

Sri Sairam Engineering College

Sai Leo Nagar, West Tambaram, Chennai – 600044

Department of Electrical and Electronics Engineering

Minutes of the first Board of Studies meeting

The first Board of Studies (BOS) meeting of the Department of Electrical and Electronics Engineering was conducted on 06.06.2020 through online mode (ZOOM) at 10.30 A.M (IST).

Following members were present.

- | | |
|---|---|
| 1. Dr. N. KUMARAPPAN
Professor
Department of Electrical Engineering
Annamalai University
Chidambaram | External stakeholder
(Subject Expert) |
| 2. Dr.R.GNANADASS
Professor
Department of Electrical Engineering
Pondicherry Engineering College
Pondicherry | External stakeholder
(Subject Expert) |
| 3. Dr.E.CHANDIRA SEKARAN
Professor
Department of Electrical and Electronics Engineering
Coimbatore Institute of Technology, Coimbatore | External stakeholder
(University Representative) |
| 4. Mr. S. SELVAKUMAR
Head-Design & Engineering
PowerProjects
Plot C, Gokulam Flats, 65/2A, Sakthi Nagar New St,
Sakthi Nagar, Porur, Chennai, Tamil Nadu 600116 | External stakeholder
(Industrial Expert) |
| 5. Ms. K. SOWMYA
EE-Component Validation Engineer
FCA, Perungudi
Hinduja Tech Groups, Chennai | External stakeholder
(Alumni Member) |
| 6. Dr.B.Meenakshi | Internal stakeholder |
| 7. Dr.R.Azhagumurugan | Internal stakeholder |
| 8. Dr.C.Nayanatara | Internal stakeholder |
| 9. Prof.P.Sharmila | Internal stakeholder |

10. Prof.P.Shanmugapriya	Internal stakeholder
11. Prof.S.Deeparohini	Internal stakeholder
12. Prof.L.Kurinjimalar	Internal stakeholder
13. Dr.T.Porselvi Professor& Head, EEE Sri Sairam Engineering College	Chairman/BOS/EEE

Dr.T.Porselvi, Chairperson of BOS opened the meeting by welcoming and introducing the external members to the internal members. She placed the following agenda for the planning and discussion of the members. The following suggestions and considerations were made during the meeting.

BOS.EEE.20.01.01: To review and approve the curriculum and syllabus of UG programme in EEE. The members recommended the following:

- a) Electric circuits and Network Analysis should be kept as separate subjects, or network part can be excluded.
- b) Internship should be completed before 8th semester, it need not be completed in the specified semester.
- c) Data structures should be included with Python Programming, which is necessary for placements
- d) Fourier Series/Laplace Transform should be included in 2nd semester for EEE students
- e) Electrical and Electronics Measurement subject title to be changed as Measurements and Instrumentation. (latest devices such as DSO/MSO/PQ analyzer should be included)
- f) Instead of Energy Harvesting Technology, Electric Energy Generation System may be included which can consists of conventional energy sources and renewable energy sources.
- g) Live in Lab Project – specific title need not be mentioned
- h) Linear and Digital integrated circuits can be framed as two separate subjects- (Analog electronics circuits and Digital electronics)
- i) Control systems lab should be included in IV semester with minimum 1.5 credits
- j) Constitution of India – 5 units not needed, freedom for students can be given (conduct seminar ,class quiz, lecture by expert members can be arranged)
- k) Power Electronics (with lab) should be separated as theory and lab.
- l) Simulation experiments should be along with hardware.
Heat sink, thermal design can be included. Power BJT can be removed. SCR, TRIAC, IGBT is enough. In syllabus step up and step down converters can be removed as there are Boost and Buck regulators in the syllabus. Detailed commutation can also be removed.
- m) MP&MC (with Lab) should be separated as theory and lab. Some content(8085) can be removed. Arduino and Arm Processor can be included.
- n) In Unit V of the subject Synchronous and Induction Machines - Amplidyne Motor, Linear Induction Motor, Introduction to Magnetic Levitation systems can be removed.
- o) In PSA, unit V -Stability Analysis content can be reduced, in unit-II- Q limit and bus switching for voltage can be removed.
- p) The subject Computer aided design of electrical machines should be removed or included in electives.

