

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING(AUTONOMOUS)
Accredited by NAAC with "A" Grade & NBA for ASE, CE, CSE, ECE, EEE, ME & IT
(Under Tier - I)
An ISO 21001:2018, 14001:2015 and 50001:2018 Certified Institution
Approved by AICTE, New Delhi and Permanently Affiliated to JNTUK, Kakinada
L.B. Reddy Nagar, Mylavaram-521 230, NTR Dist., Andhra Pradesh
Phone: 08659-222933, Fax: 08659-222931
FRESHMAN ENGINEERING DEPARTMENT
Web.: <https://lbrce.ac.in/fed/index.php> Email: hodfed@lbrce.ac.in Ext.: 516

CIRCULAR

27th August, 2026

Sub: Meeting to conduct BoS – Physics

Board of studies meeting is convened for discussing about the I B. Tech. Physics courses "Physics for Mechanical systems (PMS), Physics for advanced computing (PAC), Physics for Civil Engineers (PCE), Applied Physics (AP), Physics for Electrical systems (PES) of R26 regulation.

Date : 28th August 2026

Time : 3.00 pm

Platform : Microsoft Teams

Link to teams: https://teams.microsoft.com/l/meetup-join/19%3ameeting_ODYyNjczN2EtOWRjNS00MThjLTljM2UtNGQzMWUwOGRiNzdh%40thread.v2/0?context=%7b%22Tid%22%3a%2207f3ae2f-c55d-46be-9215-1453785ba103%22%2c%22Oid%22%3a%2298644f24-198a-4739-9dcc-665bd02f5726%22%7d

Agenda Points:

1. Modifications of contents of syllabi
2. Relevance and Modification of Course Outcomes (COs)
3. CO–PO Articulation Matrix
4. Target Values for Course Outcomes
5. Overall Remarks / Recommendations on the Proposed Syllabi
6. Any other point with permission of the Chair.


Dr. T. Satyanarayana
Head of the Department

HEAD
Freshman Engineering Dept.
Lakireddy Bali Reddy College of Engg.
MYLAVARAM-521 230, Krishna Dt. A.P.



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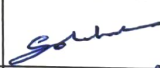
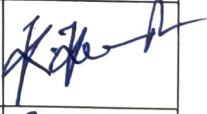
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Minutes of Board of Studies (BoS) Meeting held on 28-08-2026

The Board of Studies (BoS) Meeting of the Physics Module for R26 Regulations, UG I B. Tech., with reference to the syllabus prescribed by JNTUK, Kakinada, was held on **Friday, 28-08-2026**, at **3:00 PM** through online mode using the Microsoft Teams platform.

The meeting was conducted under the chairmanship of **Dr. T. Satyanarayana**, Professor of Physics and Head, Freshman Engineering Department (FED).

The following members were present:

Sl.	Name of the Member, Designation & Affiliation	Role in BoS	Signature
1.	Dr. T. Satyanarayana Prof. of Physics & Head, FED & LBRCE	Chairman & Module Coordinator	
2.	Dr. Abdul Azeem Professor of Physics, National Institute of Technology (NIT), Hanamkonda, Telangana 506004 drazeeem2002@nitw.ac.in Mobile: +91-870-2462578	University Nominee JNTUK Kakinada	online-Mode
3.	Dr. Syed Yusub Prof. of Physics & LBRCE	Course Coordinator for Physics for Mechanical Systems (Theory & Lab) & Applied Physics (Theory & Lab)	
4.	Dr. N. Aruna Assoc. Prof. of Physics & LBRCE	Course Coordinator for Physics for Electrical Systems (Theory & Lab)	
5.	Dr. P. Sobhanachalam Assoc. Prof. of Physics & LBRCE	Course Coordinator for Physics for Civil Engineers (Theory & Lab)	
6.	Dr. K. Kumar Raja Assoc. Prof. of Physics & LBRCE	Course Coordinator for Physics for Advanced Computing (Theory & Lab)	
7.	Smt. P. Vijaya Sirisha . Asst. Prof. of Physics & LBRCE	Member	

Welcome Address

Dr. T. Satyanarayana, Professor of Physics and Module Coordinator, welcomed the University Nominee **Dr. Abdul Azeem**, Professor of Physics, NIT Warangal, and all the members and faculty of the Physics Module. The meeting was coordinated by **Dr. N. Aruna**, who invited all the members and course coordinators to participate in the proceedings.

The Chairman formally initiated the proceedings and explained the purpose and objectives of the meeting. It was highlighted that, under the R26 Regulations, JNTUK, Kakinada has introduced a branch-specific syllabus for the Physics theory and laboratory courses, with the

content tailored to the requirements of 9 engineering branches viz., ASE, AI & DS, CE, CSE, CSE (AI & ML), ECE, EEE, IT & ME

Dr. N. Aruna presented the proposed curriculum structure of the Physics Module, including the titles and outlines of the theory and laboratory courses offered to different engineering branches. The respective Course Coordinators were introduced and invited to present the proposed syllabi for their assigned theory and laboratory courses. The Course Coordinators presented the course objectives, syllabus content, course outcomes, and laboratory components of the five Physics courses.

