



**A Report on
Professional Development Programme(PDP) on
"NBA ACCREDITATION "**

**Organized by
Internal Quality Assurance Cell (IQAC),
MITs in association with NITTTR, Chennai
12.02.2024 – 16.02.2024**



**Submitted by: Mrs. Prudhivi Anuradha, Assistant Professor, Dept of CSE-Data Science and Document Manager , IQAC
Resource Person Details: Prof. P. Malliga, Head of the Educational Media Department at NITTTR, Chennai; Prof. V. Sivakumar, Associate Professor at NITTTR, Chennai; Prof. Suja Mani Malar, Associate Professor, Dept of Electrical and Electronics Engineering, NITTTR Chennai
Report Received on 01.03.2024.**

Mode of Conduct: Offline

Venue: East Block Scale-up classroom

Participants: 40 Faculty from Various Departments.

Brochure:

About the College <p>Madanapalle Institute of Technology & Science is established in 1998 in the picturesque and pleasant environs of Madanapalle and is located on a sprawling 26.17 acre campus on Madanapalle - Akambatur Highway (NH203) near Anaparthi, about 10km away from Madanapalle.</p> <p>MITs, organized under the auspices of Ratakonda Rangayya Educational Academy under the presiding patronage of President and Dr. N. Vijaya Bhaskar Choudary, Ph.D. Secretary & Correspondent of the Academy.</p> <p>MITs is governed by a progressive management that never rests on laurels and has been striving consistently to develop it as one of the best centers of Academic Excellence in India. The institution's profile is firmly based on strategies and action plans that match changing demands of the nation and the students' interests. MITs enjoys constant support and patronage of NRI's with distinguished academic traditions and vast experience in Engineering & Technology.</p>	Chief Patron Dr. N. Vijaya Bhaskar Choudary, Ph.D., Secretary & Correspondent Patron Mrs. Keerthi Nadella Executive Director Program Chair Dr. C. Yezhaiah Principal	Five - Day Professional Development Programme on "NBA ACCREDITATION" MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE (UGC-AUTONOMOUS INSTITUTION) Madanapalle-517325, Annamaya Dist., Andhra Pradesh
About NITTTR <p>The increase in enrollment in both Engineering and Polytechnic institutions led to an increased requirement of faculty members. In order to provide in-service training to newly recruited faculty members and induction training to existing faculty members of technical institutions, the Regional Institutes of Teacher Training (RITT) (now NITTTRs) were established by the Government of India in 1964. One of the four RITTs was set up in Tharamani, Chennai. The RITT Chennai later became Technical Teachers Training Institute (TTTI). TTTI became National Institute of Technical Teachers Training and Research (NITTTR Chennai) in 2003.</p> <p>NITTTR Chennai has rich experience in conducting Professional Development Programmes (PDPs) in various areas of engineering specialization and Engineering Pedagogical programmes. The ACTE, NBA, and NAAC have recognized all the short-term training programmes conducted by NITTTR for contribution to the purpose of institutional development, departmental growth, and movement to higher grades under the Career Advancement Scheme of the faculty members.</p>	Advisory Committee Dr. Dipankar Roy HOD - C&I, MITs Dr. A.V Pavan Kumar HOD - ISE, MITs Dr. S. Sankaran HOD - ME, MITs Dr. S. Rajasekaran HOD - ECE, MITs Dr. E. Kalpana HOD - C&E, MITs Dr. M. Sreedevi HOD - C&E, MITs Dr. K. Chakraborty HOD - I&E, MITs Dr. S. Kumar HOD DS, MITs	12th - 16th February 2024 www.mits.ac.in
Organizing Committee Dr. P. Ramaniathan Vice-Principal Academics Dr. D. Pradeep Kumar Chief Coordinator, PAMRC Cell	In Collaboration With National Institute of Technical Teachers Training and Research (NITTTR Chennai).	
Coordinators Dr. K. Sathesh Coordinator, IQAC Dr. S. Padma Co-Coordinator, IQAC Mrs. P. Anuradha IQAC		

