S.A. ENGINEERING COLLEGE, CHENNAI-600 077 (An Autonomous Institution Affiliated to Anna University) DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING MINUTES OF BOARD OF STUDIES MEETING

DATE: 24/02/2021

S.A.Engineering College, Chennai conducted the meeting of Board of Studies for UG (B.E -EEE) and PG (M.E – EST) in the Department of Electrical and Electronics Engineering as per the guidelines of UGC on 24/02/2021 in online mode (Zoom meeting).

The Following are the Members of Board of Studies:

| S.NO | NAME & ADDRESS | DESIGNATION |
|----------|---|--------------------------------|
| 1. | Dr. G. Rohini | |
| | Department of Electrical and Electronics Engineering, | Chairperson, Professor & Head, |
| | S.A. Engineering College, Chennai-77. | Professor & Head, |
| 2. | Dr. P. Sivakumar | University Nominee, |
| | Department of Electrical and Electronics Engineering, | Associate Professor, |
| | RajaLakshmi Engineering College, Çhennai. | |
| 3. | Dr. K. Selvajyothi, | Subject Expert, |
| | Indian Institute of Information Technology | Assistant Professor, |
| | Design & Manufacturing (IIITDM), | Assistant Horoson, |
| <u> </u> | Kancheepuram, Chennai-127. | |
| 4. | Dr. N.P. Subramaniam, | Subject Expert, |
| | Department of Electrical and Electronics Engineering, | Associate Professor, |
| | Pondicherry Engineering college, Puducheery. | |
| 5. | Mr. N. Jeyapaul Singh, | Representative from |
| | Lucas TVS Pvt. Ltd, Chennai. | Industry, |
| | | Deputy Manager |
| 6. | Mr. S.Thirumalaikumarasamy, | Meritorious Alumnus |
| | Hitachi, Chennai. | Software Specialist |
| 7. | Dr. S. Kamalakkannan, (Power Electronics and Drives) | Professor |
| | EEE / SAEC | |
| 8. | Dr. R. Premalatha, (Power Electronics and Drives) | Professor |
| | EEE / SAEC | |
| 9. | Mrs. N. Magadevi, (Embedded System technologies) | Associate Professor |
| | EEE / SAEC | |
| 10. | Mrs. S. Bharathi M.E (Applied Electronics) | Associate Professor |
| | EEE / SAEC | |
| 11. | Mrs. A. Prabha, (Energy Engineering) | Associate Professor |
| | EEE / SAEC | |
| 12. | Mr. B. Karthikeyan, (Power System) | Associate Professor |
| 12. | EEE / SAEC | |
| 13. | Mrs. J. Megala, (Communication System) | Associate Professor |
| 13. | EEE / SAEC | 1133001410 110103301 |
| 14. | Mrs. G. Irin Loretta, (Applied Electronics) | Associate Professor |
| 14. | EEE / SAEC | Associate Fiblessoi |
| 15 | Mrs. K.S. Margaret, (Instrumentation Engineering) | Assistant Professor |
| 15. | EEE / SAEC | Assistant Professor |
| | EEE / SAEC | |

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| 16. | Mrs. A. Vinidha Roc, (VLSI Design) EEE / SAEC | Assistant Professor |
| 17. | Mrs. S. Sathya, (Power Electronics & Drives) EEE / SAEC | Assistant Professor |
| 18. | Mrs. N. Rajavinu, (Power Electronics & Drives) EEE / SAEC | Assistant Professor |
| 19. | Mrs.L.Valliammal, (Electronics and Control) EEE / SAEC | Assistant Professor |
| 20. | Mr. T. Sathish Kumar, (Power System Engineering) EEE / SAEC | Assistant Professor |
| 21. | Mr. S.P. Alexprabu, (Power Electronics & Drives) EEE / SAEC | Assistant Professor |
| 22. | Mr. N. SakthiSaravanan, (Power Electronics & Drives) EEE / SAEC | Assistant Professor |
| 23. | Mrs. L. Naga Lakshmi, (Power System Engineering) EEE / SAEC | Assistant Professor |
| 24. | Mr. R. Kamalakannan, (Embedded System Technologies) EEE / SAEC | Assistant Professor |
| 25. | Ms. R. Priyanka, (Power Electronics & Drives) EEE / SAEC | Assistant Professor |
| 26. | Ms. E. Lavanya, (Communication systems) EEE / SAEC | Assistant Professor |

The Chairperson **Dr. G. Rohini**, Board of Studies in Department of Electrical and Electronics Engineering welcomed the Members of Studies.