The members of the Board of Studies were requested to review the proposed branch-specific Physics theory and laboratory syllabi and offer their observations, suggestions, and recommendations.

Accordingly, the **following agenda items** were discussed and deliberated upon, and the corresponding decisions were taken as detailed below:

1. Modifications of contents of syllabi

The members reviewed the proposed Physics theory and laboratory syllabi prescribed by JNTUK, Kakinada, under the R26 Regulations for I B.Tech. I/II Semesters, with particular emphasis on their relevance, applicability, and suitability to the respective engineering branches. The members deliberated on the proposed content and suggested necessary modifications and refinements to ensure that the syllabi are appropriately aligned with the requirements of the respective branches. The agreed changes and refinements are summarized below.

Theory Courses				
Sl.	Course Title	Branch & Sem.	Modifications of contents of syllabi	Overall Remarks/Recommendations
1.	Physics for Mechanical Systems (PMS)	ASE, ME & I	No modifications in the content of syllabi	The committee has duly approved the contents of syllabi.
2.	Physics for Civil Engineers (PCE)	CE & I	No modifications in the content of syllabi	The committee has duly approved the contents of syllabi.
3.	Applied Physics (AP)	ECE & I	No modifications in the content of syllabi. Unit II title changed as Quantum photonics instead of Quantum Photonics & Advanced Sensing Unit III title changed as Free Electron theory of Metals & Semiconductors instead of Electrical Properties of Metals & Semiconductors	The committee has duly approved the changes in Title of the Unit II & Unit III.
4.	Physics for Electrical Systems (PES)	EEE & I	No modifications in the content of syllabi. Unit III title changed as Free Electron theory of Metals & Semiconductors instead of Electrical Properties of Metals & Semiconductors	The committee has duly approved the changes in Title of the Unit III.

Theory Courses				
Sl.	Course Title	Branch & Sem.	Modifications of contents of syllabi	Overall Remarks/Recommendations
5.	Physics for Advanced Computing (PAC)	CS IT & I CSE, CSE (AI&ML), AI&DS & II	No modifications in the content of syllabi. Unit III Title Changed as Free Electron theory of Metals & Quantum Mechanics instead of Free Electron Theory & Quantum Mechanics.	The committee has duly approved the changes in Title of the Unit III.
Laboratory Courses				
Sl.	Course Title	Branch & Sem.	Modifications of contents of syllabi	Overall Remarks/Recommendations
1.	Physics for Mechanical Systems Lab (PMS)	ASE, ME & I	No modifications in the content of syllabi	Conducting experiments related to theory syllabus. The committee has duly approved the contents of syllabi.
2.	Physics for Civil Engineers Lab (PCE)	CE & I		
3.	Applied Physics Lab (AP)	ECE & I		
4.	Physics for Electrical Systems Lab (PES)	EEE & I		
5.	Physics for Advanced Computing Lab (PAC)	CS IT & I CSE, CSE (AI&ML), AI&DS & II		

2. Relevance and Modification of Course Outcomes (COs)

The members reviewed the proposed Course Outcomes (COs) with reference to Bloom's Taxonomy, appropriate action verbs, and the required levels of knowledge and cognitive skills. The COs were refined to ensure that they are clear, measurable, relevant, and appropriately aligned with the course content and learning objectives. The suggested modifications are given below.

Theory Courses			
Sl.	Course Title	Details of Modifications of COs	Overall Remarks/Recommendations
1.	Physics for Mechanical Systems (PMS)	No modifications in the COs	The committee has duly approved the COs
2.	Physics for Civil Engineers (PCE)		
3.	Applied Physics (AP)	CO4 Modified to maintain the uniformity in the syllabus of all papers	The committee has duly approved the COs

Theory Courses			
Sl.	Course Title	Details of Modifications of COs	Overall Remarks/ Recommendations
4.	Physics for Electrical Systems (PES)	CO4 Modified to maintain the uniformity in the syllabus of all papers	The committee has duly approved the modified COs
5.	Physics for Advanced Computing (PAC)	No modifications in the COs	The committee has duly approved the COs
Laboratory Courses			
1.	Physics for Mechanical Systems Lab (PMS)	No modifications in the COs	The committee has duly approved the COs
2.	Physics for Civil Engineers Lab (PCE)		
3.	Applied Physics Lab (AP)		
4.	Physics for Electrical Systems Lab (PES)		
5.	Physics for Advanced Computing Lab (PAC)		

3. CO-PO Articulation Matrix

The members reviewed the proposed CO-PO Articulation Matrix for 5 Physics Theory and Laboratory Courses with reference to the 11 Program Outcomes (POs) prescribed by AICTE. The mapping was examined to ensure appropriate alignment between the Course Outcomes (COs), course content, and the expected graduate attributes defined by the POs and each CO mapped with Three POs. Necessary refinements were suggested to ensure relevance, consistency, and justification of the CO-PO mapping.

