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SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY: PUTTUR (AUTONOMOUS)

7thBoS Meeting of Electrical and Electronics Engineering (EEE)

Date: 12/07/2021

The 7th meeting of Board of Studies (BoS) in Electrical and Electronics Engineering is held on 12th July, 2021 (Monday) at 10.00 AM online through ZOOM.

Dr. N. Ramesh Raju, Chairman - BoS chaired the meeting and welcomed all the members to the seventh BoS meeting and discussed the following agenda:

1. Approval of course structure and syllabi for II year B.Tech. under R20 Regulation.

2. Approval of course structure and syllabi for III year B.Tech. under R19 Regulation.

3. Approval of course structure and syllabi for IV year B.Tech. under R18 Regulation.

4. Approval of examiners and paper setters for II, III and IV B.Tech. that comes under R20, R19 &

R18 respectively.

5. Any other item with the permission of Chair.

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After a brief introduction of the agenda items listed above, each agenda item were taken up for discussion and the following resolutions were passed.

Minutes:

Agenda: 1

Approval of course structure and syllabi for II year B.Tech. under R20 Regulation in EEE w.e.f., 2021-2022.

Resolution: 1

After detailed discussion, the BOS resolved to approve the course structure and syllabi for II year B.Tech. under R20 Regulation (given in **Annexure –I** respectively) applicable from the A.Y.2021-2022.

A. Course & Syllabus Comparison

With reference to the R19 regulations, the new regulation (R20) syllabus for II year has the following modifications which are given in the below table.

| S.no | R19 Regulation | R20 Regulation | % of course content changed |
|------|--|---|-----------------------------|
| 1 | Probability, Numerical Methods and Transforms | Probability. Numerical Methods and Transforms | 5 |
| 2 | Electrical Machines-I | Electrical Machines-I | 30 |
| 3 | Electrical Machines-I Lab | Electrical Machines-I Lab | 0 |
| 4 | Electrical Circuits Lab | Electrical circuits and Simulation Lab | 20 |
| 5 | Environmental Science | Environmental Science | 0 |
| 6 | Analog Electronic Circuits | Analog Electronic Circuits | 0 |
| 7 | Electromagnetic Fields | Electromagnetic Fields | 0 |
| 8 | Electrical Machines-II | Electrical Machines –II | 30 |
| 9 | Analog Electronic Circuits Lab | Analog Electronic Circuits Lab | 30 |
| 10 | Electrical Machines-II Lab | Electrical machines-II lab | 0 |
| 11 | | Power Electronics Lab | 60 |
| 12 | | Digital Electronics Lab | 0 |
| 13 | | Power Electronics | 0 |

II B.Tech

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| 14 | - | Electrical Power Transmission | |
|----|---|--------------------------------|-----|
| | | Systems | 0 |
| 15 | | | |
| | | Entrepreneurship Development | 100 |
| 16 | | | |
| | | Digital Electronics | 100 |
| 17 | | - | |
| | | PCB Designing Lab | 100 |
| 18 | | | |
| | | Generation of Electrical Power | 100 |

Consolidated Sheet

| Course | Total courses | Percentage of syllabus changed |
|--------------------|---------------|--------------------------------|
| EEE B.Tech II Year | 18 | 54.44 |

B. Course Relevance

The courses that comes under the category of Employability, Skill or Entrepreneurship development are Shown in the table below.

| S.no | Course Title | Course Code | Relevance |
|------|--|--------------------|------------------|
| 1 | Electrical Machines-I | 20EE0202 | Employability |
| 2 | Electrical Machines-I Lab | 20EE0205 | Employability |
| 3 | Electrical circuits and Simulation Lab | 20EE0206 | Employability |
| 4 | Analog Electronic Circuits | 20EC0446 | Employability |
| 5 | Electromagnetic Fields | 20EE0204 | Employability |
| 6 | Electrical Machines –II | 20EE0210 | Employability |
| 7 | Analog Electronic Circuits Lab | 20EC0447 | Employability |
| 8 | Electrical machines-II lab | 20EE0212 | Employability |
| 9 | Power Electronics Lab | 20EE0211 | Employability |
| 10 | Digital Electronics Lab | 20EC0449 | Employability |
| 11 | Power Electronics | 20EE0209 | Employability |
| 12 | Electrical Power Transmission Systems | 20EE0208 | Employability |
| 13 | Entrepreneurship Development | 20HS0815 | Entrepreneurship |

| 14 | Digital Electronics | 20EC0448 | Employability |
|----|--------------------------------|----------|---------------|
| 15 | PCB Designing Lab | 20EC0455 | Employability |
| 16 | Generation of Electrical Power | 20EE0203 | Employability |

