

# *B.N.M. Institute of Technology*

An Autonomous Institution under VTU, Approved by AICTE

## Department of Electrical and Electronics Engineering

### Minutes of the Meeting

<b>Meeting Details</b>	<b>BOS Meeting</b>
<b>Date</b>	23/10/2021
<b>Time</b>	11.00 AM-1.00 PM
<b>Venue</b>	M309, Seminar Hall, Main Building

<b>Members Present</b>	<ol style="list-style-type: none"><li>1. <b>Dr. R V Parimala, Chair</b>, Professor &amp; HoD, BNMIT</li><li>2. <b>Dr. S Sumathi, VTU Nominee</b>, Professor &amp; HoD, Department of EEE, RNSIT, Bengaluru.</li><li>3. <b>Dr. K Venkatesha, Subject Expert</b>, Professor, BNMIT</li><li>4. <b>Dr. Priyashree S, Subject Expert</b>, Associate Professor, BNMIT</li><li>5. <b>Dr. S Sudalai Shunmugam, Subject Expert</b>, Associate Professor, BNMIT</li><li>6. <b>Dr. Madhu S, Subject Expert</b>, Associate Professor, BNMIT</li><li>7. <b>Dr. Shubha Rao K, Member Secretary</b>, Associate Professor, BNMIT</li><li>8. <b>Mr. A Kumar, Subject Expert</b>, Associate Professor, BNMIT</li><li>9. <b>Dr. Keshavan, Subject Expert (External)</b>, Professor &amp; HoD, Department of EEE, Dean Academic, PES University</li><li>10. <b>Dr. Narayan Swamy, Subject Expert (External)</b>, Professor, Department of EEE, Reva University</li><li>11. <b>Dr. K Panduranga Vittal, Subject Expert (External)</b>, Professor, Department of EEE, NITK, Surathkal</li><li>12. <b>Dr. N Vasudev , Industry Expert</b>, Director, Manobhu Technology, Additional Director &amp; Group Head (Retd), CPRI</li><li>13. <b>Mr. Suraj S D, Industry Expert</b>, Founder &amp; CEO, Decibel Lab Pvt Ltd</li><li>14. <b>Mr. Anand kumar, Post graduate meritorious alumnus</b>, Project Engineer, M/s. SUPIN Automation Pvt. Ltd. Bengaluru</li></ol>
<b>Members Absent (Reasons)</b>	Nil
<b>Agenda</b>	<ol style="list-style-type: none"><li>1. Welcome address</li><li>2. Introduction</li><li>3. Presentation of scheme and syllabus from first year courses</li><li>4. Presentation of scheme from 3<sup>rd</sup> to 8<sup>th</sup> semester</li><li>5. Any other suggestions to the department</li><li>6. Concluding remarks by member secretary</li></ol>

### Proceedings of the meeting

The First Board of Studies (BoS) meeting was held on 23/10/2021 at M309, Main Building Seminar Hall, BNMMIT, Bengaluru. The meeting started at 11.00 am with Dr. R V Parimala, Chair, BoS, welcoming everyone to the meeting and briefly introducing the members to each other. The meeting was conducted in blended mode. The Chairperson, Internal BoS members, Member Secretary, Dr.S Sumathi, VTU Nominee and Mr. Suraj S D, Industry Expert attended the meeting in-person, Whereas Subject Experts (Extrenal); Dr. N Vasudev , Industry Expert and Postgraduate meritorious alumnus joined through online. The chairperson presented Vision, Mission and PEOs of the Department of EEE.VTU Regulations regarding the percentage coverage of various subject heads w.r.t to overall credit and Subject Head wise distribution of credit under BNMMIT Autonomous Scheme.

The first-year scheme & syllabus was presented and various aspects of schemes of the Physics cycle and the Chemistry Cycle were also explained. The syllabus of Basic Electrical Sciences and Electrical & Electronics laboratory was presented and the highlights of the syllabus were mentioned. The members were informed about the mini-project component in each laboratory. The list of experiments in the Electrical & Electronics Lab was discussed.

