Department of Electrical and Electronics Engineering (E.E.E.)

17.06.2026

Minutes of 2nd Board of Studies (BoS) Meeting Held on 15.06.2026

The 2nd BoS meeting was conducted online on 15-06-2026 at 3:30 P.M. through Microsoft Teams, MITS, Madanapalle.

Agenda:

1. Vision and Mission of the Electrical and Electronics Engineering Department.
2. Scheme for B.Tech., E.E.E., Regulation 2025 University Batch.
3. Syllabus for II-Year, Semester I & II, B.Tech., EEE, Regulation 2025 University Batch.
4. PSOs and PEOs for B.Tech., EEE.
5. Scheme for M.Tech., Electric Vehicle Technology, Regulation 2025 University Batch.
6. Syllabus for I-Year, Semester I & II, M.Tech., Electric Vehicle Technology, Regulation 2025 University Batch.
7. PSOs and PEOs for M.Tech., Electric Vehicle Technology.

Members Present (Online):

Sl. No.	Name and Designation of the Staff	Member	
1.	**Dr. Manavaalan Gunasekaran** Assoc. Professor & Head, Dept. of E.E.E., MITS	**Chairman**	
2.	**Dr. K. Siva Kumar** Professor, Dept. of E.E., IIT Hyderabad	Subject Expert Member	online
3.	**Dr. Balakrishna P** Senior Engineer - Emerging Technologies, GE Grid Solutions, Hyderabad.	Industry Expert Member	online
4.	**Dr. C. Kamal Basha** VP Admin. & Professor, Dept. of E.E.E., MITS	Subject Expert Member	
5.	**Dr. A. V. Pavan Kumar** Assistant Dean &Professor, Dept. of E.E.E., MITS	Subject Expert Member	
6.	**Dr. Somu Vijaya Bhaskar** Associate Professor, Dept. of E.E.E., MITS	Subject Expert Member	
7.	**Dr. R. Saravanakumar** Assistant Professor, Dept. of E.E.E., MITS	Academic Coordinator - UG	
8.	**Dr. Satish Kumar Ramoji** Assistant Professor, Dept. of E.E.E., MITS	Academic Coordinator - PG	
9.	**Mr. Sanath Hegde** Professor of Practice, Chief Technology Officer, MITS	Member	
10.	**Dr. T. S. Balaji Damodhar** Assistant Professor, Dept. of E.E.E., MITS	Subject Expert Member	
11.	**Dr. Vineet Kumar** Assistant Professor, Dept. of E.E.E., MITS	Subject Expert Member	
12.	**Dr. K. Lakshmikhandan**	Subject Expert Member	

	Associate Professor, Dept. of E.E.E., MITS	
13.	**Dr. Sarat Kumar Mishra** Assistant Professor, Dept. of E.E.E., MITS	Subject Expert Member
14.	**Mr. Rajesh KS** Assistant Professor, Dept. of E.E.E., MITS	DIQAC Member
15.	**Dr. V. B. Thurai Raaj** Assistant Professor, Dept. of E.E.E., MITS	Subject Expert Member
16.	**Dr. B. Karthick** Assistant Professor, Dept. of E.E.E., MITS	Member
17.	**Mr. Sridhar N** Assistant Professor, Dept. of E.E.E., MITS	Member
18.	**Mr. Ch. Srinivas** Assistant Professor, Dept. of E.E.E., MITS	Member
19.	**Mr K B Venugopal** Senior Engineer – P&C, Atkins Réalis, Bangalore, India	Alumni Representative online
20.	**Ms. Amrutha Gowrigari** III year EEE, MITS	Student Representative

Minutes of Meeting:

HoD welcomed the members and presented the Vision, Mission, PO's, PEO's and PSO's of the Department.

B. Tech. Electrical and Electronics Engineering:

1. The statement should explicitly mention "Operate Power Electronics-based devices and systems" instead of using only the abbreviation "PE" to ensure clarity and better understanding in the PSO1.
2. In the Mathematics subject include applications of transforms in Electrical Engineering, particularly if the subject is taught by Electrical Engineering faculty, to demonstrate their practical relevance in engineering analysis and design.
3. In the network theory include ferro resonance and the applications of waveform analysis and signal-processing-based methods, as they continue to play a significant role in modern power systems, including Phasor Measurement Units (PMUs), fault analysis, condition monitoring, and machine health assessment.
4. In the machines laboratory component may be expanded to include performance analysis and experimental studies on Brushless DC (BLDC) motors.
5. Students should be encouraged to investigate and document the practical applications of the devices and circuits studied in the laboratory. The record should include details on where, why, and how these devices are utilized in Electrical Engineering practice.
6. Incorporate practical applications of AC machines in Electrical Engineering systems and industrial environments to strengthen students' understanding.
7. In the control systems, Modern control strategies, particularly Model Predictive Control (MPC), should be introduced as part of the syllabus.

