

ERODE SENGUNTHAR ENGINEERING COLLEGE, PERUNDURAI, ERODE – 638 057

An Autonomous Institution Affiliated to Anna University, Chennai

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

The Board of studies meeting of Electrical and Electronics Engineering for the B.E. (EEE) and M.E. (PED) degree program from the academic year 2019 – 20 onwards was convened and held on 13th July 2019 in the IIT Bombay Remote Centre of Administrative Block, Erode Sengunthar Engineering College, Perundurai. The Minutes of the Meeting was

ITEM 01 WELCOMING OF BOARD OF STUDY MEMBERS

The Chairman of EEE Board of Studies welcomed all members of Board of Studies. He presented the introduction and achievements of the department and briefed the agenda to be discussed followed by introduction of all members present.

ITEM 02 TO CONSIDER AND APPROVE THE REGULATIONS OF B.E. (ELECTRICAL AND ELECTRONICS ENGINEERING) PROGRAMME

The Chairman of EEE Board of Studies presented the Regulations 2019 of B.E. Electrical and Electronics Engineering programme. The Board of Studies reviewed the regulations and suggested following modifications.

- Dr. K. Sundareswaran and Dr. S. Thangavel suggested to reduce the total no of credits in the range of 160 – 165 for UG Curriculum.
- Dr. K. Sundareswaran insisted to provide the benefits of doing additional credits by the students in the Regulation of B.E. Electrical and Electronics Engineering programme.
- Dr. S. Thangavel suggested to modify the Programme Specific Outcomes related to the core of Engineering instead of interdisciplinary.

The Board of Studies resolved to approve the regulations of B.E. Electrical and Electronics Engineering programme brought forward by the Chairman incorporating the above changes.

ITEM 03 **TO CONSIDER AND APPROVE THE REGULATIONS OF M.E. (POWER ELECTRONICS AND DRIVES) PROGRAMME.**

The Chairman of EEE Board of Studies presented the Regulations 2019 of M.E. Power Electronics and Drives. The Board of Studies reviewed the regulations and suggested following modifications.

- Dr. K. Sundareswaran and Dr. S. Thangavel suggested to reduce the total no of credits in the range of 60 – 65 for PG Curriculum.
- Dr. K. Sundareswaran and Dr. S. Thangavel suggested not to include the 1 credit courses for the PG courses.
- Dr. S. Thangavel suggested to design Programme Educational Objective and Programme Specific Outcomes for PG courses separately.

The Board of Studies resolved to approve the regulations of M.E. Power Electronics and Drives programme brought forward by the Chairman incorporating the above changes.

ITEM 04 **TO CONSIDER AND APPROVE THE CURRICULUM OF I TO VIII SEMESTERS FOR THE B.E. (ELECTRICAL AND ELECTRONICS ENGINEERING) PROGRAMMES TO BE OFFERED UNDER R-2019 WITH EFFECT FROM THE ACADEMIC YEAR 2019 – 2020 ONWARDS.**

The Chairman of EEE Board of Studies presented the Curriculum 2019 of I to VIII for the B.E. Electrical and Electronics Engineering. The Board of Studies reviewed the Curriculum and suggested following modifications.

- Dr. K. Sundareswaran, Professor suggested to remove the electives in the first semester and to provide Basic English as a mandatory course.
- The Chairman, EEE Board of studies briefed the importance of language electives (Japanese,

French and Hindi). Er.N.C.Lenin, appreciated that, it could improve the placement as globally competent.

- Dr. K. Sundareswaran and Dr. S. Thangavel suggested to provide the language electives in open elective courses and insisted to modify as 1 credit course.
- Dr. S. Thangavel suggested to provide Physics for Electrical Engineering subject instead of Physics elective.
- Dr. K. Sundareswaran and Mr. T. Jayakumar suggested combine C language and Python programming subjects. Dr. G. Sivakumar, Prof. & HoD / CSE insisted that, studying 2 languages in the same subject looks little bit tough for the students.
- Dr. K. Sundareswaran and Dr. S. Thangavel discussed with the Dr. G. Sivakumar, it is resolved to combine C language and Data Structure in one course and provided in 2nd semester.
- Dr. K. Sundareswaran and Dr. S. Thangavel suggested that, the Electric Circuits subject can be provided in the 3rd semester instead of 2nd semester.
- Dr.P.Ponnambalam enquired about the language elective – II, and it is resolved that Japanese, French and Hindi can be provided in the open elective. Dr. K. Sundareswaran enquired about the faculty availability for taking the language elective. The Chairman briefed that, with the preference of students the institution will provide faculty members.
- Dr. K. Sundareswaran and Dr. S. Thangavel suggested to interchange the Electric Circuits and Electron Devices and Circuits subjects in the curriculum. It is resolved to provide Electric Circuits subject in the 3rd semester and Electron Devices and Circuits subject in 2nd semester.
- Dr. K. Sundareswaran enquired that, the Basic English, Communicative English and Physics subjects in the first and second semester curriculum can be combined and he suggested that, it may be provided in the single semester.
- Dr. K. Sundareswaran and Dr. S. Thangavel enquired about the 19GE301 - Indian Constitution subject. The Chairman and Director / CoE briefed about the AICTE model curriculum and it is resolved that, the subject can be provided in the curriculum.
- Mr. T. Jayakumar suggested that, the Traditional Knowledge subject can be provided before Indian Constitution.
- Dr. S. Thangavel suggested to frame the syllabus of Power Plant Engineering and Renewable Energy sources subjects with different concepts. He insisted that, the open elective courses must be related to core programme. It is resolved to remove value engineering, soft computing and soft computing techniques subjects from the open elective of Electrical and Electronics Engineering

