



PSN COLLEGE OF ENGINEERING AND TECHNOLOGY

Melathediyoor, Tirunelveli

(Approved by AICTE and Recognized by UGC Section 2 (f)

An ISO 9001:2008 Certified Institution

(An Autonomous Institution, Affiliated to Anna University, Chennai)



DEPARTMENT OF ELECTRONICS AND INSTRUMENTATION ENGINEERING III – VIII SEMESTERS CURRICULUM

REGULATION – 2013

SEMESTER III

(Applicable to the students admitted from the Academic year 2013– 2014 onwards)

| SL. NO | COURSE CODE | COURSE TITLE | L | T | P | C |
|------------------|-------------|---|-----------|----------|----------|-----------|
| THEORY | | | | | | |
| 1 | 101001 | Transformation Techniques | 4 | 1 | 0 | 4 |
| 2 | 106001 | Fluid Mechanics | 3 | 1 | 0 | 3 |
| 3 | 106002 | Electrical Machines | 3 | 0 | 0 | 3 |
| 4 | 104002 | Electronic Devices and Circuits | 3 | 0 | 0 | 3 |
| 5 | 104004 | Data Structures and Algorithms | 3 | 0 | 0 | 3 |
| 6 | 106003 | Electrical Measurements | 3 | 0 | 0 | 3 |
| Practical | | | | | | |
| 1 | 106101 | Electron Devices and Circuits Laboratory | 0 | 0 | 3 | 2 |
| 2 | 106102 | Data Structures and Algorithms Laboratory | 0 | 0 | 3 | 2 |
| 3 | 106103 | Electrical Machines Laboratory | 0 | 0 | 3 | 2 |
| TOTAL | | | 19 | 2 | 9 | 25 |

SEMESTER IV

(Applicable to the students admitted from the Academic year 2013– 2014 onwards)

| SL. NO | COURSE CODE | COURSE TITLE | L | T | P | C |
|------------------|-------------|---|-----------|----------|----------|-----------|
| THEORY | | | | | | |
| 1 | 104007 | Control Systems | 4 | 0 | 0 | 4 |
| 2 | 106004 | Industrial Instrumentation – I | 3 | 0 | 0 | 3 |
| 3 | 106005 | Sensors and Transducers | 3 | 0 | 0 | 3 |
| 4 | 106006 | Digital Logic Circuits | 3 | 1 | 0 | 3 |
| 5 | 104008 | Linear Integrated Circuits and Applications | 3 | 0 | 0 | 3 |
| 6 | 106007 | Applied Thermodynamics | 3 | 1 | 0 | 3 |
| PRACTICAL | | | | | | |
| 1 | 106104 | Transducers and Measurements Laboratory | 0 | 0 | 3 | 2 |
| 2 | 106105 | Thermodynamics Laboratory | 0 | 0 | 3 | 2 |
| 3 | 106106 | Linear and Digital Integrated circuits Laboratory | 0 | 0 | 3 | 2 |
| TOTAL | | | 19 | 2 | 9 | 25 |

SEMESTER V

(Applicable to the students admitted from the Academic year 2013 – 2014 onwards)

| SL. NO | COURSE CODE | COURSE TITLE | L | T | P | C |
|------------------|-------------|---|----|---|---|----|
| Theory | | | | | | |
| 1 | 106008 | Microprocessor and Microcontroller | 3 | 1 | 0 | 3 |
| 2 | 104014 | Communication Engineering | 3 | 0 | 0 | 3 |
| 3 | 106009 | Object Oriented Programming | 3 | 1 | 0 | 3 |
| 4 | 106010 | Industrial Electronics | 3 | 1 | 0 | 3 |
| 5 | 106011 | Analytical Instruments | 3 | 0 | 0 | 3 |
| 6 | 106012 | Industrial Instrumentation II | 3 | 0 | 0 | 3 |
| PRACTICAL | | | | | | |
| 1 | 106107 | Microprocessor and Microcontroller Laboratory | 0 | 0 | 3 | 2 |
| 2 | 106108 | Object Oriented Programming Laboratory | 0 | 0 | 3 | 2 |
| 3 | 106109 | Industrial Instrumentation Laboratory | 0 | 0 | 3 | 2 |
| TOTAL | | | 18 | 3 | 9 | 24 |