• The Meeting proceeded to the matters in Agenda:

| S.NO | POINTS DISCUSSED DESCRIPTION | | |
|------|--|--|--|
| 1. | Verification of syllabus formation for semester I & II Indian Constitution subject was included as a mandatory course in Semester I. Programming in C -Theory and lab subject was included in semester II. Circuit theory-Theory cum lab subject was framed and allotted with 4 credits. | | |
| 2. | Comparison of syllabus framed with that of Anna University for the semesters III to VIII. No Elective subject in third semester. Power plant engineering subject has been removed from 3rd semester. Measurement & Instrumentation subject has been shifted from IV semester to III semester. Control and Instrumentation lab has been shifted from V to IV semester. The total number of theory and lab subjects for the semester IV, now became 5Theory + 3Lab. Microprocessor and microcontroller lab has been shifted from semester VI to semester V. Embedded system subject has been shifted from semester VI to semester VII. Power system operation and control along with Power system simulation lab has been shifted from semester VII to semester VI. Mini project shifted from semester VI to semester VII. | | |

| 3. | All Major/Technical papers which have been allotted till 6 th Semester should cover the GATE syllabus. |
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| 4. | Discussions and Suggestions are given regarding curriculum and syllabus and they are listed in Annexure. |

CERTIFICATE

The UG (B.E -EEE) and PG (M.E-EST) Syllabus of the Department of Electrical and Electronics Engineering, S.A. Engineering College (Autonomous), Chennai for 2020-2021 admission onwards, has been ratified by the Board of Studies of Electrical and Electronics Engineering which met on 24/02/2021 at S.A. Engineering College, Chennai in online mode.

Members Present:

| S.NO | NAME & ADDRESS | DESIGNATION | SIGNATURE |
|------|--|--|----------------|
| 1. | Dr. G. Rohini Department of Electrical and Electronics Engineering, S.A. Engineering College, Chennai-77. | Chairperson, Professor & Head, | 9. pohin |
| 2. | Dr. P. Sivakumar Department of Electrical and Electronics Engineering, RajaLakshmi Engineering College, Chennai. | University Nominee, Associate Professor, | R Sid |
| 3. | Dr. K. Selvajyothi, Indian Institute of Information Technology Design & Manufacturing (IIITDM), Kancheepuram, Chennai-127. | Subject Expert, Assistant Professor, | Selvappeter |
| 4. | Dr. N.P. Subramaniam, Department of Electrical and Electronics Engineering, Pondicherry Engineering college, Puducheery. | Subject Expert, Associate Professor, | N. P. Le Samue |
| 5. | Mr. N. Jeyapaul Singh, Lucas TVS Pvt. Ltd, Chennai. | Representative from Industry, Deputy Manager | NOTO |
| 6. | Mr. S.Thirumalaikumarasamy, Hitachi, Chennai. | Meritorious Alumnus Software Specialist | s of |
| 7. | Dr. S. Kamalakkannan, (Power Electronics and Drives) EEE / SAEC | Professor | der de |
| 8. | Dr. R. Premalatha, (Power Electronics and Drives) EEE / SAEC | Professor | 2. Phil |
| 9. | Mrs. N. Magadevi, (Embedded System technologies) EEE / SAEC | Associate Professor | Mogadin |
| 10 | Mrs. S. Bharathi M.E (Applied Electronics) | Associate Professor | S. BRITI |

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| | EEE / SAEC | | QMS F08 |
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| 11. | Mrs. A. Prabha, (Energy Engineering) | Associate Professor | 7_ |
| - 10 | EEE / SAEC | | V |
| 12. | Mr. B. Karthikeyan, (Power System) EEE / SAEC | Associate Professor | Blee |
| 13. | Mrs. J. Megala, (Communication System) EEE / SAEC | Associate Professor | Lefoler |
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| 18 | . Mrs. N. Rajavinu, (Power Electronics & Drives) EEE / SAEC | Assistant Professor | Way |
| 19 | . Mrs. L. Valliammal, (Electronics and Control) EEE / SAEC | Assistant Professor | Valli |
| 20 | . Mr. T. Sathish Kumar, (Power System Engineering) EEE / SAEC | Assistant Professor | Pantu |
| 21 | . Mr. S.P. Alexprabu, (Power Electronics & Drives) EEE / SAEC | Assistant Professor | Na |
| 22 | . Mr. N. SakthiSaravanan, (Power Electronics & Drives) EEE / SAEC | Assistant Professor | W |
| 23 | . Mrs. L. Naga Lakshmi, (Power System Engineering) EEE / SAEC | Assistant Professor | De Lushon |
| 24 | . Mr. R. Kamalakannan, (Embedded System Technologies) EEE / SAEC | Assistant Professor | RIM |
| 25 | . Ms. R. Priyanka, (Power Electronics & Drives) EEE / SAEC | Assistant Professor | Rija |
| 26 | . Ms. E .Lavanya, (Communication Systems) EEE / SAEC | Assistant Professor | E-Hja |

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BoS Annexure:

- 1. BoS Committee has gone through Curriculum for UG (III-VIII Semester) & PG (III & VI Semester Syllabus).
- 2. The committee has suggested introducing Project PHASE- I instead of Mini Project in semester VII and Project PHASE-II in Semester VIII if there is a provision for it. .
- 3. Committee suggested to check the credits allotted in relation to the AICTE model curriculum.
- 4. Power plant engineering subject has been removed from curriculum which was accepted by the committee and also enquired about the coverage of boiler and turbine that was available in Basic civil and mechanical engineering in Semester-II.
- 5. Committee suggested that instead of clubbing Linear Integrated and Digital lab, have a separate lab for Linear Integrated Circuits lab.

