

REPORT

Title of the Workshop: “Designing Future-Ready Curriculum (Gap Analysis Approach)”

Resource Person: Dr. S. V. Satyanarayana

Senior Professor of Chemical Engineering & Director, Academic & Planning, JNTUA
BOS Chairman, Pharmaceutical Sciences, JNTUA

AICTE “Distinguished Professor,” New Delhi

Vice President, IMS Vadodara & Former President, IChE Kolkata

Date: 23-January-2026

Venue: NECG Board Room

Organized By: Internal Quality Assurance Cell (IQAC)

Participants: All Heads of the Departments (HODs)

PHOTO GALLERY



The Internal Quality Assurance Cell (IQAC) of NECG organized a Technical Talk on “Designing Future-Ready Curriculum (Gap Analysis Approach)” on 23-01-2026 at the NECG Board Room. The session was conducted exclusively for all Heads of Departments with the objective of strengthening curriculum design processes in alignment with emerging industry needs, national education policies, and accreditation requirements.

The technical talk was delivered by Dr. S. V. Satyanarayana, a distinguished academician and administrator, who shared valuable insights based on his vast experience in curriculum planning, academic leadership, and quality assurance frameworks.

The key objectives of the session were:

- To understand the concept of future-ready curriculum in the context of rapid technological and societal changes.
- To introduce the Gap Analysis approach as a systematic method for curriculum review and upgradation.
- To guide HODs on aligning curriculum with industry expectations, research trends, and global standards.
- To strengthen Outcome-Based Education (OBE) and continuous improvement practices.

- To support departments in meeting NBA, NAAC, and autonomous curriculum requirements.
- To discuss about department specific workshop, NPTEL procedure and importance, etc.

Dr. Satyanarayana emphasized that a future-ready curriculum should be:

- Dynamic and flexible, capable of adapting to emerging technologies and interdisciplinary domains.
- Outcome-oriented, focusing on knowledge, skills, values, and employability.
- Industry-aligned, incorporating real-world problems, internships, projects, and certifications.
- Research-driven, encouraging innovation, critical thinking, and lifelong learning.

He highlighted the need to move beyond traditional content-centric syllabi toward competency-based curriculum design.

The core focus of the talk was the Gap Analysis methodology, which involves:

- i. **Identifying the desired state**
 - Industry expectations
 - Graduate attributes
 - Professional standards
 - National priorities and global benchmarks
- ii. **Assessing the current curriculum**
 - Course structure
 - Learning outcomes
 - Teaching-learning methods
 - Assessment strategies
- iii. **Analyzing gaps**
 - Skill gaps
 - Knowledge gaps
 - Technology gaps
 - Employability gaps
- iv. **Bridging the gaps**
 - Curriculum revision
 - Introduction of new courses, electives, and labs
 - Inclusion of emerging areas and interdisciplinary content
 - Strengthening project-based and experiential learning

Dr. Satyanarayana stressed that gap analysis must be data-driven, using inputs from stakeholders such as alumni, employers, faculty, students, and industry advisory boards.

The speaker also highlighted the critical role of Heads of Departments in:

- Leading Board of Studies (BoS) meetings effectively.
- Ensuring stakeholder participation in curriculum planning.
- Periodically reviewing and updating curriculum content.
- Monitoring implementation and closing the feedback loop.
- Documenting curriculum changes for accreditation and audits.

The technical talk concluded with an interactive discussion session. HODs actively participated and raised queries related to:

- Curriculum revision frequency in autonomous institutions
- Integration of industry certifications and MOOCs
- Mapping of COs-POs-PSOs in revised curricula
- Best practices for documenting gap analysis outcomes

Dr. Satyanarayana provided practical suggestions and shared examples from reputed universities and autonomous colleges.