

Dr. Babasaheb Ambedkar Technological University Lonere.

ELECTRICAL ENGINEERING DEPARTMENT



Structure and syllabus

Of

Third Year B. Tech.

(Instrumentation Engineering/ Electrical Instrumentation)

With effect from August 2018

Teaching & Evaluation scheme of Third year B. Tech. Instrumentation engineering/ Electrical Instrumentation Engineering

V Semester

| Course Code | Course Name | Teaching Scheme | | | Evaluation Scheme | | | | Credits |
|-------------|---|-----------------|-----------|-----------|-------------------|------------|------------|--------------|-----------|
| | | L | P | T | Int | MSE | ESE | Total | |
| BTINC501 | Process loop components | 3 | 0 | 1 | 20 | 20 | 60 | 100 | 4 |
| BTINC502 | Microprocessor and Micro Controller | 3 | 0 | 0 | 20 | 20 | 60 | 100 | 3 |
| BTINC503 | Digital Signal Processing | 3 | 0 | 1 | 20 | 20 | 60 | 100 | 4 |
| BTHM504 | Value Education, Human Rights and Legislative Procedures[MOOC/ Swayam/ NPTEL] | 2 | 0 | 0 | - | - | - | Audit course | 0 |
| BTINE505 | Elective-IV | 3 | 0 | 0 | 20 | 20 | 60 | 100 | 3 |
| BTINE506 | Elective-V | 3 | 0 | 0 | 20 | 20 | 60 | 100 | 3 |
| BTINL507 | Computational Technics Lab | 0 | 2 | 0 | 30 | - | 20 | 50 | 1 |
| BTINL508 | Process loop components Lab | 0 | 4 | 0 | 60 | - | 40 | 100 | 2 |
| BTINL509 | Microprocessor and micro Controller Lab | 0 | 2 | 0 | 30 | - | 20 | 50 | 1 |
| BTINF510 | Industrial Training | - | - | - | 50 | - | - | 50 | 1 |
| | Total | 17 | 08 | 02 | 270 | 100 | 380 | 750 | 22 |

Elective- IV: 1.Multi sensor and data fusion 2.. Engineering Instrumentation

Elective-V: 1. Control System 2.Artificial neural network.

VI semester

| Course Code | Course Name | Teaching Scheme | | | Evaluation Scheme | | | | Credits |
|-------------|---------------------------------------|-----------------|-----------|-----------|-------------------|------------|------------|------------|-----------|
| | | L | P | T | Int | MSE | ESE | Total | |
| BTINC601 | Digital System | 3 | 0 | 1 | 20 | 20 | 60 | 100 | 4 |
| BTINC602 | Industrial automation and Control | 3 | 0 | 1 | 20 | 20 | 60 | 100 | 4 |
| BTINC603 | Power Electronics and Drives | 3 | 0 | 0 | 20 | 20 | 60 | 100 | 3 |
| BTINOE604 | Elective-VI [MOOC/Swayam/NPTEL] | 3 | 0 | 0 | 20 | 20 | 60 | 100 | 3 |
| BTINE605 | Elective-VII | 3 | 0 | 0 | 20 | 20 | 60 | 100 | 3 |
| BTINE606 | Elective-VIII | 3 | 0 | 0 | 20 | 20 | 60 | 100 | 3 |
| BTINL607 | Digital system Lab | 0 | 2 | 0 | 30 | - | 20 | 50 | 1 |
| BTINL608 | Industrial automation and Control Lab | 0 | 2 | 0 | 30 | - | 20 | 50 | 1 |
| BTINL609 | Power Electronics and Drives Lab | 0 | 4 | 0 | 60 | - | 40 | 100 | 2 |
| | | | | | | | | | |
| | Total | 18 | 08 | 02 | 240 | 120 | 440 | 800 | 24 |

Elective-VI 1. Project engineering and management 2. Design of Experiments

Elective-VII 1. Embedded system 2. Design of sensor and transducer.

Elective- VIII. 1. Industrial data communication. 2. Fiber optics and laser instruments

*Industrial Training of 30 days to be assessed in 7 semester