# *Chhattisgarh Swami Vivekanand Technical University, Bhilai*

## SCHEME OF EXAMINATION

### *M.E. Electronics & Telecommunication (Specialization in VLSI Design)*

### FIRST SEMESTER

| Sr No | Board of Study | Subject Code | Subject | Periods Per Week | | | Scheme of Examination Theory / Practical | | | Total Marks | Credit L+(T+P) / 2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | L | T | P | ESE | CT | TA | | |
| 1 | Electronics & Telecom | 560111 (28) | VLSI Technology | 3 | 1 | - | 100 | 20 | 20 | 140 | 4 |
| 2 | Electronics & Telecom | 560112 (28) | VLSI System Design | 3 | 1 | - | 100 | 20 | 20 | 140 | 4 |
| 3 | Electronics & Telecom | 560113 (28) | MOS Circuit Design | 3 | 1 | - | 100 | 20 | 20 | 140 | 4 |
| 4 | Electronics & Telecom | 560114 (28) | Modelling with HDLs | 3 | 1 | - | 100 | 20 | 20 | 140 | 4 |
| 5 | Refer Table 1 | | Elective – I | 3 | 1 | - | 100 | 20 | 20 | 140 | 4 |
| 6 | Electronics & Telecom | 560121 (28) | VHDL Modelling Laboratory | - | - | 3 | 75 | - | 75 | 150 | 2 |
| 7 | Electronics & Telecom | 560122 (28) | Computer Simulation Laboratory | - | - | 3 | 75 | - | 75 | 150 | 2 |
| | TOTAL | | | 15 | 5 | 6 | 650 | 100 | 250 | 1000 | 24 |

### Table-I

| | Elective-I | | |
|---|---|---|---|
| Sr. No. | Board of Study | Subject Code | Subject |
| 1 | Electronics & Telecom | 560131 (28) | CMOS RF Circuit Design |
| 2 | Electronics & Telecom | 560132 (28) | Real Time System & Software |
| 3 | Electronics & Telecom | 560133 (28) | Digital Image Processing |

L - Lecture  T - Tutorial
P - Practical  ESC – End Semester Exam
CT - Class Test  TA – Teachers Assessment

Note (1) – 1/4th of total strength of students subject to minimum of twenty students is required to offer an elective in the college in a Particular academic session .

Note (2) – Choice of elective course once made for an examination cannot be changed in future examinations.

# *Chhattisgarh Swami Vivekanand Technical University, Bhilai*

**SCHEME OF EXAMINATION**

### *M.E. Electronics & Telecommunication (Specialization in VLSI Design)*

**SECOND SEMESTER**

| Sr. No. | Board of Study | Subject Code | Subject | Periods Per Week | | | Scheme of Examination Theory / Practical | | | Total Marks | Credit L+(T+P) / 2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | L | T | P | ESE | CT | TA | | |
| 1 | Electronics & Telecom | 560211 (28) | Digital Logic with Verilog Design | 3 | 1 | - | 100 | 20 | 20 | 140 | **4** |
| 2 | Electronics & Telecom | 560212 (28) | VLSI System Testing | 3 | 1 | - | 100 | 20 | 20 | 140 | **4** |
| 3 | Electronics & Telecom | 560213 (28) | Low Power VLSI Design | 3 | 1 | - | 100 | 20 | 20 | 140 | **4** |
| 4 | Electronics & Telecom | 560214 (28) | Embedded System Design | 3 | 1 | - | 100 | 20 | 20 | 140 | **4** |
| 5 | Refer Table II | | Elective – II | 3 | 1 | - | 100 | 20 | 20 | 140 | **4** |
| 6 | Electronics & Telecom | 560221 (28) | Verilog Design and verification Lab | - | - | 3 | 75 | - | 75 | 150 | **2** |
| 7 | Electronics & Telecom | 560222 (28) | Embedded system Lab | - | - | 3 | 75 | - | 75 | 150 | **2** |
| | **TOTAL** | | | 15 | 5 | 6 | 650 | 100 | 250 | 1000 | **24** |

**Table- II**

| Elective- II | | | |
|---|---|---|---|
| Sr. No. | Board of Study | Subject Code | Subject |
| 1 | Electronics & Telecom | 560231 (28) | MEMS and IC integration |
| 2 | Electronics & Telecom | 560232 (28) | MOS Physics |
| 3 | Electronics & Telecom | 560233 (28) | Neural Network for VLSI |

L - Lecture  T - Tutorial
P - Practical  ESC – End Semester Exam
CT - Class Test  TA – Teachers Assessment

**Note (1) –** **1/4th of total strength of students subject to minimum of twenty students is required to offer an elective in the college in a Particular academic session.**

**Note (2) –** **Choice of elective course once made for an examination cannot be changed in future examinations.**

# *Chhattisgarh Swami Vivekanand Technical University, Bhilai*

**SCHEME OF EXAMINATION**

*M.E. Electronics & Telecommunication (Specialization in VLSI Design)*

**THIRD SEMESTER**

| Sr. No. | Board of Study | Subject Code | Subject | Periods Per Week | | | Scheme of Examination Theory / Practical | | | Total Marks | Credit L+(T+P) / 2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | L | T | P | ESE | CT | TA | | |
| 1 | Electronics & Telecom | 560311 (28) | Analog VLSI | 3 | 1 | - | 100 | 20 | 20 | 140 | **4** |
| 2 | Refer Table- III | | Elective - III | 3 | 1 | - | 100 | 20 | 20 | 140 | **4** |
| 3 | Electronics & Telecom | 560321 (28) | Project | - | - | 28 | 100 | - | 100 | 200 | **14** |
| 4 | Electronics & Telecom | 560322 (28) | Seminar on Industrial Training | - | - | 3 | - | - | 20 | 20 | **2** |
| **TOTAL** | | | | 6 | 2 | 31 | 300 | 40 | 160 | 500 | 24 |

**Table- III**

| Elective-III | | | |
|---|---|---|---|
| Sr. No. | Board of Study | Subject Code | Subject |
| 1 | Electronics & Telecom | 560331 (28) | Algorithm for VLSI Design Automation |
| 2 | Electronics & Telecom | 560332 (28) | ASIC Design |
| 3 | Electronics & Telecom | 560333 (28) | Design of Semiconductor Memories |

L - Lecture                     T - Tutorial
P - Practical                   ESC – End Semester Exam
CT - Class Test                 TA – Teachers Assessment

**Note (1) –**     1/4th of total strength of students subject to minimum of twenty students is required to offer an elective in the college in a Particular academic session.

**Note (2) –**     Choice of elective course once made for an examination cannot be changed in future examinations.

# *Chhattisgarh Swami Vivekanand Technical University, Bhilai*

### *M.E.  Electronics & Telecommunication (Specialization in VLSI Design)*

### FOURTH SEMESTER

| Sr. No. | Board of Study | Subject Code | Subject | Periods Per Week | | | Scheme of Examination Theory / Practical | | | Total Marks | Credit L+(T+P) / 2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | L | T | P | ESE | CT | TA | | |
| 1 | Electronics & Telecom | 560421 (28) | Project + Seminar on Project | 6 | - | 34 | 300 | - | 200 | 500 | **23** |
| | | TOTAL | | **6** | **-** | **34** | **300** | **-** | **200** | **500** | **23** |

L - Lecture      T - Tutorial
P - Practical      ESC – End Semester Exam
CT - Class Test      TA – Teachers Assessment

### Scheme of Marks Allotment

| Semester | Total Marks | Grand Total |
|---|---|---|
| I | 1000 | |
| II | 1000 | 3000 |
| III | 500 | |
| IV | 500 | |