Modifications described above are carried out to the curriculum after discussion in the BOS by

Considering the feedback/suggestions from the stake holders viz. student, alumni, faculty and employers

Agenda: 2

Approval of course structure and syllabi for III year B.Tech. under R19 Regulation in EEE w.e.f., 2021-2022.

Resolution: 2

After detailed discussion, the BOS resolved to approve the course structure for III year B.Tech. under R19 Regulation (given in **Annexure –II** respectively) applicable from the A.Y.2021-2022.

A. Course & Syllabus Comparison

With reference to the R18 regulations, the new regulation (R19) syllabus for III year has the following modifications which are given in the below table.

| S.no | R18 Regulation | R19 Regulation | % of course content changed |
|------|------------------------------------|---------------------------------|-----------------------------|
| 1 | Managerial Economics and | Managerial Economics and | |
| | Financial Analysis | Financial Analysis | 100 |
| 2 | Power Systems-I | Power Systems-I | 40 |
| 3 | Control Systems | Control Systems | 0 |
| 4 | Electrical Measurements | Electrical Measurements | 0 |
| 5 | Control Systems Lab | Control Systems Lab | 0 |
| 6 | Electrical Measurements Lab | Electrical Measurements Lab | 0 |
| 7 | Microprocessors and | Microprocessors and | |
| | Microcontrollers | Microcontrollers | 0 |
| 8 | Elements of Road Traffic Safety | Elements of Road Traffic Safety | 0 |
| 9 | Non-Conventional Energy | Non-Conventional Energy | |
| | Resources | Resources | 0 |

III B.Tech

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| 10 | Introduction to IOT | Introduction to IOT | 0 |
|----|------------------------------|---------------------------------|-----|
| 11 | Power Electronics and Drives | Power Electronics and Drives | |
| | Lab | Lab | 20 |
| 12 | Power Systems Lab | Power Systems Lab | 20 |
| 13 | English for Corporate | English for Corporate | |
| | Communication Skills Lab | Communication Skills Lab | 0 |
| 14 | | Managerial Economics and | |
| | | Financial Analysis | 100 |
| 15 | | Power Systems-I | 100 |
| 16 | | Control Systems | 100 |
| 17 | | Electrical Measurements | 100 |
| 18 | | Control Systems Lab | 100 |
| 19 | | | |
| | | Electrical Measurements Lab | 100 |
| 20 | | Microprocessors and | |
| | | Microcontrollers | 100 |
| 21 | | Elements of Road Traffic Safety | 100 |
| 22 | | Non-Conventional Energy | |
| | | Resources | 100 |
| 23 | | Introduction to IOT | 100 |
| 24 | | Power Electronics and Drives | |
| | | Lab | 100 |
| 25 | | | |
| | | Power Systems Lab | 100 |
| 26 | | English for Corporate | |
| | | Communication Skills Lab | 100 |

Consolidated Sheet

| Course | Total courses | Percentage of syllabus changed |
|---------------------|---------------|--------------------------------|
| EEE B.Tech III Year | 26 | 56.92 |

B. Course Relevance

The courses that comes under the category of Employability, Skill or Entrepreneurship development are

Shown in the table below.

| S.no | Course Title | Course Code | Relevance |
|------|--|--------------------|------------------|
| 1 | Business Ethics | 19HS0861 | Entrepreneurship |
| 2 | Electrical Power Generation & Transmission systems | 19EE0211 | Employability |
| 3 | Control Systems | 19EE0212 | Employability |

