



Estd. 1995

# SETHU INSTITUTE OF TECHNOLOGY

Pulloor, Kariapatti – 626 115

(An Autonomous Institution)



Approved by AICTE, New Delhi and affiliated to Anna University, Chennai)

## DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING MINUTES OF THIRD BOARD OF STUDIES MEETING

DATE: 11.07.15

The Third Board of Studies meeting for Department of Electrical and electronics Engineering is held on 11.07.15 in EEE seminar Hall at Sethu Institute of Technology, Pulloor, Kariapatti.

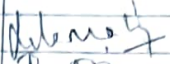
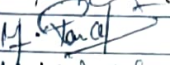
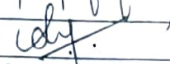
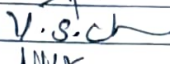
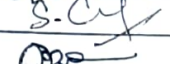
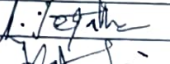
The following members are present.

| S. No. | NAME OF THE MEMBERS                                                     | DESIGNATION & CONTACT ADDRESS                                                                                                                                                              | POSITION               | SIGNATURE                                                                                              |
|--------|-------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|--------------------------------------------------------------------------------------------------------|
| 1      | Dr.M.Santhi                                                             | Prof & Head/EEE,<br>SIT-Kariapatti.                                                                                                                                                        | Chairman               | <br>11/7/15         |
| 2      | Dr.R.Rajeswari<br>(University Nominee)                                  | Assistant Professor ( Senior Grade) Department of Electrical and Electronics Engineering, Government college of Technology, Thadagam Rd, PN Pudur, Coimbatore, Tamil Nadu 641013           | Member nominated by VC | <br>11/7/15        |
| 3      | Dr. K Mahadevan<br>(External Expert nominated by Academic Council)      | Professor<br>Department of Electrical and Electronics Engineering<br>PSNA College of Engineering & Technology,<br>Kothandaraman Nagar, National Highway 209, Dindigul, Tamil Nadu – 624622 | Member                 | <br>11/7/15       |
| 4      | Dr.H.Habibullah sait<br>(External Expert nominated by Academic Council) | Assistant Professor<br>Department of Electrical and Electronics Engineering<br>BIT campus,<br>Tiruchirapalli<br>Tamil Nadu – 620024                                                        | Member                 |                   |
| 5      | Dr.S.Uma Shankar<br>(External Expert nominated by Academic Council)     | Associate Professor<br>School of Electrical Engineering<br>VIT University, Near Katpadi Rd, Vellore, Tamil Nadu 632014.                                                                    | Member                 | <br>S. Umashankar |

| S. NO | NAME OF THE MEMBERS                                               | DESIGNATION & CONTACT ADDRESS                                                                                                   | POSITION | SIGNATURE      |
|-------|-------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|----------|----------------|
| 6     | Dr.K.Adalarasu<br>(External Expert nominated by Academic Council) | Professor, Department of Electronics and Communication Engineering, PSNA College of Engineering and Technology, Dindugal-624622 | Member   | K. Adalarasu   |
| 7     | Mr.R.Rajesh Kumar<br>(Expert from Industry Relating to Placement) | Manager-HR Technical, Elgi Equipments Limited Trichy Road, Singanallur, Coimbatore-641 005.                                     | Member   | Rajesh Kumar   |
| 8     | Mr.K.Aravindhana<br>(Under Graduate Alumni)                       | Proprietor, P.M.K Engineering Services, Avaniyapuram, Madurai - 625012                                                          | Member   | K. Aravindhana |