curriculum.

- Dr.P.Ponnambalam, suggested to provide 19EE504 - Microcontroller and Embedded System and 19EE605 - Microcontroller and Embedded Programming Laboratory in the same semester. He insisted to provide 19EEX08 - Solid state Drives subject in the core in curriculum.

The Board of Studies resolved to approve the Curriculum of 2019 of I to VIII for the B.E. Electrical and Electronics Engineering programme brought forward by the Chairman incorporating the above changes.

ITEM 05

TO CONSIDER AND APPROVE THE CURRICULUM OF I TO IV SEMESTERS FOR THE M.E. (POWER ELECTRONICS AND DRIVES) PROGRAMMES TO BE OFFERED UNDER R-2019 WITH EFFECT FROM THE ACADEMIC YEAR 2019 – 2020 ONWARDS.

The Chairman of EEE Board of Studies presented the Curriculum 2019 of I to IV for the M.E. Power Electronics and Drives. The Board of Studies reviewed the Curriculum and suggested following modifications.

- Dr. K. Sundareswaran and Dr. S. Thangavel suggested to provide 19PE204 - System Theory in the first semester in the M.E. (Power Electronics and Drives) curriculum and 19PE105 - Modeling and Analysis of Electrical Machines in the second semester.
- Dr. S. Thangavel enquired about the 19PE201 - Research Methodology, the Chairman and Director / CoE explained about the creation of research environment among the students
- Dr.P.Ponnambalam, suggested to add Microcontroller based Power Electronics Theory and Laboratory in the PG curriculum.

The Board of Studies resolved to approve the Curriculum of 2019 of I to IV for the M.E. Power Electronics and Drives programme brought forward by the Chairman incorporating the above changes.

ITEM 06

TO CONSIDER AND APPROVE THE SYLLABI OF I TO VIII SEMESTERS FOR THE B.E. (ELECTRICAL AND ELECTRONICS ENGINEERING) PROGRAMMES TO BE OFFERED UNDER R-2019 WITH EFFECT FROM THE ACADEMIC YEAR 2019 – 2020 ONWARDS.

The Chairman of EEE Board of Studies presented the syllabi of I to VIII for the B.E. Electrical and Electronics. The Board of Studies reviewed the syllabus and suggested following modifications.

- Dr. K. Sundareswaran suggested to combine Electric Circuits Laboratory and Electron Devices Laboratory syllabus and provide it as Electric Circuits and Electron Devices Laboratory in the 3rd semester. It is resolved that, the electric circuits experiments can be provided in the first cycle and electron devices experiments can be provided in the 2nd cycle.
- Dr. K. Sundareswaran suggested to provide the reference book authored Joseph A. Edminister, Mahmood Nahri, “19ES204 - Circuit Theory”, Schaum’s series, McGraw- Hill, New Delhi book as a first text book and he asked to remove Network Reduction and Theorems for AC Circuits from 2nd unit. He insisted to interchange the 3rd and 4th unit of syllabus in the “19ES204 - Circuit Theory” subject.
- Dr. K. Sundareswaran suggested to provide reference book authored E. Kreyszig, Advanced Engineering Mathematics, Eighth Edition, John Wiley and Sons, Inc, Singapore and B.S. Grewal, Higher Engineering Mathematics, Fortieth Edition, Khanna Publications, New Delhi 2007 and C. Ray Wylie and C. Louis Barrett, Advanced Engineering Mathematics, Tata McGraw-Hill Publishing Company Ltd into the text books. And he insisted to update the version of Venkataraman, M.K., Engineering Mathematics - Vol.III - A & B (13th edition), National Publishing Co., Chennai, 1998 book.
- Dr. K. Sundareswaran suggested to provide Wadhwa, C.L., ‘Generation Distribution and Utilisation of Electrical Energy’, New Age International publishers, 3rd edition, 2010 book as a first text book and “Electrical Power “, Uppal, S.L., Khanna publication, New Delhi, 2011 as a second text book.
- Dr. K. Sundareswaran and Dr. S. Thangavel insisted to check the Dr. S. N. Busi, Dr. B. R. Ambedkar, “Framing of Indian Constitution”, 1st Edition, 2015 book edition year.