8. In addition to conventional microcontroller concepts, recent advancements in computing such as Graphics Processing Units (GPUs), AI accelerators, and an introductory overview of Quantum Computing may be included.
9. While covering basic C programming, the course may briefly introduce C++, its objectives, and object-oriented programming concepts. Special emphasis should also be given to Embedded C Programming.
10. If possible, merge electrical machines I and II and include a course on machines used in EVs such as PMSM, SRM, BLDC….
11. Add autotransformer and its connection in the DC machines & transformers syllabus.
12. In the control Systems lab syllabus remove the MATLAB software.
13. Add advanced experiments in the Microprocessor and Microcontrollers lab.

M. Tech. Electric Vehicle Technology

1. It is recommended to rename Unit III of the Power Electronic Converter course to 'Offline Converter'.
2. It is recommended to rename Unit I of the Energy Storage Devices and Systems course to 'Introduction'.
3. It is recommended that individual software names be omitted from the EV Simulation and Modeling Laboratory and EV Motor Drives & Control Laboratory experiments.
4. EV architecture subject/lab should make students to assemble/de-assemble parts of EV vehicle physically at least bike.
5. EV charging infrastructure should touch Grid/Off-Grid Micro grids, smart meters/net meters/AMI system, V2G concepts. Special emphasis on EV chargers modular/compact design itself.
6. Energy Storage - Health Monitoring techniques of Batteries including ML-based should be covered along with upcoming advanced materials used in batteries.
7. Field Visit to EV manufacturing industry is encouraged.
8. Hybrid EV's are gaining more attraction too and such systems to be covered as well.
9. Hands-on Case studies using simulation or hardware-based tools should be encouraged in every course as group assignments with 20-30% weightage in scoring.
10. How EV vehicle design matters at cycle, bike, car, bus, truck level to be emphasized.

BoS Chairman

Outlook

Re: MoM of 2nd BoS, Dept. of EEE

From Dr. Siva Kumar K <ksiva@ee.iith.ac.in>
Date Mon 6/29/2026 10:37 AM
To HoD-Electrical & Electronics Engineering <eeehod@mits.ac.in>
Cc Bala Krishna <balakrishna20984@gmail.com>; Venugopal <venugopal.kbr@gmail.com>; Pamulaparthy, Balakrishna (GE Vernova) <balakrishna.pamulaparthy@ge.com>

Dear sir,

Looks fine to me; please go ahead

WR
Sova

On Wed, Jun 24, 2026 at 5:54 PM HoD-Electrical & Electronics Engineering <eeehod@mits.ac.in> wrote:

> Dear Sir/Madam
> Greetings
>
> I request your approval for the BoS Minutes of Meeting held on **15/06/2026 at 03:30 PM** via **Microsoft Teams.**
>
> The MoM are attached to the mail for your kind consideration.
>
> *With Regards,*
>
> **Dr. Manavaalan Gunasekaran** M.E., Ph.D. (IITK)
> Associate Professor & Head
> Department of EEE,
> Madanapalle Institute of Technology & Science,
> MITS Deemed to be University,
> 2025 NIRF (Band 201-300), NAAC A+,
> Madanapalle - 517 325
> Mob: +91-9160020781
> E-mail Id: eehod@mits.ac.in

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Siva Kumar K, Ph.D,
Professor,
Department of Electrical Engineering,
Indian Institute of Technology Hyderabad,
Kandi, Sangareddy,
Telangana, India. 502285
www.iith.ac.in/~ksiva

Outlook

Re: MoM of 2nd BoS, Dept. of EEE

From Bala Krishna <balakrishna20984@gmail.com>
Date Wed 6/24/2026 7:39 PM
To HoD-Electrical & Electronics Engineering <eeehod@mits.ac.in>

Approved sir.

Best Regards,
BALA KRISHNA.P,
M.TECH,IIT MADRAS.

On Wed, 24 Jun, 2026, 17:54 HoD-Electrical & Electronics Engineering, <eeehod@mits.ac.in> wrote:

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> Department of EEE,
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> MITS Deemed to be University,
> 2025 NIRF (Band 201-300), NAAC A+,
> Madanapalle - 517 325
> Mob: +91-9160020781
> E-mail Id: eeehod@mits.ac.in

Outlook

Re: MoM of 2nd BoS, Dept. of EEE

From Venugopal <venugopal.kbr@gmail.com>
Date Thu 6/25/2026 4:56 PM
To HoD-Electrical & Electronics Engineering <eeehod@mits.ac.in>

Hi Sir,

Approved.

Regards
Venugopal

On Wed, 24 Jun 2026 at 5:54 PM, HoD-Electrical & Electronics Engineering <eeehod@mits.ac.in> wrote:

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> Greetings
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> Associate Professor & Head
> Department of EEE,
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