The list of subjects to be taught from 3rd Semester to 8th Semester was presented. The chairperson informed the members about the seven specialization streams (**Interface stream, Power engineering stream, General Electrical stream, AI & ML stream, Electric vehicle stream, Information Technology and Management stream**) for professional electives. The chair mentioned that a student can choose electives in a single stream to become proficient in that field.

The member secretary concluded the meeting and thanked the members for the fruitful discussions and suggestions.

### Recommendations/Suggestions from the BOS Members

	<b>Recommendations / Suggestions from Dr. S Sumathi, VTU Nominee:</b>	<b>Action taken</b>
<b>Dr. S Sumathi, VTU Nominee, Professor &amp; HoD, Department of EEE, RNSIT, Bengaluru</b>	<ol style="list-style-type: none"> <li>1. Informed the members about the latest VTU circular directing all the institutions to follow the scheme of teaching in line with National Education Policy (NEP) and suggested to check the adherence of the scheme to the latest rules and regulations.</li> <li>2. Increase the contact hours of module 1 and module 2 for Basic Electrical Sciences. Designate 3 modules for Electrical topics and 2 modules for Electronics topics</li> <li>3. The concepts of electrical power and power factor should be included in Basic Electrical Sciences course.</li> </ol>	<ol style="list-style-type: none"> <li>1. Scheme of teaching has been revised. It is as per the University directive and in line with NEP.</li> <li>2. The course Basic Electrical Science has been split into two courses               <ol style="list-style-type: none"> <li>(i) Basic Electrical Engineering (Physics Cycle) &amp;</li> <li>(ii) Basic Electronics Engineering. (Chemistry Cycle)</li> </ol> </li> </ol>



	<ol style="list-style-type: none"> <li>4. Combine the 2-way &amp; 3-way control of lamp Experiment and Measurement of Earth Experiment as a single Experiment.</li> <li>5. Include the Torque/Speed Characteristics of induction Motor in theory so that the students correlate and understand the experiment in the laboratory.</li> <li>6. One mini-project course shall be offered instead of two mini-projects in each semester. Students shall be encouraged to undertake simulation as well as hardware projects.</li> <li>7. Power System Analysis and Stability course listed in 5<sup>th</sup> Semester should be introduced after introducing Linear Control Systems course listed in 6<sup>th</sup> Semester. These two courses shall be swapped.</li> <li>8. The Contact Hours for Internship shall be cut down and accommodate that in some other courses.</li> </ol>	<p>All the suggested contents are included in the Course <b>Basic Electrical Engineering</b> and duration for each module has been revised.</p> <p>3. Power System Analysis &amp; Stability will be in 5<sup>th</sup> Semester, Linear Control System of 6<sup>th</sup> Sem has been shifted to 4<sup>th</sup> semester.</p>
<p><b>Dr. Keshavan,</b>  <b>Subject Expert,</b>  <b>Professor &amp; HoD,</b>  <b>Department of EEE</b>  <b>Dean Academic,</b>  <b>PES University</b></p>	<p><b>Recommendations / Suggestions from Dr. Keshavan, Subject Expert:</b></p> <ol style="list-style-type: none"> <li>1. Advised to reduce the portion or increase the contact hours for module 1 and module 2 of Basic Electrical Sciences.</li> <li>2. Include DC circuits, KVL and KCL in module 1</li> <li>3. Include detailed AC circuits syllabus in module 2</li> <li>4. Review the hours allotted for all the modules of Basic Electrical Sciences.</li> <li>5. Include application oriented experiments in Lab.</li> <li>6. Stagger Power Systems related courses in different semesters. (Currently they are in 5<sup>th</sup> Semester)</li> <li>7. The rubrics for the evaluation procedure for MOOC Courses shall be developed.</li> <li>8. Introduce Skill Development Programs to enhance the job opportunities of students.</li> </ol>	<p><b>Action taken</b></p> <ol style="list-style-type: none"> <li>1. All the suggested contents are included in the Course <b>Basic Electrical Engineering</b> and duration for each module has been revised.</li> <li>2. Application oriented experiments are included in the laboratory course.</li> <li>3. Power System Courses have been staggered from 3<sup>rd</sup> sem to 7<sup>th</sup> sem.</li> <li>4. Rubrics for the MOOC courses shall be prepared.</li> </ol>