- q) Embedded system and IOT is vast syllabus.
- r) PSO using Computational intelligence lab should be renamed as Power System Simulation Lab. In syllabus Matlab to be included.
- s) In Solid States Drives and Control text book can be G.K Dubey and S.K Pillai, Vedam Subramanian book to be included.
- t) Renewable Energy system should be replaced by Distributed generation and micro grid.(1st unit -Wind,2nd - Solar and PV,3rdother resources,4th and 5th- Distributed Generation and Micro grid)
- u) Artificial intelligence should be removed or moved to open elective.

Elective -I

- a) Design of electrical apparatus subject to be removed.
- b) Power system stability is a complex subject for UG students and hence can be removed.
- c) Power Electronics and modern power converters (Elective-I) are coming under same semester which will be difficult for the students
- d) FACTS and Advanced Control System should also be removed. At student point of view these subjects are difficult to study in V Semester

Elective –II

- a) Power Quality content can be reduced.
- b) **The subject Block chain and Crypto currency Technologies can be replaced by Big Data Analytics and Data Science.**
- c) In Smart Grid technologies, Unit-I to be changed and text book should be Wiley publication
- d) Advanced Energy storage technology should be changed as Energy storage technology.

Elective -III

- a) In HVE text book should be C.L .Wadhwa and M.S .Naidu (Only two)
- b) The subject Programmable Logic controller can be removed and either Industrial Automation or Industry 4.0 can be included.
- c) EHV Power Transmission can be included in elective after studying HVE .
- d) Anna university syllabus can be followed for the subject Restructured Power system
- e) Power system transients is very tough and it can be removed.

Elective –IV

- a) **Power System Protection and Switchgear can be renamed as Power system protection.**
- b) **In Soft Computing Techniques for Electrical Engineering, Unit -V should be replaced by case study related to Electrical Engineering.**

Elective -V

- a) **Micro grid and control can be removed.**
- b) **VLSI design is not needed for electrical students**
- c) **In Energy management, Power analyser can be included in syllabus.**

Elective –VI

- a) **Biomedical Instruments and Electrical Safety can be separated into 2 subjects.**
- b) **Diagnosis and Protection for Solid State Systems can be removed from syllabus.**
- c) **Industrial Drives and Control can also be removed from syllabus**
- d) **TQM can be replaced by Operational Research**

Based on the suggestions given by the members, the Chairperson of BOS told that those fruitful suggestions would be incorporated appropriately in the **curriculum and syllabi**.

BOS resolved to recommend the following to the Academic Council for further approval.

- a) **Syllabus for core courses of B.E. Electrical and Electronics Engineering (EEE) Programme as enclosed in Annexure -I.**
- b) **List of Professional and Open Elective Courses in B.E. Electrical and Electronics Engineering (EEE) Programme as enclosed in Annexure -II**
- c) **List of Courses offered for other departments from EEEas enclosed in Annexure -III.**
- d) **Syllabus for M.E. Power Electronics and Drives Programme as enclosed in Annexure -IV.**

BOS.EEE.20.01.02: To review and approve the syllabus of courses offered to Mechanical

The members reviewed the following syllabus of courses offered to Mechanical and resolved to approve the same.

BOS resolved to recommend the following to the Academic Council for further approval.

1. 20ESEE201 Electrical Technology with Lab

List of Courses offered for **Mechanical** department from EEE as enclosed in **Annexure -III**.

BOS.EEE.20.01.03: To review and approve the syllabus of courses offered to CSBS

The members reviewed the following syllabus of courses offered to CBCS and resolved to approve the same.

BOS resolved to recommend the following to the Academic Council for further approval.

