VIGNAN'S
FOUNDATION FOR SCIENCE, TECHNOLOGY & RESEARCH
(Deemed to be University) - Estd. u/s 3 of UGC Act 1956

DEPARTMENT OF PHYSICS

CIRCULAR

Date: 17.11.2025

The Department of Physics is going to conduct a Department Council (DC)/DAAC meeting to discuss the Physics courses related to B.Tech. offered as per R25 & C25 curriculum on **18.11.2025** from **4.20 pm** onwards. The meeting will be held at the Office of Head, Department of Physics. 3rd Floor, A Block, VFSTR. All the members are requested to make it convenient to attend the meeting.

The Department Council members are

S. No.	Faculty name and Designation	Role
1	Dr. K. Venkata Madhuri, HOD and Professor	Chairman
2	Dr. M. Ramanjaneyulu, Associate Professor	Convener
3	Dr. M. Sreenivasulu, Professor	Member
4	Dr. J. Nitchal Kiran, Professor	Member
5	Dr. Habibuddin Shaik, Associate Professor	Member
6	Dr. B. Nageswara Rao, Assistant Professor	Member
7	Dr. Srinivasa Rao Pathipati, Assistant Professor	Member
8	Dr. Ashutosh Upadhyay, Assistant Professor	Member
9	Dr. T. Srinivasa Reddy, Assistant Professor	Member
10	Dr. Venkaiah Malapati, Assistant Professor	Member

Invited Faculty members

S. No.	Faculty name and Designation	Role
1	Dr. Dr. M. L. N. Madhu Mohan, Associate Professor	Invited member
2	Dr. Tirupataiah Chereddy, Associate Professor	Invited member

3	Dr. Katuri Venkata Prasad, Assistant Professor	Invited member
4	Dr. Sreekar G, Assitant Professor	Invited member
5	Dr. B. Naveen Kumar Reddy, Assistant Professor	Hyderabad off campus
6	Dr. Ramesh Babu Kunchala, Assistant Professor	Hyderabad off campus
7	Dr. Shiva Assistant Professor	Hyderabad off campus

Agenda of the DAAC Meeting:

The key points that need to be discussed during DAAC meeting are follows

1. Discussion and approval for R25 and R22 (C22 & C 24) assessment pattern changes.
2. Discussion of results –FA, SA, grades, and correlations of the results announced after previous BoS.
3. Approval of change in L-T-P-SL structure, no of credits or contents of existing courses, if any.
4. Approval of SWAYAM-NPTEL courses/ ratifications of previous approved courses
5. Approval of Honour/ Minor/ Department elective/ Open elective courses, if any that are not approved earlier.
6. Discussion of attainments- process, rubrics, CO/PO/PSO and SO values.
7. Any two faculty members have to present about the best practices of Formative assessment (pre-T1, T1, T2, T3 and T5).
8. HoD and T & P coordinator have to present about the best practices of T & P activities.
9. Analysis of feedback collected from various stake holders such as alumni, employers, faculty, parents and students during the AY 2024-25 and/or 2025-26.
10. Guest lecturers by industry personal planning / executions related to any core courses/ Dept. electives.
11. Discussion of workshops, conferences organized by the department.
12. Any other points, if required
13. ATR for the previous BOS.

Chairperson

Prof. K.V. Madhuri
Head
Department of Physics
School of Applied Sciences & Humanities
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DEPARTMENT OF PHYSICS

Minutes of DAAC Meeting

18-11-2025

The Department of Physics is conducting a Department Council (DC)/DAAC meeting to discuss the Physics courses related to B.Tech. offered as per R25 & C25 curriculum on **18.11.2025** from **4.20 pm** onwards. The meeting is being held at the Office of Head, Department of Physics. 3rd Floor, A Block, VFSTR.

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The following points were discussed in the Department Council meeting:

1. Feedback analysis indicates that laboratory-based learning enhances students' technical and practical skills significantly, there is need to improve laboratory practices more and need to add more relevant practices.
2. The curriculum is generally well-received, catering effectively to both advanced learners and slow learners.

Based on the feedback collected from various stakeholders the following points were discussed:

1. The changes in the regulations and assessment pattern in the R25 regulations compared to R22 (C22 & C24) were discussed.
2. Dr. B. Nageswara Rao BOE has presented the result analysis to the DAAC members. There is about ~96% pass percentage that has been achieved during the AY 2024-2025 2nd semester.
3. L-T-P-SL structure, of all the courses and the no of credits are discussed and are accepted in the present R25 format.
4. A minor program on Quantum technologies and open elective course on quantum technologies has been presented and are accepted by the council members in its present form.
5. Engineering Physics syllabus revision has been proposed by the members. The following are the revision required in the EP syllabus in the module 1 and 2 with the topic of tunnelling diode.

