195 | 16 |
| 5. | | Mathematics Elective | 2-0-0-2 | MAE1 | |
| 6. | | Department Elective-1 | 3-0-0-3 | DPE1 | |
| Total Credits | | | 17 | | |

Semester-II

| S.No. | Course Code | Course Name | L-T-P-C | Course Code (prior to Jul 2022) | Senate | |
|-------|----------------|---|---------|------------------------------------|--------|--|
| 1. | EE530L | Analog VLSI Design | 3-0-0-3 | EE5041 | 16 | |
| 2. | EE540L | MOS Device Modeling and Characterization | 3-0-0-3 | EE5023 | 16 | |
| 3. | EE536P | FPGA Laboratory | 0-0-3-2 | EE5296 | 16 | |
| 4. | EE533P | Device Fabrication and Characterization Laboratory | 0-0-3-2 | EE5298 | 16 | |
| 5. | | Department Elective-2 | 3-0-0-3 | DPE2 | | |
| 6. | | Department Elective-3 | 3-0-0-3 | DPE3 | | |
| 7. | | Free Elective-1 | 3-0-0-3 | FRE1 | | |
| | Total Credits | | | 19 | | |

Semester-III

| S.No. | Course Code | Course Name | L-T-P-C | Course Code (prior to Jul 2022) | Senate |
|---------------|----------------|-----------------|---------|------------------------------------|--------|
| 1. | EE693G | Seminar | 1 | EE6110 | 4 |
| 2. | EE691G | Project Phase-I | 10 | EE6150 | 4 |
| Total Credits | | | 11 | | |

Semester-IV

| S.No. | Course Code | Course Name | L-T-P-C | Course Code (prior to Jul 2022) | Senate |
|---------------|----------------|------------------|---------|------------------------------------|--------|
| 1. | EE692G | Project Phase-II | 15 | EE6250 | 4 |
| Total Credits | | | 15 | | |