# National Institute of Technical Teachers' Training and Research, Bhopal PROGRAMME BRIEF

Title of the Programme: - Induction Training Programme (Phase I)

Programme code:- GUJ-07

Programme duration: - 12th to 23rd June 2023

Venue: SVNIT, SURAT, Gujrat

#### 1. Rationale:

In the era of rapid economic globalization and the advent of Industry 4.0 and digitalization, increasing international and regional competitions pose great challenges for the technical education system. In this perspective, practicing educators are required to bring reforms to the existing education and training system to prepare young graduates to effectively cope with these changes. As a result, a lot of challenges and issues are emerging for today's educators. The imperative in recent years about improving student outcomes is also about improving the quality of the teaching professionals.

Achievement of teacher quality is the pedagogical knowledge of teachers. The term refers to the art of teaching and the strategies teachers employ to communicate learning content effectively. Pedagogical knowledge and skills refer to the specialized knowledge of teachers for creating effective teaching and learning environments for all students. Pedagogical skills are proficiencies that allow teachers to manage and instruct students in the classroom as well as in laboratories and workshops.

Recognizing the imperative, the Induction Training Program (Phase 1) is a flagship program offered by NITTTR, Bhopal. This programme was recently redesigned, keeping in view the recommendations of the National Education Policy (NEP) 2020, and mainly focusing on equipping the practicing teachers with the pedagogical skills for enhancing the quality of teaching-learning and ultimately students' learning in the technical institutions across the region. Understanding these skills and their importance to the teaching profession can help teachers use them for professional growth and development.

#### 2. Programme Outcomes:

After completing the programme, the participants will be able to

- i. Elucidate the National Education Policy 2020 and its implications on the Technical Education System in India.
- ii. Practice the emerging roles & responsibilities of technical teachers;
- iii. Applies the principles of learning in teaching learning process
- iv. Interpret the learning outcomes after curriculum analysis of a given course.
- v. Demonstrate classroom communication and presentation skills
- vi. Select appropriate instructional methods and strategies in view of the learning outcomes.
- vii. Practice innovative teaching strategies to improve the teaching-learning process;
- viii. Use technology-enabled learning approaches to enhance the quality of teaching-learning;
- ix. Explore online Free and Open Source Software [FOSS], Open Educational Resource (OER) and other digital tools for the creating effective learning environment.
- x. Develop instructional media as per curricular needs.
- xi. Supplement the classroom presentations with appropriate media and materials for effective teaching learning process.

- xii. Prepare session plan for classroom, laboratory, workshop and industry-based instruction.
- xiii. Design an effective lesson utilizing instructional technology resources and integrate into the teaching environment.
- xiv. Define the functional role of assessment and evaluation in an educational institution.
- xv. Design a question paper based on the table of specification.
- xvi. Assess the student's performance using rubrics in the technical education system.

# 3. Programme Content:

# Week 1

- NEP 2020 & its implication on the Technical Education System
- Emerging Roles and Responsibilities of Technical Teachers and Professional Ethics
- · Domains of Learning
- Revised Bloom's Taxonomy
- Dave's and Krathwohl's Taxonomy
- · Outcome-based Education
- OBC- Outcomes at Course and Programme level and their mapping.
- Academic Performance Index

- Classroom Communication and Presentation skills
- Outcome-Based Teaching-Learning Approaches
- Improved Lecture, Q-A, Tutorial, Demonstration
- Blended and Flipped Learning
- Seminar
- · Think-Pair-Share
- Group discussion and Case Study
- Open Educational Resources (OER)
- ICT Tools

#### Week 2

- Overview of Educational Media (Classroom and Lab sessions)
- Media Design Principles
- Course Plan preparation
- · Gagne's Events of Instruction,
- Content analysis using a Concept map
- · Outcome-based Assessment
- Assessment Tools (Direct & Indirect)
- Rubrics

- Assessment of Higher-Order Thinking Skills
- Laboratory, Workshop and its Assessment
- Project work and its Assessment.
- Micro-Teaching Practice
- Self-directed learning and Learning Strategies

# 4. Instructional Strategy:

- Input cum discussion
- · Brainstorming session
- Case study
- · Good practices
- · Individual & Group assignments

# 5. Target Group:

Faculty members of different discipline working in the technical institutions.

# 6. Coordinator & Faculty details:

#### **COORDINATOR**

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# **Faculty**

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# **Coordinator-Second Week**

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# **Faculty**

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# 7. Tentative Programme Schedule:

# Week 1

Date	Session I 10.00 - 11.30 AM	Session II 11.45 AM-01.15 PM	Session III 02.15-03.45 PM	Session IV 04.00- 05.30 PM
Day 1	<ul><li>Registration</li><li>Inauguration</li><li>Programme brief</li><li>Expectations</li></ul>	The implication of NEP 2020 on the Technical Education System	Emerging Roles and Responsibilities of technical teachers and Professional Ethics	Activity 1 Knowledge and experience sharing- issues and challenges faced
Day 2	<ul> <li>Domains of learning</li> <li>Revised Bloom's Taxonomy</li> <li>Dave's Taxonomy</li> <li>Krathwohl's taxonomy</li> </ul>	<ul> <li>Outcome-based Education</li> <li>OBC- Outcomes at Course and Programme level and their mapping.</li> </ul>	Task 1 • Formulate COs and prepare Course Articulation Matrix	Academic     Performance     Index
Day 3	Classroom     Communication     and presentation     skills	Outcome-Based     Teaching-     Learning     Approaches	Improved lecture, Q-A, Tutorial, and Demonstration	Activity 2 Discussion on the improvement of TL using these methods
Day 4	Blended and Flipped learning	<ul><li>Seminar</li><li>Think-Pair-Share</li></ul>	Group discussion, Case Study	Task 2 Create a sample case
Day 5	Open     Educational     Resources     (OER)	ICT Tools	Consolidation     Open Discussion	Achievement Test for Week 1

Week 2

Date	Session I 10.00 - 11.30 AM	Session II 11.45 AM - 01.15 PM	Session III 02.15-03.45 PM	Session IV 04.00-0 5.30 PM		
Day 6	<ul> <li>Overview of Educational Media (Classroom and Lab. Sessions)</li> <li>Media Design Principles</li> </ul>		<ul> <li>Course plan preparation</li> <li>Gagne's Events of Instruction, Content analysis using a concept map</li> </ul>	Task 3 Session Plan preparation		
Day 7	Outcome-based Assessment	<ul><li>Assessment Tools (Direct &amp; Indirect)</li><li>Rubrics</li></ul>	Assessment of higher-order thinking skills	Task 4 Formulate questions to assess HOTs		
Day 8	<ul> <li>Laboratory, workshop and its Assessment</li> </ul>	<ul> <li>Project work and its Assessment.</li> </ul>	Task 5 Design of Rubrics	<ul> <li>Preparation for Micro Teaching</li> </ul>		
Day 9	Micro-Teaching Practice followed by feedback					
Day 10	<ul> <li>Self-directed learning and learning strategies</li> </ul>	Experience sharing related to innovative TL approaches used	<ul> <li>Consolidation of Tasks and submission of Portfolio</li> <li>Open Session</li> </ul>	<ul> <li>Achievement Test</li> <li>Summarization oflearning,</li> <li>Valedictory</li> </ul>		

**Tea Break:** 11.30 AM to 11.45 AM and 03.34 PM to 04.00 PM; **Lunch Break:** 01.15 PM to 02.15 PM