



NANDHA ENGINEERING COLLEGE (AUTONOMOUS)

Erode, Tamil Nadu

EVENT REPORT



5-Day Faculty Development Programme on
“Outcome Based Education – NBA – SAR – GAPC 4.0 (Phase II)”

Programme Title	Faculty Development Programme (FDP) on Outcome Based Education (OBE) – NBA SAR – GAPC 4.0 (Phase II)
Organized By	National Institute of Technical Teachers' Training and Research (NITTTR), Chennai
Duration	5 Days (10.08.2026 to 14.08.2026)
Venue	Dr.APJ Abdul Kalam Block, NITTTR, Chennai
Resource Persons	Dr. G. Janarthanan Dr.V.Shanumganeethi Dr. K.S.A. Dinesh Kumar Dr. R. Santhakumar;

Participants:

A seven-member team representing different academic and quality-assurance functions of Nandha Engineering College participated in the Phase-II FDP at NITTTR Chennai.

S.No.	Name	Designation / Department
1	Dr. E. K. Mohanraj	Dean – IQAC
2	Mr. R. Thiruneelakkandan	Head – Freshmen Engineering Department
3	Dr. M.Manikandan	Associate Professor / Mechanical Engineering
4	Ms. S.Maheswari	Assistant Professor / CSE (IoT)
5	Ms. P. Kokila	Assistant Professor / ECE
6	Ms.S. Geetha	Assistant Professor / CSE
7	Ms. R. Amutha	Assistant Professor / Mathematics

Objectives of the FDP

The major objectives of the programme were to:

1. Develop a clear understanding of the philosophy and principles of Outcome Based Education.
2. Understand the evolution and structure of the NBA GAPC 4.0 framework.
3. Strengthen the formulation of Vision, Mission, PEOs, POs, PSOs and COs.
4. Develop competency in CO–PO/CO–PSO mapping and correlation justification.

5. Understand curriculum design, Knowledge and Attitude (WK) integration and curriculum gap analysis
6. Understand the identification and documentation of Complex Engineering Problems (CEP).
7. Understand SDG integration into curriculum and self-learning activities.

FDP Schedule

Time Date	I	II	III	IV
Monday 10.08.2026	Introduction to OBE and Insights of GAPC 4.0 (GJ)		Framing Vision and Mission (VSN)	Crafting Course Outcomes (VSN)
Tuesday 11.08.2026	CO-PO Mapping (VSN)		Curriculum Design and Aligning WK (GJ)	
Wednesday 12.08.2026	Outcome based Assessment (AD)		5E – Lesson Planning (RS)	
Thursday 13.08.2026	SAR Criteria – Insights and documentation (GJ)		Performance Assessment (RS)	
Friday 14.08.2026	Integration of SDG into Curriculum, Incorporating Complex Engg Problem (GJ)		IQA & Common Pitfalls (GJ)	Valedictory (GJ)

Day Wise course content:

Day 1 • Introduction to Outcome Based Education • NBA Accreditation Framework and evolution towards GAPC 4.0 • Vision, Mission, PEOs, POs and PSOs • Learning Taxonomy and writing Course Outcomes	Day 2 • CO–PO/CO–PSO Mapping – I • CO–PO/CO–PSO Mapping – II • Curriculum Design and Integration of WK • Curriculum Gap Analysis • SDG Integration and Self-Learning Activities
Day 3 • Outcome-based assessment • GAPC 4.0 criteria and weightages • Rubrics • CO and PO attainment calculation • Student Performance Criteria • Faculty contributions • Facilities and technical support	Day 4 • Complex Engineering Problem • Institute-level criteria • Structure and format of the new SAR • Criterion-wise responses and evidence mapping Day 5 • Common pitfalls in SAR preparation • Peer review • Mock SAR presentation

About FDP

The Faculty Development Programme (FDP) on Outcome Based Education and GAPC 4.0 – New SAR Preparation, organized by NITTTR Chennai, was conducted from 10–14 August 2026 as a five-day, 40-hour intensive capacity-building programme. Seven faculty members from Nandha Engineering College (Autonomous) participated in Phase-II of the programme. The FDP focused on OBE principles, NBA accreditation and GAPC 4.0, Vision–Mission–PEOs–POs–PSOs, CO–PO mapping, curriculum gap analysis, outcome-based assessment, rubrics, attainment, Complex Engineering Problems, SDG integration, SAR preparation, evidence mapping, institutional data repositories and continuous quality improvement.

Alignment with Sustainable Development Goals

The FDP has a **direct and strong connection with SDG 4 – Quality Education**, while several secondary linkages can be established through quality enhancement, innovation, institutional capacity building and collaborative partnerships.

Primary SDG

SDG 4 – Quality Education

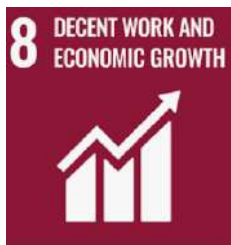
“Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.”