   Removal of *Tunnelling Diode* from Module 1 or need of defining a clear scope to teach in Module1 and module 2 as well.
6. Members discussed on the laboratory practices and felt that one need to put more focus on the acquiring skills and analytical skills and hands on practicing the required experiments.
7. Dr. M.L.N Madhu Mohan has presented the status of the newly joined research scholars and allotted guides to the members.
8. Dr. K.V. Madhuri presented the formative assessment pattern for R25 and discussed in detailed about various assessments (Pre-T1, T1, T2, T3, and T5).
9. Dr. M. Ramanjaneyulu has presented the stake holders feedback on curriculum. A total of ~ 570 responses were received from all stakeholders like students, faculty, parents and industry relevant people. From the responses it can be concluded that all the stakeholders are happy with the curriculum. There is minor suggestions as follows
   a) More practice questions and relevant real life examples must be added.
   b) Add more practices to understand the concepts

c) May be add more interactive learning aids and videos for easy understanding

10. **ATR (Action Taken Report)** for the previous BoS.

Action point form previous BOS: External members suggested to create more awareness about IKS to the faculty members by conducting either department workshops or institute level workshops

Response: Awareness programmes on IKS has been conducted by university at different times during the AY 2025-2026.

It was resolved that these changes and suggestions will be incorporated in the curriculum drafts and forwarded to the BoS for review and approval.

The detailed stakeholder feedback summary is appended as Annexure-I.

The recommendations of the DAAC will be formally submitted to the Board of Studies (BoS) for further consideration and implementation.

Chairperson

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DEPARTMENT OF PHYSICS

18-11-2025

Action taken report

The following actions are taken on the resolutions drawn from the DAAC meeting:

1. Laboratory Practices Enhancement

- **Discussion:** Feedback analysis highlighted the importance of laboratory-based learning in improving students' technical and practical skills.
- **Action Taken:** Steps initiated to revise and expand laboratory practices by incorporating more relevant experiments aligned with current industry and academic standards.

2. Curriculum Reception and Revision

- **Discussion:** The existing curriculum is well-received by both advanced and slow learners; however, a minor revision is required to better align with industry and skill requirements.
- **Action Taken:**
    - A minor revision proposed in the R25 syllabus focusing on course outcomes and practical components such as tunnelling diode.
    - C25 curriculum updates to emphasize skill-based electives, multi-disciplinary open electives, and value-added courses incorporating 21st-century skills such as digital literacy and computational thinking for 1st year B.Tech students.

4. Support for Slow Learners

- **Discussion:** Special focus needed on supporting slow learners with additional academic assistance.
- **Action Taken:** Implementation of slow learner classes planned starting next academic year. Formative and summative assessments are being structured to identify and support these students effectively.

5. Crating of more awareness on IKS components:

- **Discussion:** Create more awareness about IKS to the faculty members by conducting either department workshops or institute level workshops

- Awareness programmes on IKS has been conducted by university at different times during the AY 2025-2026

5. Forwarding Recommendations to Board of Studies (BoS)

- **Discussion:** All proposed changes and suggestions will be incorporated in curriculum drafts for BoS approval.
- **Action Taken:** Curriculum drafts updated accordingly. The recommendations and detailed stakeholder feedback summary (Annexure-I) have been formally submitted to the BoS for further consideration.

The DAAC recommendations have been duly considered, and necessary actions have been initiated or planned to enhance the curriculum and teaching-learning processes. Implementation will proceed after BoS approval.

Chairperson

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Annexure I

Feedback Summary:

The following is the feedback acquired from various stakeholders. A total of ~ 570 responses were received from all stakeholders like students, faculty, parents and industry relevant people. From the responses it can be concluded that all the stakeholders are happy with the curriculum. However, there are minor suggestions as follows

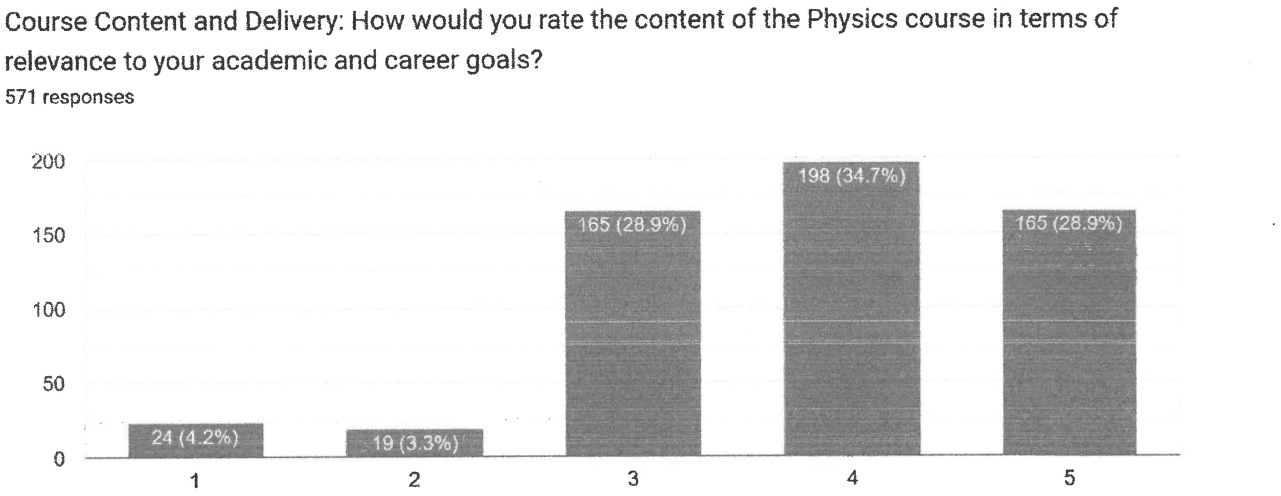
Suggestions:

a) More practice questions and relevant real life examples must be added.

b) Add more practices to understand the concepts

c) May be add more interactive learning aids and videos for easy understanding

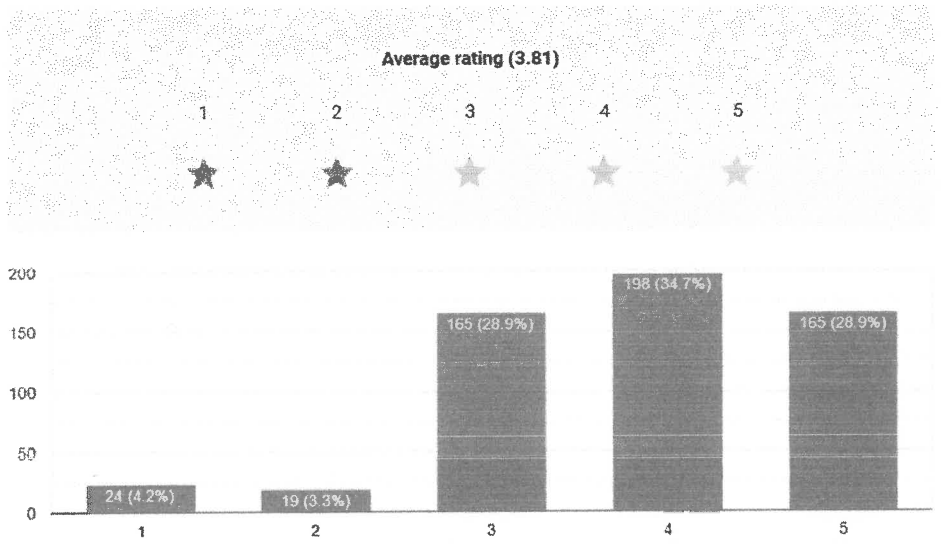
The following are the responses from the feedback form.



Course Content and Delivery: How would you rate the content of the Physics course in terms of relevance to your academic and career goals?

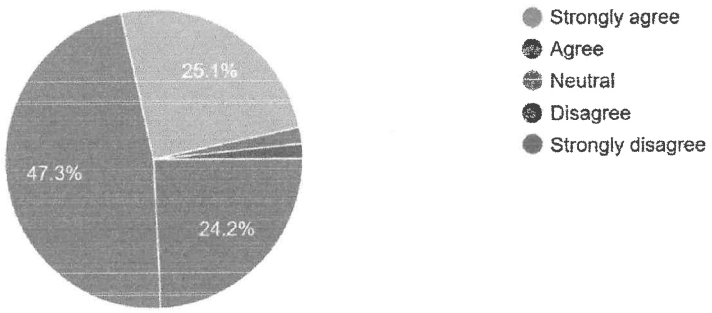
Copy chart

571 responses



Are the lecture materials (PPTs, notes, references) helpful and well-prepared?

565 responses



Is the pace of teaching suitable for understanding the concepts?

565 responses

The above feedback is submitted to DAAC members and are accepted as its present form. The same feedback is forwarded to BOS for further approval.