6. Electrical machines -I

The Committee has gone through the syllabus of Electrical machines -I and suggested the following changes.

- Committee asked to include speed control of machines in course objectives.
- In Unit-V they asked to include load test on Three phase transformer.

7. Electrical machines laboratory -I

The Committee has gone through the syllabus of Electrical machines laboratory -I and suggested the following changes.

- Committee asked to rearrange the cycle of experiment in unit wise
- Committee asked to include parallel operation of the transformer and load test on three phase transformer.

8. Electromagnetic theory

The Committee has gone through the syllabus of Electromagnetic theory and accepted the syllabus framed for all units.

9. Measurement and Instrumentation

The Committee has gone through the syllabus of Measurement and Instrumentation and suggested the following changes.

- The committees suggested swapping Unit-IV and Unit -V content and also rename the UNIT- IV as transducers and UNIT -V as Date acquisition system and storage devices.
- They suggested that some applications can be introduced in Unit-IV.
- . In Unit-V they asked to remove magnetic tape and recorder and to include the latest storage devices.

10. Electronics Devices and Circuits

The Committee has gone through the syllabus of Electronics Devices and Circuits and suggested the following changes.

. In unit I they asked to include clippers and clamper using diode, as qualitative treatment.

11. Electronics Devices and Circuits Laboratory

The Committee has gone through the syllabus of Electronics Devices and Circuits Laboratory and suggested the following changes.

The committee suggested including study of DSO in addition to CRO.

- They suggested having application oriented experiments like Zener diode as voltage regulator, diode as clipper and clamper ,transistor as amplifier iand remove some basic experiments.
- They asked to include the name of circuit simulation software for doing the experiment.

12. Digital Logic Circuits

The Committee has gone through the syllabus of **Digital Logic Circuits** and suggested the following changes.

- The committee accepted the syllabus framed for all units
- Committee suggested converting Digital Logic Circuits as theory cum lab with 4 credits and also suggested adding VHDL programmings.

13. Linear Integrated Circuits:

The Committee has gone through the syllabus of Linear Integrated Circuits and suggested the following changes.

 In unit IV they suggested not to have any special IC number mentioned in the syllabus.

14. Linear & Digital Integrated Circuits Lab

The Committee has gone through the syllabus of Linear & Digital Integrated Circuits Lab and suggested the following changes.

- Committee asked to include OP-AMP application oriented experiments
- Instead of Linear & Digital Integrated Circuits Lab it is preferred to have Linear Integrated Circuits separately. Digital lab can be combined with its Theory.

15. Electrical Machines-II

The Committee has gone through the syllabus of Electrical Machines-II and suggested the following changes.

- In Unit IV, they suggested mentioning the slip power recovery scheme using conventional method.
- In Unit V, they asked to include PMBLDC motor and PMSM motor instead of reluctance motor and universal motor.
- They asked to include Theraja.B.L also as a reference book.
- In Unit V, they suggested that no need to mention the separate topics for each types
 of 1φ Induction Motor can be added as types of 1φ Induction Motor and its
 applications.

16. Electrical Machines-II Lab

The Committee has gone through the syllabus of **Electrical Machines-II** Lab and accepted the syllabus framed for all the experiments.

17. Control System

The Committee has gone through the syllabus of Control System and suggested the following changes.

 Committee asked to remove the topic proposed - Synchros and to have the Gear trains.

18. Control & Instrumentation Lab

The Committee has gone through the syllabus of Control & Instrumentation Lab and accepted the syllabus framed for all the experiments.

19. Electrical Drives and Control (For Mechanical)

The Committee has gone through the syllabus and suggested the following changes.

In Unit –IV they asked to remove the DC-DC Buck and Boost converter.

20. Electrical Engineering Lab(For Mechanical)

- Committee asked to remove the OCC & load test on the DC shunt & DC series generator, as this lab is mainly meant for drives & control.
- Instead of that study of storage batteries can be included.

21. Transmission & Distribution

- The Committee suggested that the syllabus is very vast with proposed topics of generation in Unit- I. Decided to be retained as Transmission and Distribution with few modifications.
- Asked to make sure that the content is not lengthy.

22. ME –Embedded Systems Technology

The Committee has gone through the syllabus of all the subjects for Embedded Systems Technology and accepted the syllabus framed for all units.

GENERAL POINTS:

- 1. The committee has suggested each topic in the syllabus must be very specific.
- 2. Committee also suggested including Pre-requisite followed by Course Objective, wherever applicable.
- 3. Committee asked to update the syllabus with recent editions of Textbooks and reference books.
- 4. The Committee suggested introducing an entrepreneur Course as a Mandatory course if possible in any one higher semester.