<p>Dr. Narayan Swamy Subject Expert. Professor, Department of EEE, Reva University</p>	<p><b>Recommendations / Suggestions from Dr. Narayan Swamy, Subject Expert</b></p> <ol style="list-style-type: none"> <li>1. Commented that portions of module1 and 2 of Basic Electrical sciences is vast and it will be difficult to complete in the allotted time. Suggested to increase the contact hours for module1 and module2</li> <li>2. Single-line Diagram in the syllabus of Basic Electrical Sciences is not required.</li> </ol>	<p>All the suggested contents are included in the Course Basic <b>Electrical Engineering</b> and duration for each module has been revised.</p>
<p>Dr. K Panduranga Vittal, Professor, Department of Electrical &amp; Electronics NITK, Surathkal, Mangalore</p>	<p><b>Recommendations / Suggestions from Dr. K Panduranga Vittal, Subject Expert</b></p> <ol style="list-style-type: none"> <li>1. Syllabus outline gives scope for frontier technologies of future.</li> <li>2. Major concern is condensing vast content in less time to meet reduced credit suggestion given from VTU.</li> <li>3. Mid-course corrections would help in improving the quality.</li> </ol>	<p>1. Suggestion given will be taken care of while framing the syllabus.</p>
<p>Dr. N. Vasudev Industry Expert, Director, Manobhu Technology, Additional Director &amp; Group Head (Retd),CPRI</p>	<p><b>Recommendations / Suggestions from Dr. N Vasudev, Industry Expert</b></p> <ol style="list-style-type: none"> <li>1. Mention the title of the method used for measurement of earth resistance.</li> <li>2. Include domestic wiring, industrial wiring and motor winding design as part of laboratory experiments.</li> </ol>	<p>1. Title of the method used for earth resistance measurement is mentioned in the revised syllabus.</p> <p>2. Domestic Wiring expt. is included in 1<sup>st</sup> semester laboratory course &amp; industrial wiring and motor winding design shall be included in higher Semesters.</p>
<p>Mr. Suraj S D, Industry Expert, Founder &amp; CEO Decibel Lab Pvt Ltd</p>	<p><b>Recommendations / Suggestions from Mr. Suraj S D, Industry Expert</b></p> <ol style="list-style-type: none"> <li>1. Demonstrate the use of MOSFET/BJT for better practical exposure.</li> <li>2. Use of simulation / software and project management tools shall be exploited as a part of mini-project.</li> <li>3. Emerging topics such as wiring harness using software tool, ISO and other standard concepts, Circuit and PCB design using non-commercial software</li> </ol>	<p>1. Use of MOSFET/BJT shall be included in 3<sup>rd</sup> and 5<sup>th</sup> semester laboratory courses.</p> <p>2. Project Based Learning has been introduced as one of the courses from 3<sup>rd</sup> to 6<sup>th</sup> semester. Here we shall make use of simulation tools.</p>



	tool, Different Testing concepts (MIL,HIL and SIL), Communication protocols, HV safety, Security issues in smart grid shall be incorporated in the curriculum or Lab/mini-project.	
Mr. Anand kumar, Post-Graduate meritorious alumnus Project Engineer, M/s. SUPIN Automation Pvt. Ltd., Bengaluru	<b>Recommendations/Suggestions from Mr. Anand Kumar, Post graduate meritorious alumnus.</b> 1. Preference should be given for industrial visits. 2. Include domestic and industrial wiring as laboratory experiments.	1. Industrial visits are regular practice in the department. 2. Domestic Wiring expt. is included in 1 <sup>st</sup> semester laboratory course.
Concluding Remarks by Member Secretary, Dr. Shubha Rao K	1. The Member Secretary, Dr. Shubha Rao K, thanked the Members of BoS for their suggestions, recommendations to improve the scheme and syllabus. 2. Summarized Suggestions/recommendations given by the members. 3. Finally concluded the meeting by thanking Dr. R V Parimala, Chairperson for successfully presenting the Scheme and Syllabus.	

Shubha  
(Dr. Shubha Rao K)  
Member Secretary

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**Snapshots of BoS meeting held on 23<sup>rd</sup> October 2021**





