## **INDIVIDUAL COURSE DETAILS**

## **ITEC**

## **Design of Educational Applications using Web Technologies**

A. Name of the Institute	NATIONAL INSTITUTE OF TECHNICAL TEACHERS TRAINING AND RESEARCH TARAMANI, CHENNAI – 600 113. [Ministry of Education, Government of India] Taramani, Chennai – 600 113, INDIA.
B. Title of the Course	Certificate Course on "Information & Communication Technologies In Education & Training"
C. Course Duration	Weeks: 4
	Start Date: 1 <sup>st</sup> Oct 2024 End Date: 28 <sup>th</sup> Oct 2024
D. No. of days of Training	Days: 25
	learning hours (Approximate): 125 hrs
E. Eligibility Criteria for Participants	Applicants for this course must be
Educational Qualification	Degree/ Diploma in Information Technology (IT) / Computer
2. Work Experience	Science/ Information and Communication Technology / Educational Technology / Engineering Education / Network Technology/ Communication Technology / Internet Security Technologies / Network Security
	<ul> <li>Minimum of two years experience in teaching / IT / ICT application design, Development and Training</li> <li>Have a good proficiency in English which is the medium of instruction</li> </ul>
3. Age Limit	Preferably not more than 45 years
4. Target Group	Computer Science and Information Technology professionals
F. Aims & Objectives of the Course	To develop appropriate and necessary competencies in IT / ICT based Education and Training which facilities Anytime, Anywhere and Any pace Learning
	<ul> <li>To understand the concepts of IT applications in the area of training and administration</li> <li>To know the concepts of effective presentations in the Training Environment as well as in classroom Teaching</li> <li>To use the web-based / desktop based presentation packages and Information Technology applications.</li> <li>To understand the different kind instructional technologies and educational applications</li> <li>To design pages using Markup languages with the help of FOSS tools.</li> </ul>

- To design Web Site using a content Management tool such as JOOMLA
- To understand Learning Management System and Design LMS using MOODLE Package
- To Understand Intranet / Internet Environment
- To appreciate the use of e-learning technologies and solutions.
- To appreciate the use of MOOCs
- To understand the principles of design & development of e – Learning System
- To design web based education framework
- To design and develop web applications to meet blended learning.
- To understand e-administration with e-governance in educational and Training Organization.
- To know the cloud computing functions and characteristics
- To use the Cloud Collaboration tools for Education and Training
- To Understand Information security and Information Retrieval
- To understand Risk Management activities

G. Details of Content of the Course / Training Schedule (pl attach a simple thematic / day-wise schedule (topics covered)).

**Week -1:** Computer Software and Hardware - Operating System - System Administration - Presentation Concepts - Presentation Tools - Adobe Presentation packages- Mind map tools - Screen Capturing tools

Basics of Networking - Communication in Local Area Network - Intranet - WWW - Internet Concepts - Instructional Technologies - Flipped Class Room - Models of distance education and delivery - Introduction to Web Technologies - Design of web pages using HTML - CSS - Dreamweaver - Web Browser- Web server - Web site Deployment - Project Work

**Week -2:** Distributed open online learning (OER) – MOOCs – ICT in Outcome Based Education (OBE) - Web 2.0 - Social media in education – Social networking tools – Google tools – Social media strategies for teachers

Overview of Content Management System – JOOMLA - Article Management – Template Management – Module Management – Plugin Management - Overview of e-learning features – Modes of e-learning – Learning Management System (LMS) - MOODLE - Development of Instructional resources – Deploy resources in LMS

**Week – 3:** Overview on Instructional Media - Classification of Media - Simple Graphics & Animation Development - Script writing fundamentals – Video Production equipments – Video Production System – Post production and Editing

**Week -4:** Introduction to Cloud computing – Cloud Delivery Models – Cloud Collaboration tools for Education - Security in web technologies – Secure campus network – Project work

H. Mode of Evaluation of Performance of the ITEC Participant	Attainment of course objectives will be periodically reviewed by course review, internal assessment and project work.  At the end of the course, candidates will be awarded with an Advanced Certificate on "Certificate Course on "Information & Communication Technologies In Education & Training"
I. Platform for delivery of online course (wherever applicable)	Google Platform
J. Name of the Department	Department of Computer Science and Engineering
K. Name of Coordinator	S.Sasirekha
L. Resource persons	V Shanmuganeethi Seshubabu Pulagara