**FACULTY MEMBERS OF THE DEPARTMENT.**

| SL NO | NAME OF THE FACULTY       | DESIGNATION         | POSITION | SIGNATURE             |
|-------|---------------------------|---------------------|----------|-----------------------|
| 1.    | Dr.A.SRINIVASAN           | PROFESSOR           | Member   | A. Srinivasan         |
| 2.    | Mr.B.MEENAKSHI SUNDARAM   | ASSOCIATE PROFESSOR | Member   | B. Meenakshi Sundaram |
| 3.    | MRS.G.SOUNDRA DEVI        | ASSOCIATE PROFESSOR | Member   | G. Soundra Devi       |
| 4.    | Mrs.C.RAJESWARI           | ASSOCIATE PROFESSOR | Member   | C. Rajeswari          |
| 5.    | Mrs.J.RAHILA              | ASSOCIATE PROFESSOR | Member   | J. Rahila             |
| 6.    | Mrs.C.KOKILA              | ASST.PROF(SR.GRADE) | Member   | C. Kokila             |
| 7.    | Mrs.K.RADHA LAKSHMI       | ASSOCIATE PROFESSOR | Member   | K. Radha Lakshmi      |
| 8.    | Mr.J.KUMARESAN            | ASST.PROF(SR.GRADE) | Member   | J. Kumaresan          |
| 9.    | Mr.G.VARATHAN             | ASST.PROF(SR.GRADE) | Member   | G. Varathan           |
| 10.   | Mr.A.RAMARAJ              | ASST.PROF(SR.GRADE) | Member   | A. Ramaraj            |
| 11.   | Mr.S.SRINIVASAN           | ASST.PROF(SR.GRADE) | Member   | S. Srinivasan         |
| 12.   | Mrs.J.JEYASANTHI          | ASST.PROF(SR.GRADE) | Member   | J. Jeysanthi          |
| 13.   | Mr.V.KANNAN               | ASST.PROF(SR.GRADE) | Member   | V. Kannan             |
| 14.   | Ms.S.INDUMATHI            | ASST.PROF(SR.GRADE) | Member   | S. Indumathi          |
| 15.   | Mrs.M.VETRISELVI          | ASST.PROF(SR.GRADE) | Member   | M. Vetriselvi         |
| 16.   | Mrs.R.C.DHIVYA @ RAMCELLA | ASST.PROF(SR.GRADE) | Member   | R. C. Dhivya          |
| 17.   | Mrs.K.ALAGU SOUNDARI      | ASST.PROF(SR.GRADE) | Member   | K. Alagu Soundari     |
| 18.   | Mrs.V.HEMA MAHESWARI      | ASST.PROF(SR.GRADE) | Member   | V. Hema Maheswari     |

| SE<br>NO | NAME OF THE FACULTY    | DESIGNATION         | POSITION | SIGNATURE                                                                             |
|----------|------------------------|---------------------|----------|---------------------------------------------------------------------------------------|
| 19.      | Mrs.ELAMATHY           | ASST.PROF(SR.GRADE) | Member   |    |
| 20.      | Mrs.P.SARAI ADEVI      | ASST.PROF(SR.GRADE) | Member   |    |
| 21.      | Ms.MEENAI OCHINI       | ASST.PROF(SR.GRADE) | Member   |    |
| 22.      | Ms.S.ROHINI            | ASST.PROF(SR.GRADE) | Member   |    |
| 23.      | Mr.S.KANNADASAN        | ASST.PROF(SR.GRADE) | Member   |    |
| 24.      | Mr.B.KARTHIKEYAN       | ASST.PROF(SR.GRADE) | Member   |    |
| 25.      | Mr.M.PAI PANDIAN       | ASST.PROF(SR.GRADE) | Member   |    |
| 26.      | Mr.M.RAMUVEL           | ASST.PROF(SR.GRADE) | Member   |    |
| 27.      | Mr.M.MUHAMMED ALAUDEEN | ASST.PROF           | Member   |    |
|          | ASHIQ                  | ASST.PROF           | Member   |    |
| 28.      | Ms.C.SONIA             | ASST.PROF           | Member   |    |
| 29.      | Ms.V.S.CHITHRA         | ASST.PROF           | Member   |    |
| 30.      | Mrs.N.KARTHIGA         | ASST.PROF           | Member   |    |
| 31.      | Ms.KOKILA VANI         | ASST.PROF           | Member   |    |
| 32.      | Mr.G.SENTHIL KUMAR     | ASST.PROF           | Member   |   |
| 33.      | Mr.S.GOPI              | ASST.PROF           | Member   |   |
| 34.      | Mr.K.JEYAKANTH         | ASST.PROF           | Member   |  |
| 35.      | Mr.S.VIGNESHWARAN      | ASST.PROF           | Member   |  |
| 36.      | Ms.L.JEGATHA           | ASST.PROF           | Member   |  |
| 37.      | Ms.E.KALAIARASI        | ASST.PROF           | Member   |  |