- Dr. K. Sundareswaran suggested to provide Grewal B. S, Numerical Methods in Engineering and Science with Programmes in C & C++, Ninth Edition, Khanna Publications, 2010 book in the text book.
- Dr. K. Sundareswaran suggested to provide Theraja B.L., Theraja A.K., “ A Textbook of Electrical Technology: Volume 2 AC and DC Machines”, S. Chand, 23rd Edition and Say M.G, “Performance and Design of Alternating Machines”, CBS Publishers and Distributors, New Delhi book in the AC Machines subject text book.
- Mr. T. Jayakumar insisted to frame laboratory syllabus with uniform no. of experiments.
- Dr. S. Thangavel suggested to include more electronic circuits concept in the 19ES302 - Electronic Devices and Circuits subject.
- Dr.P.Ponnambalam suggested to provide Dismantling and assembly of motors experiment instead of Dismantling and assembly of Centrifugal Gear Pump / Gear box and Dismantling and assembly of two-stroke and four-stroke petrol engine in 19ES106 - Workshop Practice

The Board of Studies resolved to approve the syllabi of I to VIII semesters for the B.E. (Electrical and Electronics Engineering) Programme brought forward by the Chairman incorporating the above changes.

ITEM 07

TO CONSIDER AND APPROVE THE SYLLABI OF I TO IV SEMESTERS FOR THE M.E. (POWER ELECTRONICS AND DRIVES) PROGRAMMES TO BE OFFERED UNDER R-2019 WITH EFFECT FROM THE ACADEMIC YEAR 2019 – 2020 ONWARDS.

The Chairman of EEE Board of Studies presented the syllabi of I to IV for the M.E. Power Electronics and Drives. The Board of Studies reviewed the syllabus and suggested following modifications.

- Dr. K. Sundareswaran and Dr. S. Thangavel suggested to provide 19PE204 - System Theory in the first semester and 19PE105 - Modeling and Analysis of Electrical Machines in the second semester.
- Dr. S. Thangavel enquired about the 19PE201 - Research Methodology, the Chairman and Director / CoE explained about the creation of research environment among the students

- Dr. K. Sundareswaran and Dr. S. Thangavel suggested to provide 19PE102 - Power Quality Problems and Solutions in the 1st semester and to frame the syllabus to much related to the power electronics.
- Dr. K. Sundareswaran and Dr. S. Thangavel insisted to provide the mathematical subject for PG courses as Advanced Mathematics and suggested to remove Fourier series concepts from the courses.
- Dr. K. Sundareswaran suggested to provide Solid State Drives Book by Dr. K. Sundareswaran in the PG curriculum in the 19PE202 - Solid State Drives.
- Dr. K. Sundareswaran insisted to modify the 19PEX14 - Power Electronics Applications to Lighting System into advanced level of topics.

AS PER THE INSTRUCTIONS FROM DIRECTOR / ANNA UNIVERSITY ACADEMIC COURSES, FOR III TO VIII SEMESTERS OF CURRENT 2nd & 3rd YEAR STUDENTS OF B.E. (ELECTRICAL AND ELECTRONICS ENGINEERING), THE SAME SYLLABUS UNDER ANNA UNIVERSITY 2017 REGULATIONS WILL BE FOLLOWED.

The chairman informed that, as per the instructions from Director / Anna university Academic courses, for III to VIII semesters of current 2nd & 3rd year students of B.E. (Electrical and Electronics Engineering), the same syllabus under Anna university 2017 regulations will be followed.

AS PER THE INSTRUCTIONS FROM DIRECTOR / ANNA UNIVERSITY ACADEMIC COURSES, FOR VII & VIII SEMESTERS OF CURRENT 4th YEAR STUDENTS OF B.E. (ELECTRICAL AND ELECTRONICS ENGINEERING), THE SAME SYLLABUS UNDER ANNA UNIVERSITY 2013 REGULATIONS WILL BE FOLLOWED.

The chairman informed that, as per the instructions from Director / Anna university Academic courses, for VII to VIII semesters of current 4th year students of B.E. (Electrical and Electronics Engineering), the same syllabus under Anna university 2013 regulations will be followed.

AS PER THE INSTRUCTIONS FROM DIRECTOR / ANNA UNIVERSITY ACADEMIC COURSES, FOR III & IV SEMESTERS OF CURRENT 2nd YEAR ITEM 10 STUDENTS OF M.E. (POWER ELECTRONICS AND DRIVES), THE SAME SYLLABUS UNDER ANNA UNIVERSITY 2017 REGULATIONS WILL BE FOLLOWED.

The chairman informed that, as per the instructions from Director / Anna university Academic courses, for III to IV semesters of current 2nd year students of M.E. (Power Electronics and Drives), the same syllabus under Anna university 2017 regulations will be followed.


Chairman
(BoS-EEE)