

INDIVIDUAL COURSE DETAILS**Redefining Engineering Education through innovative Curriculum for Industry 4.0**

A. Name of the Institute	<p style="text-align: center;">NATIONAL INSTITUTE OF TECHNICAL TEACHERS TRAINING AND RESEARCH TARAMANI, CHENNAI – 600 113, INDIA [An Autonomous Institute under Department of Higher Education, Ministry of Education, Government of India] Taramani, Chennai – 600 113, INDIA.</p>
B. Title of the Course	Advanced Certificate Course on Redefining Engineering Education through Innovative curriculum for Industry 4.0
C. Proposed Mode of the Course 1.Offline(Physical - Regular ITEC) 2. Online (e-ITEC) 3. Either Offline(Regular ITEC) or Online (e-ITEC)	Online (e-ITEC)
D. Proposed Dates and Duration of the Course (in weeks / months)	(2 Weeks) from 13/03/2023 to 24/03/2023
E. Eligibility Criteria for Participants 1. Educational Qualification 2. Work Experience 3. Age Limit 4. Target Group	1) Degree / Diploma Engineering / Technology 2) Have a minimum of 5 years Experience in Teaching / Training Have a good proficiency in English which is the medium of instruction 3) Preferably less than 45 years 4) Practicing teachers / industrial trainers, curriculum developers / planners and or administrators in technical education. Executives of College Education / Directorates / Ministries
F. Aims & Objectives of the Course	The course aims at developing attributes for redefining and development of Engineering Education through outcome-based education and CDIO Approach <ul style="list-style-type: none"> • To formulate the curriculum to suit the requirement of the society at large. • To adopt the changes in Curriculum vis-a-vis Industry 4.0 needs.

G. Details of Content of the Program <i>(please attach detailed course profile)</i>	<ul style="list-style-type: none"> • Industry4.0 / Societal Requirement • Curriculum Design and Implementation for Industry 4.0 • Outcome Based Education • Conceive, Design, Implement and Operate • Learning Management System • Curriculum Assessment • Concept Mapping • Use of FOSS in LMS • Project work and Presentation
H. Expected Outcomes	<ul style="list-style-type: none"> • To effectively implement the curriculum by various learning approaches and assessment to achieve the attributes of a professional. • To systematically evaluate the curriculum and develop further based on outcome/feedback of the learners.
I. Evaluation of Performance of the ITEC Participant	Qualitative Assessment through Rubrics
J. Name of the Department	Department of Mechanical Engineering, NITTTR, Chennai
K. Name of Coordinator	V.Sivakumar
L. Brief Profile / CV of Coordinator	<p>Mechanical Engineer from University of Madras with a specialisation in Design and Production of Thermal Power Equipments from Regional Engineering College, Tiruchirappalli and currently working in the area of Outcome Based Education, curriculum design as a trainer.</p> <p>Industrial Experience of 7 years in various projects of Steel plants and Copper plants in the area of Project Estimation, Project Management and Execution.</p> <p>Teaching Experience of 7 years as faculty in various Engineering Colleges and Involved in establishment of Laboratories, Staff Advisor for various professional Societies like Society of Automotive Engineers (SAE). Presented papers in various International/National Conferences and Seminars.</p> <p>Training Experience from 2006, November onwards at National Institute of Technical Teachers Training and Research, Chennai, an autonomous organization under (An Autonomous Institute under Ministry of Education, Government of India) (MOE) serving the state of Karnataka for 15 years in with major responsibilities as given</p>

	<p>below:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Involved in Curriculum Revision in the state of Karnataka for technical education. <input type="checkbox"/> Training the technical (Engineering college and Polytechnic) teachers of Karnataka state and other southern states in various technological and pedagogical areas. <input type="checkbox"/> Involved in implementation of Outcome based Education for Karnataka State. <input type="checkbox"/> Involved in E-Content Development and Learning Management systems for technical education system in Karnataka. <input type="checkbox"/> Resource person for various NBA Accreditation Workshops at Jadavpur University, University Institute of Chemical Technology, Jalgaon. <input type="checkbox"/> Resource person at various universities in Curriculum Design and Higher order thinking skills. <input type="checkbox"/> Interacting and visiting industries to understand their requirement.
<p>M. Resource persons</p>	<p>Faculty from NITTTR, Chennai (Including Extension Centres) and other reputed institutions and industry</p>