The Chairman welcomed the members and presented the proposed Curriculum and Syllabi to be followed from the academic year 2015-16 under Autonomous Regulations R-2015 for B.E. Electrical and Electronics Engineering and M.E. Power Electronics and Drives (Full Time & Part Time).

**B.E. Electrical and Electronics Engineering – 2015-16 under Autonomous Regulation:**

The members discussed thoroughly the new curriculum and Syllabi for B.E. Electrical and Electronics Engineering to be followed from the academic year 2015-16 under autonomous regulation and offered useful suggestions.

- Vision and Mission of our department have been changed and approved in order to meet our college mission.
- Based on the suggestions given by NBA expert committee, Programme Educational Objectives and Programme Outcomes of UG and PG Programmes were redefined and approved by the BOS members.
- Feedback from stakeholders regarding curriculum and syllabi were analyzed with the BOS members
- Mapping of Curriculum components with PEOs and POs and Mapping of Curriculum and syllabi with Programme Specific Criteria were presented and analyzed
- Problem based learning and Project based learning courses were presented and discussed

**Dr.R.Rajeswari suggested that:**

- The course titled "Smart Grid Technology" may be included in the Programme Electives, since it is more recent and important area in the electrical field.
- The course titled "Non-Conventional Energy Resources" may be removed in the list of Programme Electives, since the contents of the same is offered in the Open Electives.
- More number of EEE oriented subjects may be offered as Open Electives.
- The contents in the "Solid State Relays" are mostly obsolete, so that it may be replaced as "Numeric Relays".
- "Power Plant Engineering" course may be renamed as "Power System Generation" to avoid repetition of same course title across the Programmes.
- The 60% of the "Industry Involved Courses" may be handled by the Industrial Experts and the remaining 40% may be handled by the Internal Faculty Members.

**Mr.R.Rajesh Kumar suggested that:**

- A new course titled “Automobile Electronics” may be included in the list of Industry Involved Courses.
- The “Power Quality” course may be offered as Professional Core, since it plays a vital role in the area of power system.

**Dr. K Mahadevan suggested that:**

- Advanced Learners may be identified and provided with the Degree as “BE –Honours”
- The practical component may be improved in the syllabus.

**Dr.H.Habibullah said suggested that:**

- PLC based speed control experiments may be included in the syllabus of the course “Advanced Electric Drives and Control Laboratory”
- The courses in the professional electives named “Battery Technologies” and “Bio Medical Engineering” can be replaced by the courses “Distributed Generation and Micro grid” and “Power System Dynamics”.

**Dr.S.Uma Shankar suggested that:**

- The percentage of practical knowledge may be still improved in the syllabus.
- Massive online open courses may be offered with credits.
- A new course titled “Electric Vehicles” and “Deregulation and Restructured Power System” may be included in the list of Professional Electives.

**Dr.K.Adalarasu suggested that:**

- Data structure related subject may be included in the curriculum

**Mr.K.Aravindhan suggested that:**

- Solar based Industry Involved Courses may be included

The Board of Studies of Department of Electrical & Electronics Engineering approves and recommends the Curriculum and Syllabi of B.E. Electrical & Electronics Engineering to be followed from the academic year 2015-16 under autonomous regulations 2015 with the above modifications.

**M.E. Power Electronics and Drives (Full Time & Part Time) – 2015-16 under Autonomous Regulation:**

The members discussed thoroughly the new curriculum and Syllabi for M.E. Power Electronics and Drives (Full Time & Part Time) to be followed from the academic year 2015-16 under autonomous regulation and offered useful suggestions.