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| 4 | Electrical Measurements | 19EE0213 | Employability |
|----|--|----------|-------------------|
| 5 | Control Systems and Simulation Lab | 19EE0215 | Employability |
| 6 | Electrical Measurements Lab | 19EE0216 | Employability |
| 7 | Microprocessors and Microcontrollers | 19EC0421 | Employability |
| 9 | Non-Conventional Energy Resources | 19ME0321 | Employability |
| 10 | Introduction to IOT | 19EC0450 | Skill development |
| 11 | Power Electronics and Simulation Lab | 19EE0214 | Employability |
| 12 | Power Systems and Simulation Lab | 19EE0220 | Employability |
| 13 | English for Corporate Communications | 19HS0859 | Skill development |
| 14 | Substation Automation Lab (Virtual Lab) | 19EE0221 | Employability |
| 15 | Power Electronics | 19EE0210 | Employability |
| 16 | Software Development and Testing | 19CS0545 | Skill development |
| 17 | Switch Gear and Protection | 19EE0219 | Employability |
| 18 | Strategic Management | 19HS0862 | Skill development |
| 19 | Power System Analysis | 19EE0218 | Employability |
| 20 | Human Values and Professional Ethics | 19HS0858 | Skill development |
| 21 | Power System Operation and Control | 19EE0217 | Employability |
| 22 | Project Planning and Control | 19CE0147 | Employability |
| 23 | Mechatronics & Robotics | 19ME0337 | Employability |
| 24 | MATLAB Programming | 19EC0451 | Employability |
| 25 | Introduction to Cyber Security | 19CS0546 | Employability |
| 26 | Microcontroller and its Applications Lab | 19EC0424 | Employability |

Modifications described above are carried out to the curriculum after discussion in the BOS by Considering the feedback/suggestions from the stake holders viz. student, alumni, faculty and employers

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Agenda: 3

Approval of course structure and syllabi for IV year B.Tech. under R18 Regulation in EEE w.e.f., 2021-2022.

Resolution: 3

After thorough discussion, course structure and syllabus was framed to make the students acquire required technical knowledge and skills. The BOS resolved to approve the course structure for III year B.Tech. under R18 Regulation (given in **Annexure –III** respectively) applicable from the A.Y.2021-22.

A. Course & Syllabus Comparison

With reference to the R16 regulations, the new regulation (R18) syllabus for IV year has the following modifications which are given in the below table.

| S.no | R16 Regulation | R18 Regulation | % of course content changed |
|------|--|--|-----------------------------|
| 1 | Electrical Distribution Systems | Electrical Distribution Systems | 0 |
| 2 | Principles of Power Quality | Power Quality | 0 |
| 3 | HVDC Transmission Systems | HVDC and FACTS | 40 |
| 4 | Mat lab Programming | MATLAB Programming | 0 |
| 5 | Entrepreneurship Development | Entrepreneurship Development | 0 |
| 6 | Soft Computing Techniques | Neural Networks and Fuzzy Logic | 20 |
| 7 | Utilization of Electrical Power | Utilization of Electrical Energy | 0 |
| 8 | High Voltage Engineering | High Voltage Engineering | 0 |
| 9 | MOOC Courses- Offered by Swayam/NPTEL/NISTE - suggested by the | MOOC-I | 0 |
| 10 | department(Online Courses | | 0 |
| 10 | Project Work | Project Phase-II | 0 |
| 11 | | Electrical Energy Conservation and Auditing | 100 |
| 12 | | Power System Protection | 100 |
| 13 | | Electrical and Hybrid Vehicles | 100 |
| 14 | | Advanced Electrical Drives | 100 |
| 15 | | Project Planning and Control | 100 |

IV B.Tech

| 16 | Computer Aided Process Planning | 100 |
|----|----------------------------------|-----|
| 17 | Substation Automation Lab | |
| | (Virtual Lab) | 100 |
| 18 | | |
| | Project Phase-I | 100 |
| 19 | | |
| | Wind and Solar Energy Systems | 100 |
| 20 | Microcontroller and Applications | |
| | Lab | 100 |
| 21 | Software Development and | |
| | Testing | 100 |
| 22 | MOOC-II | 100 |

