

INDIVIDUAL COURSE DETAILS

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	Digital Teaching and Learning Technologies
C.	Course Duration	Weeks: Two Start Date: 30, October 2023 to 10, November 2023
D.	No. of days of Training	Days: 10 days
E.	Eligibility Criteria for Participants 1. Educational Qualification	Any Diploma / Degree / Post-graduation in Engineering or Science or Social Science or Management with interest in developing educational video programs. Good proficiency in spoken, written and comprehension of English which is the medium of instruction.
	2. Work Experience, if any	Experience in Teaching / Training / Research / Consultancy / Administration / Developing Multimedia Content / video programs for technical, vocational, Arts & Science fields in Colleges, Universities, Media Centers and Training Organizations
	3. Age Limit	Maximum 55 years
	4. Target Group [Level of participants and target Ministries / Departments etc., may be indicated]	Teachers, Trainers, Consultants, Administrators from Colleges, Universities, Industries, e-Learning Companies, Training Organizations, and Government Departments.

F.	Aims & Objectives of the Course	<p>The course aims at developing essential competencies for developing e-content for appropriate learning outcomes.</p> <p>Objectives:</p> <ul style="list-style-type: none"> • Explain the need for e-Content Development • Discuss the Generation Z learners Characteristics • Use Instructional Design Principles for E-Content Development • Explore various Learning Management Systems • Create concept maps to organize and represent knowledge of a subject. • Create Graphics, Audio and Video Contents for a course • Explore Open Educational Resources and Learning Space created by Government of India through NMEICT • Use Online Collaborative Tools for developing 21st Century Learning Skills • Use Online Assessment tools for effective Teaching and Learning • Deploy the course content developed and activities on LMS • Explore the AR/VR/MR apps for Education • Adopt Open Educational Practices for Accessibility, Equity and Quality in Education
G.	Details of Content of the Program (detailed Course Profile enclosed)	<p>Course of Study – Syllabus Abstract</p> <ul style="list-style-type: none"> • Digital Learning Ecosystem in Higher Education • E-Learning Authoring Tools • Learning Management System • Resilient Pedagogy • Learners Characteristics and Motivation • Concept Map and Package the e-Content • OER and Creative Commons License • Open Educational Practices

		<ul style="list-style-type: none"> • Blended and Flipped Learning • NMEICT • Video based lesson • Audio / Video Editing Tools • Online Collaborative Tools • Assessment Tools • Virtual Laboratory Instruction • Immersive Technologies -AR,VR, MR
H.	Mode of Evaluation of Performance of the ITEC Participant	<p>The performance of the participants will be regularly assessed through assignments, group activities and content development projects.</p> <p>At the end of the course, candidates will be awarded with a Certificate on “Digital Learning and Teaching Technologies”.</p>
I.	Platform for delivery of online course (wherever applicable)	<p>Online (e-ITEC) Google Meet, MOODLE/ Canvas LMS</p>
J.	Name of the Department	<p>Department of Educational Media and Technology NITTTR, Chennai</p>
K.	Name of the Coordinator	<p>Dr. P. Malliga Professor & Head Department of Educational Media and Technology NITTTR, Chennai</p>

L.	Resource Persons	<ul style="list-style-type: none"> • Dr. P. Malliga, Professor & Head Dept. of Educational Media and Technology • Dr. S. Renukadevi, Professor & Head, Centre for Academic Studies and Research • Dr. G. Kulanthaivel, Professor & Head, Centre for International Affairs • Dr. G. Janardhanan Professor & Head, Dept. of CDPC • Dr. V. Shanmuganeethi Professor & Head, Dept. of DCSE • Dr. KSA Dineshkumar, Professor, Dept. of Civil & Environmental Engg. • Er. V. Sivakumar, Associate Professor Dept. of Mechanical Engineering • Mr. Felix Arokiya Raj, Assistant Professor Dept. of Educational Media and Technology • Guest Faculty from E-Learning Industries
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(Dr. P. Malliga)
Professor & Head
Dept. of Educational Media and Technology

Course Profile

Advanced certificate Course on “Digital Learning and Teaching technologies”

1. Rationale

With the advent of Internet and world wide web (www), the access to information has become very easy and the entire world is moving towards digitization. Twenty first century students learn in a global classroom and not necessarily within four walls. They are more inclined to find information by accessing the Internet through mobile phones and computers or chatting with friends on a social networking site. The advancements in technology and the plethora of powerful and innovative digital devices and tools have a great potential to improve educational outcomes. Educators must understand that the use of digital content and devices will improve teaching and learning and thus enhance educational opportunities and benefit the Generation Z learners. This course on E-content development for online teaching is meant to understand the meaning and standards of E-content, learning objects, designing and development of digital resources for teaching and learning. Thus, this course aims in providing the knowledge and skill for teachers to cater to present day learners and their learning styles.

2. Course Outcomes

After completing the learning tasks in this course, the participants will be able to:

- Plan, design and develop effective lessons utilizing instructional technology resources and deploy in learning environment.
- Use online tools, applications, and open educational resources for the creating effective learning resources.

3. Course Objectives:

The course aims at developing essential competencies for developing e-content for appropriate learning outcomes.

- Explain the need for e-Content Development
- Discuss the Generation Z learners Characteristics
- Use Instructional Design Principles for E-Content Development
- Explore various Learning Management Systems
- Create concept maps to organize and represent knowledge of a subject.
- Create Graphics, Audio and Video Contents for a course
- Explore Open Educational Resources and Open License
- Use Online Collaborative Tools for developing 21st Century Learning Skills
- Use Online Assessment tools for effective Teaching and Learning
- Deploy the course content developed and activities on LMS
- Explore the AR/VR/MR apps for Education
- Adopt Open Educational Practices for Accessibility, Equity and Quality in Education

4. INSTRUCTIONAL STRATEGIES

Lecture – Discussions –Démonstrations – Assignments –Video lessons – Field trip –
Outstation field visit – Project work

5. Course Content

- Digital Learning Ecosystem in Higher Education
- E-Learning Authoring Tools
- Resilient Pedagogy
- Learning Management System
- Learners Characteristics and Motivation
- Concept Map and Package the e-Content
- OER and Creative Commons License
- Open Educational Practices
- NMEICT Initiatives
- Innovative and Interactive Teaching Methods- Blended and Flipped Learning
- Creating Video based lessons
- Audio / Video Editing Tools
- Graphics and Animation Tools
- Online Collaborative Tools
- Online Assessment Tools
- Virtual Laboratory Instruction and Simulations
- Immersive Technologies -AR/VR/MR in education

6. ASSESSMENT and AWARD

- Attainment of course outcomes will be based on continuous internal assessment and project work.
- Successful candidates are awarded “**Digital Learning and Teaching Technologies**”