About PDP	Main Objectives	Resource Person
NBA accreditation is crucial for fostering continuous quality improvement in Engineering Education Institutes. This Professional Development Programme (PDP) is designed to meet the need for understanding the significance of NBA Accreditation, along with its complete process and evaluation. It plays a vital role in enhancing the overall quality of education in the field of engineering, ensuring that institutions meet established standards. The program aims to equip participants with comprehensive knowledge about the NBA accreditation process, fostering a culture of excellence in engineering education. Through this PDP, participants will gain insights into the key aspects of NBA Accreditation and its impact on educational institutions. The emphasis is on promoting best practices and quality benchmarks in engineering education through a thorough understanding of the accreditation process. The program is tailored to address the specific requirements and challenges faced by institutions seeking an ongoing NBA accreditation. It serves as a valuable resource for educational professionals and administrators striving for excellence in engineering education. Engaging in this PDP will empower participants with the necessary skills and knowledge to navigate the NBA accreditation landscape successfully.	<p>The objectives of this program are to enable participants for:</p> <ul style="list-style-type: none"> Understand the correlation between Outcome-Based Education (OBE) and Accreditation. Develop Effective Vision, Mission Statements, and Program Educational Objectives (PEO) Identify and Define Graduate Attributes crucial for program success. Implement Teaching-Learning Processes aligned with NBA Criteria. Articulate and Evaluate Course Outcome and Programme Outcome. Establish Effective CO-PO Mapping practices for continuous improvement. Implement Examination Reforms and adopt Outcome-Based Assessment strategies. Master the skill of preparing comprehensive Course Files. Analyze various criteria based on the Self-Assessment Report (SAR). <p>Course Coordinator's</p> <p>Prof. P. Malliga Professor and Head Educational Media Department NITTTR Chennai</p> <p>Prof. V. Siva Kumar Associate Professor Dept. of Mechanical Engineering NITTTR Chennai</p>	<p>Prof. Suja Mani Malar Associate Professor Dept. of Electrical and Electronics Engineering NITTTR Chennai</p> <p>Topics to be discussed</p> <ul style="list-style-type: none"> OBE and Accreditation Developing Vision Mission Statements and PEO Graduate Attributes Teaching-Learning Process based on NBA Criteria Course Outcome and Programme Outcome CO-PO Mapping Examination Reforms and Outcome based Assessment Course file Preparation Analyzing Various Criteria based on SAR <p>In Collaboration With</p> 

The Five-Day Professional Development Programme (PDP) on 'NBA ACCREDITATION' for the faculty members was conducted from 12th February 2024 to 16th February 2024 in the East Block Scale-up classroom. Forty faculty members from various departments attended the PDP.



The objectives of this program are to enable participants to:

- Understand the correlation between Outcome-Based Education (OBE) and Accreditation.
- Develop effective Vision, Mission Statements, and Program Educational Objectives (PEO).
- Identify and define Graduate Attributes crucial for program success.
- Implement Teaching-Learning Processes aligned with NBA Criteria.
- Articulate and Evaluate Course Outcomes and Programme Outcomes.
- Establish effective CO-PO Mapping practices for continuous improvement.
- Implement examination reforms and adopt Outcome-Based Assessment strategies.
- Master the skill of preparing comprehensive Course Files.
- Analyze various criteria based on the Self-Assessment Report (SAR).

The Course Coordinator's Prof. P. Malliga and Prof. V. Siva Kumar and the Resource Person Prof. Suja Mani Malar from NITTTR, Chennai handled the sessions. The program commenced with an inauguration session on 12th February 2024. Dr. K. Sathesh, IQAC Coordinator, welcomed the gathering. Dr. P. Ramanathan, Vice Principal (Academics) delivered the presidential address. Dr. D. Pradeep Kumar felicitated the gathering. Prof. P. Malliga, Professor and Head, Educational Media Department from NITTTR, Chennai described the importance of the PDP.

