

**Master of Arts/ Master of Science (eLearning)  
(MA/ MSc - eLearning)**

**80 credits**

**2019-20**

**Courses and Evaluation Weightage**

<b>Courses</b>	<b>Internal</b>	<b>External</b>	<b>Credits</b>
<b>Semester I</b>			
120011 Educational Technology and Instructional Technology	50	50	4
120012 Learner and the Process of Learning	50	50	4
120013 Instructional Systems Design: Basics	50	50	4
120014 Open and Flexible Distance Learning System #	50	50	4
120015 Information Technology *	50	50 (Pract)	4
<b>Semester II</b>			
220011 Instructional System Design: Theories and Models	50	50	4
220012 Instructional Strategies for Face-to-face learning #	50	50	4
220016 eLearning *	50	50 (Pract)	4
220014 Research Methodology	50	50	4
220015 OER Development	50	50 (Pract)	4
<i>Exit: PG Diploma in eLearning</i>			
<b>Semester III</b>			
320011 Interactive Multimedia: Concept and Development	100		4
320012 Online Learning: Planning and implementation	100		4
320014 Modern Techniques in Educational Technology	100		4
320015 Visual Communication and Language Communication * #	100		4
320888 Research	100		4
<b>Semester IV</b>			
420011 Web-Application Skills *	100		4
420012 Project Management	100		4
420888 Research	50	50 (Pract)	4
420999 Internship	150	50 (Pract)	8

*Assessment strategies to be used for "Practical external" are: Lab practical of software, Presentation/Seminar/Workshop evaluation, product evaluation, Viva Voce, etc. by external examiners. Theory papers are not to be set for these courses.*

**\* CBCS for other students**

**# can be dropped out by DET students**

***\$ Skill-based courses***

**Rules for CBCS Elective offerings**

Highlighted courses of every semester will be open for all other master degree students.

MA/MSc (eLearning) students can skip the same courses if they wish to join course of other master degree.

Maximum 3 students from one department will be allowed to join elective of that semester. Total 10 students of other departments can be accommodated in one elective course.

**Master of Arts / Science (eLearning) (MA/MSc eL)  
Detailed Syllabus**

**Semester I**

Courses	Intern al	Extern al	Credits
<b>Semester I</b>			
120011 Educational Technology and Instructional Technology	50	50	4
120012 Learner and the Process of Learning	50	50	4
120013 Instructional Systems Design: Basics	50	50	4
120014 Open and Flexible Distance Learning System	50	50	4
120015 Information Technology	50	50 (Pract)	4

**Course 120011: Educational Technology and Instructional Technology**

**4 Credits: 100 marks**

**Course Objectives:** Learners will be able to

- ◆ Trace the development of the Concept of ET with special reference to Indian Context
- ◆ Analyse a given system
- ◆ Describe Communication process with the use of models.
- ◆ Derive specific objectives from the given goals
- ◆ Analyse the given content
- ◆ Differentiate between formative and summative evaluation.
- ◆ Classify instructional strategies using various criteria

**Module 111: Concept of Educational Technology, Systems Approach to education and Process of Communication**

**Credit 1**

**Objectives:** Learners will be able to

- ◆ Trace the development of the Concept of ET with special reference to Indian Context
- ◆ State characteristics of a system.
- ◆ Develop a micro level system related to education field.
- ◆ Identify areas of application of system approach in Education

- ◆ Identify elements of Communication
- ◆ List characteristics of Communication process
- ◆ Describe Communication process with the use of models.
- ◆ Suggest applications of good communication to the process of education.

**Content:**

- **Concept of ET:** Meaning, Definition, Development
- **System-** definition, characteristics, Stages of Development of a System
- **Communication Process-** Definition, Elements, characteristics
- Models of Communication: Simple, Osgood and Schram, Shanon-Weaver
- Concepts of Noise and Distortion

**Module 112: Goal Setting and Content Analysis**

**Credit 1**

**Objectives:** Learners will be able to

- ◆ derive specific objectives from the given goals
- ◆ Enlist objectives using Magerian System
- ◆ Place given objectives in Bloom's Taxonomy
- ◆ Analyse the given content

**Content:**

- Goals of Education (Domains: Cognitive, Affective, Psychomotor)
- Objectives
  - Instructional Objectives/ Performance Objectives
  - Characteristics, Criteria for writing objectives
  - Taxonomy of Educational Objectives
- Content Analysis – CDT Matrix
  - Process, Categories of content (Facts, Concepts, Principles, Procedures)

**Module 113: Evaluation Strategies**

**Credit 1**

**Objectives:** Learners will be able to

- ◆ State importance of Evaluation in the teaching learning process.
- ◆ Differentiate between formative and summative evaluation.
- ◆ Develop various types of test items.
- ◆ Develop an Achievement Test

**Content:**

- Evaluation
  - Process, Types (Formative Evaluation, Summative Evaluation)
  - Process of developing an Achievement Test
  - Characteristics of Diagnostic Test

- Mastery Learning

## **Module 114: Instructional Strategies**

**Credit 1**

**Objectives:** Learners will be able to

- ◆ compare strengths and weaknesses of the Teacher determined, Group determined and individualized instructional strategies
- ◆ classify instructional strategies using various criteria

**Content:**

Instructional strategy

- Meaning, nature

Classification of Instructional Strategies

1. Teacher/Group/Individual determined strategies
2. Cooperative/Collaborative Strategies

Role of teacher/trainer in using various types of strategies

## **Course 120012: Learner and the Process of Learning**

**4 Credits, 100 marks**

**Course Objectives:** Learners will be able to

- ◆ Define process of learning.
- ◆ Describe process of attention and its aspects
- ◆ Describe the role of perception in the process of learning
- ◆ Explain the implications of theories of learning for classroom teaching
- ◆ Relate brain structure to process of learning
- ◆ Develop places of learning as an application of BBL.
- ◆ Identify Learning styles of learners
- ◆ Enumerate special characteristics of Adult Learning

## **Module 121: Learner Characteristics**

**Credit 1**

**Objectives:** Learners will be able to

- ◆ Define process of learning.
- ◆ State various aspects of process of learning.
- ◆ Relate brain structure to process of learning
- ◆ Identify learner characteristics.

**Content:**

- 1. Process of Learning
- 2. Individual Differences in learning
  - Intelligence
  - Multiple Intelligences

Emotional Intelligence  
Creativity

## **Module 122: Processes and Factors Associated with Learning**

**Credit 1**

**Objectives:** Learners will be able to

- ◆ Define attention
- ