SIDDHARTHA
ACADEMY OF HIGHER EDUCATION
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Kanuru, Vijayawada - 520 007, AP. www.vrsiddhartha.ac.in

DEPARTMENT OF MECHANICAL ENGINEERING

V. R.SIDDHARTHA SCHOOL OF ENGINEERING

Date: 06-11-2025

NOTICE

All faculty members are hereby informed to attend the exit meeting of Academic audit in CAD Lab-I at 4PM on 07-11-2025.

Agenda:

1. To discuss the Academic Audit reports given by external and internal experts of academic audit 2024-25.
2. To offer suggestions for improvement, if any based on academic audit reports.

6/11/25

HOD-ME

Professor & Head
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Date: 08-11-2025.

Minutes of the exit meeting of academic audit held at 4:00 PM on 07/11/25 in the CAD Lab-I

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The following points are deliberated upon:

1. To discuss the evaluation report given by external and internal experts of academic audit.

Academic audit report

(a) Strengths:

1. **Curriculum Design & Attainments**
   - Program Outcomes (POs) and Program Specific Outcomes (PSOs) are clearly defined and systematically assessed.
   - Majority of Course Outcomes (COs) are strongly attained; corrective measures are planned for moderately attained COs (e.g., tutorials, video lectures, remedial classes).
   - Regular stakeholder feedback (students, faculty, parents, alumni, employers) is collected and incorporated into curriculum revision.
   - Introduction of new courses (9) and significant course upgradation (>25% content in 10 courses) demonstrate responsiveness to technological trends.
2. **Faculty Profile & Contributions**
   - Strong cadre of qualified faculty: 68% with Ph.D.s, and 10 faculty guiding 27 Ph.D. scholars.
   - Active participation in research with 16 SCI/Scopus-indexed publications and an h-index of 13.
   - Several faculty members serve as reviewers and editorial board members in reputed journals.
   - Recognition at national conferences and awards received by faculty reflect quality contributions.
3. **Research, Consultancy & Innovation**
   - Funded projects from DRDO-related industries (ASL, Ramesh's Aerospace) show strong defense/industry linkages.
   - 20 patents published in the last cycle.
   - Establishment of a Center of Excellence in Composite Materials and addition of 2KW DED Metal 3D Printer (₹90 lakhs) strengthens research infrastructure.

- Active consultancy culture with ₹88,618 revenue generated.

4. **Teaching–Learning Practices**
   - Strong mechanisms for slow learners (remedial classes) and fast learners (support for research publications, project funding).
   - Bridge courses and skill-oriented labs (e.g., PLC, CFD Simulation Lab) enhance employability.
   - Students have published 34 papers and developed 30 models, showing good research and innovation culture.
5. **Industry Linkages & Student Exposure**
   - 162 students undertook internships; 34 EPICS (community service) projects completed.
   - 8 active MoUs with industries and NIT Warangal.
   - Regular guest lectures, industrial visits, and workshops conducted.
   - Student clubs (Mech Maverics) and professional society chapters are active.
6. **Infrastructure & Facilities**
   - Modern laboratories with investments exceeding ₹1.19 Crores in 2024–25.
   - 12 classrooms, 18 labs (including 3D Printing and CAM labs), 10 e-classrooms, and seminar halls.
   - Department library with 753 books and well-developed ICT facilities
   - Strong internet and computing resources.

(b) Weaknesses:

1. **Student Performance & Outcomes**
   - High failure rate (23% in 2021–25 batch) and NBA success rate of only 0.77 indicates a concern in core subject understanding.
   - Placement percentage (53%) is moderate; median salary (₹3.45 LPA) could be improved.
   - Limited number of students pursuing higher education (7.4%).
2. **Research & Innovation Gaps**
   - Despite 20 published patents, none are granted yet.
   - Limited startups, incubations, and entrepreneurship activities; no active incubation centers.
   - Consultancy revenue is low compared to faculty strength and infrastructure.
3. **Faculty Development**
   - No record of faculty industrial training in 2024–25; industry exposure of faculty is minimal.
   - e-Content development is nil; limited digital learning contributions.
   - Faculty mobility (post-doctoral fellowships, international exposure) is absent.
4. **Student Engagement**
   - Limited student achievement in GATE/competitive exams (only 1 qualified in GATE).
   - Entrepreneurship and innovation awards from reputed platforms are absent.

(c) Suggestions for improvement:

1. **Academic & Learning Outcomes**
   - Strengthen mentoring and bridge programs to reduce failure rates.
   - Introduce problem-solving workshops and peer-assisted learning to improve NBA success rate.
   - Enhance communication skills training (as noted in PO10 moderate attainment).
2. **Placements & Career Progression**
   - Strengthen industry-connect through more MoUs with core mechanical industries and defense organizations.
   - Introduce certification programs in trending areas (AI in manufacturing, EVs, renewable energy systems, Industry 4.0).
   - Establish a Career Advancement Cell for higher studies (GATE/GRE coaching).
3. **Research & Consultancy**
   - Focus on converting published patents into granted patents.
   - Establish at least one Centre of Excellence with the help of CSR grants.
   - Establish at least one incubation/startup cell in the Institute.
   - Expand consultancy to local industries (manufacturing, automotive, renewable energy).
4. **Faculty Development**
   - Encourage faculty to undergo industrial internships and collaborative projects.
   - Incentivize creation of e-learning modules, MOOCs, and virtual labs.
   - Promote international collaborations and post-doctoral research opportunities.
5. **Student Innovation & Recognition**
   - Motivate students to participate in national-level hackathons, SAE/ASME competitions, and Smart India Hackathon.
   - Provide structured support for student startups and entrepreneurship.
   - Institutionalize an annual Best Project Award and seed funding scheme

2. To offer suggestions for improvement, if any based on academic audit report.
   - Identifying the subjects having less pass percentage and taking measures by consulting subject experts, conducting quality circles and arrange seminars.
   - Efforts are being made to establish MoU with core mechanical industries and defense organizations to strengthen industry-connection.
   - MOOCS Coordinator is informed to encourage students to enroll online courses on trending areas (AI in manufacturing, EVs, renewable energy systems, Industry 4.0).
   - Higher studies coordinator is informed to conduct GATE coaching with in house faculty.
   - Faculty are informed to make efforts to convert published patents in to granted patents.

- Encourage faculty to apply more research projects to establish center of excellence and establish startups with the help of students.
- Efforts are being made to consult local industries with senior faculty members to explain the strengths and facilities in the department for consultancy projects.
- Encourage faculty to undergo industrial internships and collaborative projects.
- Efforts are being made to create e-learning resources by faculty.
- Department have conducted ROBOX-2K25 hackathon and good number of students have participated.
- Efforts are being made to motivate students to participate in national-level hackathons, SAE/ASME competitions, and Smart India Hackathon.

8/11/25

HOD-ME

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