4. Target Values for Course Outcomes

The target values for the courses are fixed as 70% for the knowledge levels less than or equal to K3, 65% for the knowledge levels greater than or equal to K4. The CO target values for various Theory and Laboratory Courses of Physics Module are given as follows:

Theory Courses								
Sl.	Course Title	Branch & Sem.	CO Targets & Knowledge Level					Overall Remarks/ Recommendations
			CO1	CO2	CO3	CO4	CO5	
1.	Physics for Mechanical Systems (PMS)	ASE, ME & I	70 & K3	65 & K4	70 & K3	65 & K4	65 & K5	The committee has duly approved the targets of COs
2.	Physics for Civil Engineers (PCE)	CE & I	70 & K3	65 & K4	70 & K3	65 & K4	65 & K5	The committee has duly approved the targets of COs
3.	Applied Physics (AP)	ECE & I	70 &	65 &	65 &	70 &	70 &	The committee has duly approved the

Theory Courses								
Sl.	Course Title	Branch & Sem.	CO Targets & Knowledge Level					Overall Remarks/ Recommendations
			CO1	CO2	CO3	CO4	CO5	
			K3	K4	K4, K5	K3	K3	targets of COs
4.	Physics for Electrical Systems (PES)	EEE & I	70 & K3	65 & K4	65 & K4	70 & K3	70 & K3, K4	The committee has duly approved the targets of COs
5.	Physics for Advanced Computing (PAC)	CS IT & I CSE, CSE (AI&ML), AI&DS & II	70 & K3	65 & K4	70 & K3	65 & K4	70 & K3	The committee has duly approved the targets of COs
Laboratory Courses								
1.	Physics for Mechanical Systems Lab (PMS)	ASE, ME & I	70 & K3	65 & K4	70 & K3	65 & K4	70 & K3	The committee has duly approved the targets of COs
2.	Physics for Civil Engineers Lab (PCE)	CE & I	70 & K3	65 & K4	70 & K3	65 & K4	70 & K3	The committee has duly approved the targets of COs
3.	Applied Physics Lab (AP)	ECE & I	70 & K3	65 & K4	70 & K3	70 & K3	65 & K4	The committee has duly approved the targets of COs
4.	Physics for Electrical Systems Lab (PES)	EEE & I	70 & K3	65 & K4	65 & K4	70 & K3	65 & K4	The committee has duly approved the targets of COs
5.	Physics for Advanced Computing Lab (PAC)	CS IT & I CSE, CSE (AI&ML), AI&DS & II	75 & K3	65 & K4	65 & K4	65 & K4	65 & K4	The committee has duly approved the targets of COs

5. Overall Remarks / Recommendations on the Proposed Syllabi

The Board of Studies approved the proposed theory and laboratory syllabi for the five Physics courses offered in the UG B.Tech. I/II Semesters under the R26 Regulations, with the understanding that the suggestions, recommendations, and modifications recorded in these minutes shall be incorporated appropriately.

6. Any other point with permission of the Chair.

- The latest editions of relevant textbooks and reference books shall be included as per given guidelines.
- The laboratory experiments shall be conducted by following appropriate safety measures and standard operating procedures.
- Any two suitable laboratory experiments may be conducted in virtual mode, wherever permitted by the academic regulations.
- The Physics Module Coordinator shall incorporate the approved modifications and submit the finalized syllabi to the concerned academic authorities.

Concluding Remarks

Dr. T. Satyanarayana, Physics Module Coordinator, Chairman of Board of Studies expressed his sincere gratitude to the University Nominee Dr. Abdul Azeem, Professor of Physics, NIT Warangal, and all the Course Coordinators and Physics faculty members for their valuable suggestions, constructive inputs, and active participation in the proceedings. The meeting concluded at 3:50 PM.

Annexures:

The Minutes of the Board of Studies Meeting, along with the approved curriculum, syllabi, CO-PO articulation matrices, and other relevant records, are enclosed as annexures for reference and record. The following annexures form an integral part of the minutes and document the deliberations, recommendations, and decisions taken during the meeting.

- i. **Annexure I:** Communications and Agenda of the Meeting
- ii. **Annexure II:** Approved Syllabi of 5 Theory & Laboratory courses of Physics including Cos, CO-PO Articulation Matrices
- iii. **Annexure III:** Proposed R26 Regulations of JNTUK Kakinada

BoS Meeting Link of Physics Module:

https://teams.microsoft.com/l/meetup-join/19%3ameeting_ODYyNjczN2EtOWRjNS00MThjLTljM2UtNGQzMWUwOGRiNzdh%40thread.v2/0?context=%7b%22Tid%22%3a%2207f3ae2f-c55d-46be-9215-1453785ba103%22%2c%22Oid%22%3a%2298644f24-198a-4739-9dcc-665bd02f5726%22%7d

BoS Meeting Recording Video Link of Physics Module:

https://lbrce-my.sharepoint.com/:v/g/personal/t380_lbrce_ac_in/IQAE1FwkMdp9SbSAsXPN0IGSAeosDIApLTxYVfUrYXdWp24?e=WAVHvZ

Date: 03-09-2026


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