SEMESTER VI

(Applicable to the students admitted from the Academic year 2013– 2014 onwards)

| SL. NO | COURSE CODE | COURSE TITLE | L | T | P | C |
|------------------|-------------|------------------------------------|----|---|---|----|
| THEORY | | | | | | |
| 1 | 106013 | Modern Electronic Instrumentation | 3 | 0 | 0 | 3 |
| 2 | 106014 | Process Control | 4 | 0 | 0 | 4 |
| 3 | 106015 | Industrial Automation | 3 | 1 | 0 | 3 |
| 4 | 104019 | Digital Signal Processing | 3 | 1 | 0 | 3 |
| 5 | 106016 | Virtual Instrumentation | 3 | 0 | 0 | 3 |
| 6 | 106017 | Biomedical Instrumentation | 3 | 0 | 0 | 3 |
| PRACTICAL | | | | | | |
| 1 | 106110 | Communication and DSP Laboratory | 0 | 0 | 3 | 2 |
| 2 | 106111 | Process Control Laboratory | 0 | 0 | 3 | 2 |
| 3 | 106112 | Virtual Instrumentation Laboratory | 0 | 0 | 3 | 2 |
| TOTAL | | | 19 | 2 | 9 | 25 |

SEMESTER VII

(Applicable to the students admitted from the Academic year 2013– 2014 onwards)

| SL. NO | COURSE CODE | COURSE TITLE | L | T | P | C |
|---------------|-------------|------------------------------------|---|---|---|---|
| THEORY | | | | | | |
| 1 | | Industrial Data Networks | 3 | 0 | 0 | 3 |
| 2 | | Computer based Industrial Control | 3 | 1 | 0 | 3 |
| 3 | | VLSI Design | 3 | 1 | 0 | 3 |
| 4 | | Fibre Optics and Laser Instruments | 3 | 0 | 0 | 3 |
| 5 | E1 | Elective – I | 3 | 1 | 0 | 3 |

| | | | | | | |
|------------------|----|--|----|---|---|----|
| 6 | E2 | Elective – II | 3 | 0 | 0 | 3 |
| PRACTICAL | | | | | | |
| 1 | | VLSI Lab | 0 | 0 | 3 | 2 |
| 2 | | Instrumentation System Design Laboratory | 0 | 0 | 3 | 2 |
| 3 | | Comprehension | 0 | 0 | 3 | 1 |
| TOTAL | | | 18 | 3 | 9 | 23 |

SEMESTER VIII

(Applicable to the students admitted from the Academic year 2013 – 2014 onwards)

| SL. NO | COURSE CODE | COURSE TITLE | L | T | P | C |
|------------------|-------------|--------------------------|---|---|----|----|
| THEORY | | | | | | |
| 1 | | Principles of Management | 2 | 1 | 0 | 2 |
| 2 | E3 | Elective-III | 3 | 1 | 0 | 3 |
| 3 | E4 | Elective-IV | 3 | 1 | 0 | 3 |
| PRACTICAL | | | | | | |
| 1 | | Project Work | 0 | 0 | 20 | 10 |
| TOTAL | | | 8 | 3 | 20 | 18 |

B.E ELECTRONICS AND INSTRUMENTATION ENGINEERING

LIST OF ELECTIVES – R 2013

ELECTIVE I

| SL. NO | COURSE CODE | COURSE TITLE | L | T | P | C |
|--------|-------------|-----------------------------------|---|---|---|---|
| 1 | | Artificial Intelligence | 3 | 1 | 0 | 3 |
| 2 | | Applied Soft Computing | 3 | 1 | 0 | 3 |
| 3 | | Operating Systems | 3 | 1 | 0 | 3 |
| 4 | | Visual Languages and Applications | 3 | 1 | 0 | 3 |

ELECTIVE II

| SL. NO | COURSE CODE | COURSE TITLE | L | T | P | C |
|--------|-------------|---|---|---|---|---|
| 1 | | Embedded Systems | 3 | 0 | 0 | 3 |
| 2 | | Robotics and Automation | 3 | 0 | 0 | 3 |
| 3 | | Ultrasonic Instrumentation | 3 | 0 | 0 | 3 |
| 4 | | Instrumentation and Control in Paper Industry | 3 | 0 | 0 | 3 |

ELECTIVE III

| SL. NO | COURSE CODE | COURSE TITLE | L | T | P | C |
|---------------|--------------------|---|----------|----------|----------|----------|
| 1 | | Power Plant Instrumentation | 3 | 1 | 0 | 3 |
| 2 | | Instrumentation in Petrochemical Industries | 3 | 1 | 0 | 3 |
| 3 | | Mems and Nano Technology | 3 | 1 | 0 | 3 |
| 4 | | Satellite Instrumentation | 3 | 1 | 0 | 3 |

ELECTIVE IV

| SL. NO | COURSE CODE | COURSE TITLE | L | T | P | C |
|---------------|--------------------|---|----------|----------|----------|----------|
| 1 | | Digital Image Processing | 3 | 1 | 0 | 3 |
| 2 | | Advanced Control System | 3 | 1 | 0 | 3 |
| 3 | | Instrumentation in Aerospace and Navigation | 3 | 1 | 0 | 3 |
| 4 | | Optimization Techniques | 3 | 1 | 0 | 3 |