Consolidated Sheet

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|--|----------------------|--------------------------------|---|
| Course | Total courses | Percentage of syllabus changed | |
| EEE B.Tech IV Year | 22 | 57.27 | |

B. Course Relevance

The courses that comes under the category of Employability, Skill or Entrepreneurship development are Shown in the table below.

| S.no | Course Title | Course Code | Relevance |
|------|---|--------------------|-------------------|
| 1 | Electrical Distribution Systems | 18EE0219 | Employability |
| 2 | Power Quality | 18EE0227 | Employability |
| 3 | HVDC and FACTS | 18EE0230 | Employability |
| 4 | MATLAB Programming | 18EC0450 | Employability |
| 5 | Entrepreneurship Development | 18HS0815 | Entrepreneurship |
| 6 | Neural Networks and Fuzzy Logic | 18EE0231 | Employability |
| 7 | Utilization of Electrical Energy | 18EE0220 | Employability |
| 8 | High Voltage Engineering | 18EE0228 | Employability |
| 9 | MOOC-I | | Skill development |
| 10 | Project Phase-II | 18EE0235 | Employability |
| 11 | Electrical Energy Conservation and Auditing | 18EE0226 | Employability |

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| 12 | Power System Protection | 18EE0224 | Employability |
|----|---|----------|-------------------|
| 13 | Electrical and Hybrid Vehicles | 18EE0225 | Employability |
| 14 | Advanced Electrical Drives | 18EE0232 | Employability |
| 15 | Project Planning and Control | 18CE0146 | Skill development |
| 16 | Computer Aided Process Planning | 18ME0353 | Skill development |
| 17 | Substation Automation Lab (Virtual Lab) | 18EE0233 | Employability |
| 18 | Project Phase-I | 18EE0234 | Employability |
| 19 | Wind and Solar Energy Systems | 18EE0229 | Employability |
| 20 | Microcontroller and Applications Lab | 18EC0422 | Employability |
| 21 | Software Development and Testing | 18CS0544 | Skill development |
| 22 | MOOC-II | | Skill development |

Modifications described above are carried out to the curriculum after discussion in the BOS by Considering the feedback/suggestions from the stake holders viz. student, alumni, faculty and employers

Agenda: 4

Approval of Panel of examiners and Question paper setters for various regulations under UG.

Resolution: 4

Approved the panel of examiners prepared for valuation and panel of question paper setters (given in **Annexure–IV** respectively) to be submitted to the college Academic council for approval.

The above items were discussed, debated and the necessary approval was accorded by the BOS. The meeting was concluded with vote of thanks proposed by the Chairman-BOS.

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ELECTRICAL AND ELECTRONICS ENGINEERING

| Members | Present |
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| S.No. | Member Name | Academic/Industry Position | Designation | Signature |
|-------|------------------------|---|-------------|------------------|
| 1 | Dr. N.Ramesh Raju | Professor &HOD (Instrumentation & Control) | Chairman | Nº fair |
| 2 | Prof. P.Chandra Sekhar | Professor (Power Systems) | Member | P. chardhasekhan |
| 3 | Mr.S.Muni Sekhar | Associate Professor (Power Electronics) | Member | Signine. |
| 4 | Mr.T.Madhurantaka | Associate Professor (Power Electronics) | Member | manne |
| 5 | Mrs R Lakshmi | Associate Professor (Power Systems) | Member | lal:R |
| 6 | Dr. P. Lakshmi | Professor Department of EEE Anna University, Chennai | Member | P. Jahl. |
| 7 | Dr T Gouri Manohar | Professor Department of EEE, S V University, Tirupati | Member | T. Gournant |
| 8 | Dr. P Sujatha | Professor Department of EEE, JNTUA, Anantapuramu | Member | P. Sijallin |
| 9 | Mr.S V Mahesh Babu | Assistant Divisional Engineer, AP Transco, Chittoor | Member | Iche Se |
| 10 | Miss K Yamini | Assistant Engineer, AP Transco, Chittoor | Member | K. Yamini |