Day 1: 12.02.2024, Monday

Forenoon Sessions:

Prof. P. Malliga, Head of the Educational Media Department at NITTTR, Chennai, led the session which covered Accreditation Criteria, Scoring, and highlighted the importance of focus areas. Participants gained insights into outcomes levels such as PEOs, POs, PSOs, and COs, along with awareness on Sustainable Development Goals (2030) and their connection to the National Education Policy (NEP) of 2020. Prof. Malliga explored the SAR outline, workflow of vision and mission, Development of PEOs, and correlation with mapping. The program emphasized documentation with evidence and included hands-on practice with the Learning Management System (LMS) "CANVAS Infrastructure.



Afternoon Sessions:

Prof. V. Sivakumar, Associate Professor at NITTTR, Chennai, initiated an engaging session with a graphic representation of the Ostrich, Peacock, and Beaver analogy. He highlighted features included Learning Outcomes, Communication, Educational Strategies, Course Content aligning with COs and POs, Student Progression, Assessment, and the Educational Environment, with a specific emphasis on student selection. The presentation delved into the attributes of an engineer, focusing on cognitive, psychomotor, and affective domain skills. The design process was discussed using a top-down approach, and assessment was explored through a bottom-up approach. Prof. Sivakumar, introduced the CDIO Approach and discussed Engineering Habits of Mind, Encompassing System Thinking, Problem Finding, Visualizing, Improving, Creative Problem Solving, and Adapting.



Day 2: 13.02.2024, Tuesday

Forenoon Sessions:

Prof. P. Malliga highlighted key components, including a sample Self-Assessment Report (SAR) and assessment strategies like "Teach towards General Objective and Test towards Specific Objective." The session explored Gen Z learners' characteristics and emphasized faculty as "Co-Instructors of Learners," introducing interactive methods like Flipped Learning, Blended Learning, and the use of Social Media. Prof. Malliga also stressed the importance of Open Repositories and introduced an Open Educational Resources (OER) Kit.



Afternoon Sessions:

Prof. V. Siva kumar, covered several key topics during the session. The focus was on understanding and articulating Course Outcomes (CO) and Program Outcomes (PO). Prof. Siva kumar emphasized the significance of each Program Outcome and engaged in a discussion on the practical use of Cookbook Experiments. The session further explored the implementation of Open-Ended Experiments, highlighting their relevance in the educational context. Additionally, Prof. Siva kumar introduced a CO-PO Articulation Matrix, providing numerous examples, including references to the NBA website for sample matrices.



Day 3: 14.02.2024, Wednesday

Forenoon Sessions:

In the forenoon session on Examination Reforms with Prof. V. Sivakumar, the focus was on both Quantitative and Qualitative Assessment, particularly considering the perspective of Digital migrants. Program Outcomes (PO) were highlighted, and development strategies, such as Course Projects, Student E-portfolios, Open-ended experiments, Co-curricular activities, Minor Projects, and Project-based Learning using the CDIO Model, were discussed. Prof. Siva kumar emphasized that CDIO serves as a platform for developing knowledge, skills, and attitudes, including the creation of patents. The session also covered e-Portfolio evaluation with formats like collections, reflections, achievements, and communications. Active learning methods, including the Jigsaw method, were explored, and the session concluded with insights into effective Course Plan Preparation.



Afternoon Sessions:

In the afternoon session, Prof. P. Malliga used an online quiz on quizizz.com to assess participants' knowledge of Outcome-Based Education (OBE) and NBA. Emphasizing OBE as a platform for student-centric learning in the challenging UVCA environment, Prof. Malliga introduced the TPACK model, integrating Technology, Pedagogy, and Content Knowledge. The session covered various knowledge types and discussed addressing the needs of both advanced and weaker learners through learner analytics. Examination reforms were explored in terms of curriculum, pedagogy, and assessment, highlighting the crucial role of assessment in driving student learning, distinguishing between Formative, Summative, and Diagnostic assessments. Prof. Malliga also linked lower-order skills (End Semester Examinations) to higher-order skills (assignments) and informed participants about the AICTE initiatives for faculty, concluding with insights into the National Education Policy (NEP) advocating internships for faculty.