Based on the suggestions given by the members, the following resolutions are made:

- One Core Course (15PPE204 – Internship /Industrial Training) is newly introduced in the curriculum.
- Open Elective is newly included in the curriculum
- Two electives are removed from our 2014 Autonomous regulation and two new electives are added in 2015 Autonomous regulation
- The newly added electives are,
  - 15PPE517- Nanomaterials and Energy Systems.
  - 15PPE524- Optimization Techniques in Power Electronics
- Some core & elective subject syllabuses are modified from R2014 Autonomous Syllabus as follows,

| S. No | Name of the Courses                              | Modification                                                                                            |
|-------|--------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| 1.    | Analysis of Electrical Machines                  | Performance analysis of three phase squirrel cage Induction Motor using MAXWELL RMxpert Software(ANSYS) |
| 2.    | Analysis of power converters                     | Sepic converters – super lift converters-zeta converters-applications.                                  |
| 3.    | Power Electronics for PV and Wind Energy Systems | Design of PV Systems                                                                                    |
| 4.    | Digital Simulation of Power Electronic Systems   | Simulation Using PSpice Simulator                                                                       |
| 5.    | HVDC System and Control                          | HVDC Light System                                                                                       |
| 6.    | Power Controllers in Power Systems               | Distributed Flexible AC Transmission System(D-FACTS) devices                                            |
| 7.    | Electric Power Quality                           | Shunt Active Filters –PSCAD/EMTDC-Simulation of Active Filter –Unified Power quality                    |
| 8.    | Microcontroller Based System Design              | Introduction to MPLAB IDE and PICSTART plus-Device Programming using MPLAB and PICSTART plus            |
| 9.    | Switched Mode Power Conversion                   | Design of Capacitors                                                                                    |
| 10.   | Restructured Power System                        | Calculation of Static and dynamic ATC                                                                   |

|     |                                    |                                             |
|-----|------------------------------------|---------------------------------------------|
| 11. | Energy Management and Auditing     | Refrigeration & Air Conditioning            |
| 12. | Modern power Semiconductor Devices | Heat sink design and selection of heat sink |

**Dr.R.Rajeswari suggested that:**

- Include terms and condition for the course “Internship/Industrial Training” in the R2015 curriculum itself.

**Dr.H.Habibullah said suggested that:**

- Introduce the new laboratory titled as “Design and Development of Power Module Lab” with fabrication experiments in the Curriculum.



Chairman  
Board of Studies  
Electrical and Electronics Engineering

Chairperson  
Board of Studies  
Electrical & Electronics Engineering  
Sethu Institute of Technology  
Kariapatti - 626 115

## Industry Involved Courses

| S.No. | Name of the Industry Involved Course                     | Address of the Involved Industry                                        |
|-------|----------------------------------------------------------|-------------------------------------------------------------------------|
| 1     | Wind Farm Development and Operation                      | National Institute of Wind Energy, Chennai                              |
| 2     | Design of Towers and Blades Structures                   | National Institute of Wind Energy, Chennai                              |
| 3     | Wind Turbine Blades Fabrication Technology               | National Institute of Wind Energy, Chennai                              |
| 4     | ECO Paint Application Technology for Automobile Industry | Durr India Pvt.Ltd , Chennai                                            |
| 5     | Solar Voltaic Technology                                 | Surya Sakthi Pvt Ltd,Madurai                                            |
| 6     | Aeromodelling                                            | Nuclons Automation & Control<br>No.10,Flowers Road,<br>Kelpark, Chennai |
| 7     | Programmable Logic Controller                            | Unique Control s&<br>Automation<br>Madurai                              |
| 8     | Real Time Application on Embedded Systems                | TECNIPPvt. Ltd., Chennai                                                |
| 9     | System Design and Implementation                         | Elegant Training Services,<br>Anna Nagar , Madurai                      |
| 10    | Energy management and auditing                           | TSP Engineer Pvt Ltd, Trichy                                            |

10/7/14