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Annexure II

DAAC Recommendation on Formative Question Paper Standard and CO-PO Attainment Target Fixing

1. Formative Assessment Question Paper Standards

In light of the academic performance and student feedback for the above subject, the DAAC recommends the following for the design and implementation of formative assessments (e.g., class tests, quizzes, assignments, internal exams):

- **Cognitive Level Balance**:
  Adopt Bloom's Taxonomy to balance the cognitive levels of questions:
  - 20–30% of questions at **Remembering and Understanding** levels
  - 40–50% at **Applying and Analyzing** levels
  - 20–30% at **Evaluating and Creating** levels (depending on program level)
- **Coverage of Course Outcomes (COs)**:
  Each assessment must explicitly map questions to Course Outcomes (COs), ensuring:
  - All COs are evaluated at least once across the assessments
  - Each CO is tested through questions at appropriate cognitive levels
- **Difficulty Level Calibration**:
  Based on the recent difficulty experienced by students, the question paper should maintain:
  - 30% **Easy** questions (direct concept-based)
  - 50% **Moderate** questions (application or derivation-based)
  - 20% **Difficult** questions (analytical, case-study, or open-ended)
- ***Question Paper Review Process***:
  All formative question papers should undergo internal review to ensure:
  - Alignment with syllabus and COs
  - Reasonable difficulty and time-bound solvability
  - Clear instructions and grading rubrics

2. CO-PO Mapping and Attainment Target Fixing

Based on performance data and the difficulty level experienced by students in the current and previous cycles:

- **Attainment Level Thresholds**:
    - **Target Level 1 (Basic Attainment)**: ≥ 50% of students scoring above 40% marks in a CO
    - **Target Level 2 (Moderate Attainment)**: ≥ 60% of students scoring above 50% marks in a CO
    - **Target Level 3 (High Attainment)**: ≥ 70% of students scoring above 60% marks in a CO
- **Adjustment Based on Subject Difficulty**:
    - If **>50%** of students scored below 40% in a particular CO, re-evaluate the mapping of that CO to the assessments or revise the teaching-learning strategy.
    - For **subjects identified as difficult** based on trend analysis, a **target level reduction by 1** can be considered after discussion and justification.
- **Corrective Actions**:
    - For COs not meeting the target level:
        - Conduct remedial sessions focused on weak COs
        - *Include more practice problems in those areas*
        - Reassess teaching strategies and content delivery
- **PO Mapping and Aggregation**:
    - Use weighted averages of CO attainment levels to compute PO attainment
    - Ensure clarity and consistency in the mapping logic across courses

3. Recommendations for Future Improvement

- Establish a **question bank repository** categorized by COs, Bloom's level, and difficulty
- Incorporate **student feedback mechanisms** to refine assessment strategies
- Regularly **review attainment targets** based on academic data trends

Approved by:

Chairperson

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Department of Physics
Document on Identification of Slow and Fast Learners
Prepared by: Department Academic Assessment Committee (DAAC)

Date: 18.11.2025

1. Introduction

As part of the continuous academic improvement and student performance monitoring, the Department of Physics has undertaken the task in agreement with the Department Academic Assessment Committee (DAAC) to identify **slow learners** and **advanced learners** based on their academic performance in internal assessments (Formative Assessment) three times a semester.

This initiative is aimed at providing focused support to underperforming student's and enriching opportunities to achiever's par excellence.

2. Criteria for Identification

2.1 Slow Learners

Low performing students are identified based on their marks obtained in **Module-1- Formative Assessment (T1-A+T2+T3, T4+T5)** and **Module- 2- Formative Assessment (T1-A+T2+T3)**. The threshold marks for categorizing a student as a slow learner are as follows:

- Marks $\leq$ **15** in **Module-1- Formative Assessment (T1-A+T2+T3) out of 30**
- Marks $\leq$ **15** in **Module-1- Formative Assessment (T4+T5) out of 30**
- Marks $\leq$ **15** in **Module-2- Formative Assessment (T1-A+T2+T3) out of 30**

A student scoring **less than or equal to the above prescribed norms** is considered a **slow learner**.

2.2 Advanced Learners

Advanced learners are identified based on students active and consistent performance across all assessments in that subject. The threshold marks for identifying fast learners are:

- Marks > **25** in **Module-1- Formative Assessment (T1-A+T2+T3) out of 30**
- Marks > **25** in **Module-1- Formative Assessment (T4+T5) out of 30**
- Marks > **25** in **Module-2- Formative Assessment (T1-A+T2+T3) out of 30**

Students who meet or exceed this benchmark in all their subjects are classified as **advanced learners**.

3. Objective of the Categorization

- **Slow Learners**: To provide additional academic support, mentoring, and remedial sessions.
- **Advanced Learners**: To encourage participation in advanced learning opportunities, research projects, and academic competitions.

4. Implementation and Follow-up

- The list of slow and fast learners was shared with concerned subject faculty.
- Mentoring and support plans will be initiated accordingly.
- Periodic reviews will be conducted to monitor the progress of students in both categories.

Prepared and verified by:
Department Academic Assessment Committee (DAAC)

Approved by HoD
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