Day 4: 15.02.2024, Thursday

Forenoon Sessions:

Under the guidance of Prof. P. Malliga, the session focused on Criteria 6 and 7 discussions, followed by an exploration of Criteria 8, 9, and 10. Criteria 9 emphasized mentoring and the utilization of audio and visual tools, with a specific mention of PHET Tools for Basic Sciences. Criteria 10 was dedicated entirely to the Strategic Plan. Prof. Malliga stressed the importance of documenting P Files and I Files. The session introduced Peer-to-Peer Evaluation, utilizing the Padlet tool for submitting various activities, such as assignments, fostering collaborative assessment practices.

Afternoon Sessions:

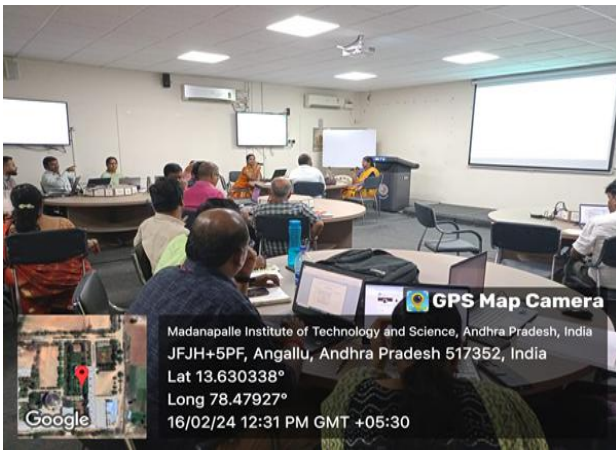
Prof. Suja Mani Malar, Associate Professor, Dept of Electrical and Electronics Engineering, NITTTR Chennai, handled this session which focused on the discussion of formulae and values, with relevant examples presented for clarification. Additionally, the resource person covered the documentation requirements, providing insights into the various documents that need to be submitted.



Day 5: 16.02.2024, Friday

Forenoon Sessions:

Prof. P. Malliga and Prof. Suja Mani Malar, led a collaborative session. Each faculty member wrote Course Outcomes, followed by a discussion where Prof. Malliga provided suggestions for modifications. Building on this, faculty members conducted Course Outcomes to Program Outcomes (CO/PO) Mapping for their respective courses. The discussion extended to an open forum using the Padlet tool, fostering collective engagement and sharing of ideas.



Afternoon Sessions:

Prof. P. Malliga and Prof. Suja Mani Malar continued the session with a focus on Course Outcomes to Program Outcomes (CO/PO) Mapping. The discussion expanded to cover the Teaching-Learning Process (TLP), specifically delving into Gagne's Nine Events of Instruction.



In summary, the five-day Professional Development Program was led by Prof. P. Malliga, Prof. V Siva Kumar and Prof. SujaMani Malar from NITTTR, Chennai, covering a diverse range of topics and hands-on activities. The sessions addressed accreditation, examination reforms, teaching strategies, and assessment methods, providing faculty members with valuable insights into aligning course outcomes with program objectives. The program emphasized interactive teaching methods, the integration of technology in education, and the practical application of concepts through projects and experiments. Participants engaged in collaborative activities using online platforms like quizizz.com and Padlet.

The five-day PDP concluded with a valedictory session. Dr. D. Pradeep Kumar, Chief Coordinator of the PAARC Cell, shared opening remarks, Dr. C. Yuvaraj, Principal of MITS, delivered the felicitation address, and Dr. P. Ramanathan, Vice Principal (Academics), proposed the Vote of Thanks. Faculty members shared their experiences about the PDP, resource persons, and the organizing committee. We express our gratitude to the Management and the Principal for all their support in successfully completing this PDP.



OUTCOMES OF THE PROGRAM:

Forty Participants were trained on Outcome Based Education and its effectiveness for NBA Accreditation. These participants learned the need to Design Curriculum and Carry out Assessment to enhance the learning abilities of students. Further the participants, were exposed to the provide learner centric approach to attract the students and motivate them to enhance their skills to meet the Industry Demands.

With regards,

Dr. C. Kamal Basha, M.E., Ph.D.

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