Secondary SDG Mapping

SDG	Target	Relevance to FDP
SDG 4 – Quality Education	4.4	Faculty competency development, outcome-based curriculum and skills-oriented education
SDG 4 – Quality Education	4.7	Integration of SDGs into curriculum and self-learning activities
SDG 4 – Quality Education	4.3	Strengthening quality and effectiveness of higher technical education
SDG 9 – Industry, Innovation and Infrastructure	9.5	Strengthening innovation, research-oriented engineering education and institutional technical capacity
SDG 8 – Decent Work and Economic Growth	8.2	Improving productivity through technological upgrading, skills and quality-oriented engineering education
SDG 16 – Peace, Justice and Strong Institutions	16.6	Transparent, accountable and effective institutional systems through evidence-based quality assurance and data repositories
SDG 17 – Partnerships for the Goals	17.16 / 17.17	Institutional and professional collaboration through NITTTR–NEC knowledge exchange and capacity building



Primary SDG



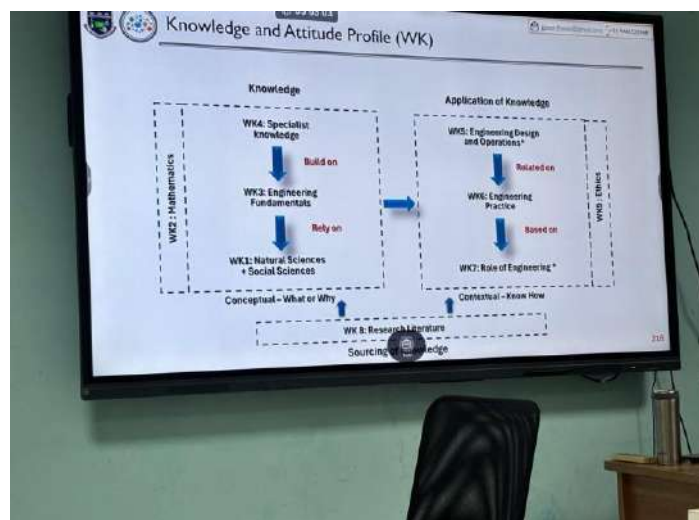
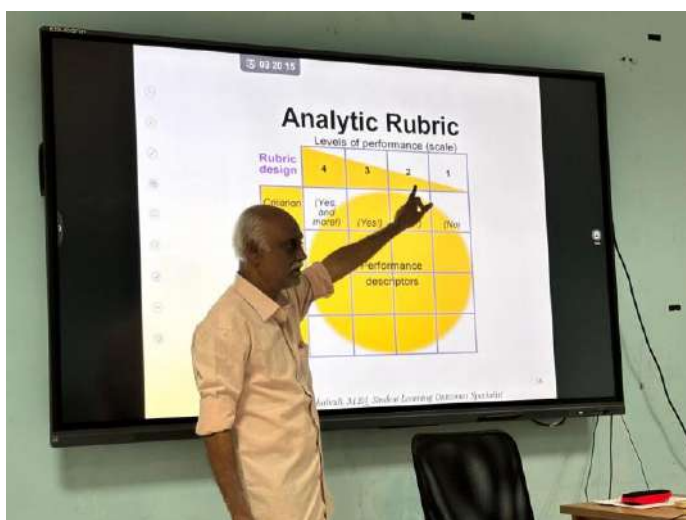
Secondary SDG

The Primary and Secondary SDG alignment of the FDP

Outcomes

- Faculty developed a working understanding of OBE principles and their application to NBA SAR documentation.
- Departmental teams gained clarity on CO-PO mapping in alignment with GAPC 4.0 and the NCrF.
- Participants were equipped to prepare Self-Learning Materials and identify appropriate Open Educational Resources for their courses.
- Rubric-based project evaluation frameworks and SDG-integrated curriculum design approaches were introduced for adoption across departments.
- A shared institutional roadmap emerged for aligning academic delivery with industry-integrated certification pathways.

FDP Glimpses



Prof. Santhakumar explained the rubrics based assessment during his session on Outcome Based Assessment



Glimpses of Dr.G. Janarthanan session on Outcome Based Education- GAPC 4.0



Participants of 5 Days FDP on Outcome Based Education- GAPC 4.0

Proposed Post-FDP Action Plan for NEC

To maximize the institutional benefit of the FDP, the following action plan can be adopted:

S.No.	Action	Suggested Responsibility	Expected Output
1	Dissemination of FDP learning to faculty	FDP Participants / IQAC	Faculty orientation sessions
2	Review of CO formulation	HoDs / Course Coordinators	Revised measurable COs
3	Review of CO–PO/PSO mapping	Departments	Justified mapping matrices
4	Review of assessment tools	Departments / IQAC	Outcome-aligned assessment
5	Review of attainment methodology	IQAC / Departments	Standardized attainment process
6	Curriculum gap analysis	HoDs / BOS	Gap identification report
7	SDG–Curriculum mapping	Departments	SDG mapping matrix
8	CEP identification and documentation	Departments	CEP evidence repository
9	GAPC 4.0 criterion-wise evidence mapping	IQAC / NBA Team	Evidence matrix
10	Mock SAR preparation	IQAC / NBA Committee	Department-wise SAR drafts
11	Peer review and corrective action	IQAC / HoDs	Continuous improvement report

Conclusion:

The five-day Phase-II Faculty Development Programme on **Outcome Based Education and GAPC 4.0 – New SAR Preparation** at NITTTR Chennai provided the seven-member team from Nandha Engineering College with structured exposure to OBE, curriculum design, assessment, accreditation documentation and quality assurance. The programme covered CO–PO mapping, curriculum gap analysis, outcome-based assessment, attainment, Complex Engineering Problems, SDG integration, GAPC 4.0, SAR preparation, evidence mapping, institutional data repositories and action planning. Participation from IQAC, Freshmen Engineering, Mechanical, CSE/IoT, CSE, ECE and Mathematics enabled wider academic dissemination. The FDP strengthened institutional capacity for OBE implementation, NBA preparedness, continuous quality improvement and SDG-integrated engineering education.

Enclosures:

1. Course Handbook
2. Faculty Participation Certificates
3. Sample Assignments