- 1. 20 ES EE 105 Principles of Electrical Engineering**
- 2. 20ESPL 108 Electrical Engineering Laboratory**

List of Courses offered for **CSBS** department from EEE as enclosed in **Annexure -III**.

BOS.EEE.20.01.04: To review and approve the syllabus of courses offered to Civil

The members reviewed the following syllabus of course offered to Civil and resolved to approve the same.

BOS resolved to recommend the following to the Academic Council for further approval.

1. 20 ESEE202 Basics of Electricals & Electronics Engineering

List of Courses offered for Civil department from EEE as enclosed in **Annexure -III**.

BOS.EEE.20.01.05: To review and approve the curriculum and syllabus of PG programme in Engineering with specialization in Power Electronics and Drives.

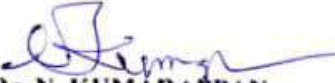
The members reviewed the syllabus of courses offered to PG programme in Engineering with specialization in Power Electronics and Drives and resolved to approve the same.

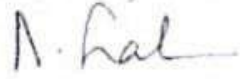
BOS resolved to recommend the following to the Academic Council for further approval.

General Remarks by the members:

1. Objective should be uniform for all subjects (3/4/5). Mapping should be done with utmost care.
2. Text books must be maximum of 2 and 5 reference books; the year of edition should be latest.
3. Theory and Lab should be separated. (Nomenclature should be changed)
4. Electives can be framed as a single list.
5. Credits for labs should be worked out. Simple labs can be given 1 credit and other labs with minimum of 1.5 credits.
6. Skill enhancement can be made as credit free.
7. Ensure Project is given with 10 credits.
8. Suggested to add internship for all semesters and ensure the total number of credits to be satisfied before the commencement of 8th semester.
9. Suggested to frame the regulation after completing all departments' BOS meeting.

In the concluding remarks, the **Chairperson** stated that the reduction of credits in UG Curriculum and other recommendations suggested by the members would be considered. Meeting then ended with vote of thanks by Dr.B.Meenakshi, Professor/EEE.


Dr. N. KUMARAPPAN
Professor
Department of Electrical Engineering
Annamalai University


Dr. R. GNANADASS
Professor
Department of Electrical Engineering
Pondicherry Engineering College

E. Chandira

Dr. E. CHANDIRA SEKARAN
Professor
Department of Electrical and Electronics Engg
Coimbatore Institute of Technology, Coimbatore

S. Selvaraj

Mr. S. SELVAKUMAR
Head-Design & Engineering
Power Projects
Plot C, Gokulam Flats, 65/2A, Sakthi
Nagar New St,
Sakthi Nagar, Porur, Chennai, Tamil Nadu
600116

K. Sowmya

Ms. SOWMYAK
EE-Component Validation Engineer
FCA, Perungudi
Hinduja Tech Groups, Chennai

M. B. Meenakshi

Dr. B. Meenakshi
Prof/ Dept. of EEE
Sri Sairam Engineering College
Chennai-44

R. Azhagumurugan

Dr. R. Azhagumurugan
Associate Prof./ Dept. of EEE
Sri Sairam Engineering College
Chennai-44

C. Nayanatara

Dr. C. Nayanatara
Associate Prof/ Dept. of EEE
Sri Sairam Engineering College
Chennai-44

P. Sharmila

Prof. P. Sharmila
Assistant Prof./ Dept. of EEE
Sri Sairam Engineering College
Chennai-44

P. Shanmugapriya

Prof. P. Shanmugapriya
Assistant Prof/ Dept. of EEE
Sri Sairam Engineering College
Chennai-44

S. Deeparohini

Prof. S. Deeparohini
Assistant Prof./ Dept. of EEE
Sri Sairam Engineering College
Chennai-44

L. Kurinjimalar

Prof. L. Kurinjimalar
Assistant Prof/ Dept. of EEE
Sri Sairam Engineering College
Chennai-44

T. Porselvi

Dr. T. Porselvi
Chairperson/BOS/EEE
Professor & Head/EEE
Sri Sairam Engineering College
Chennai-44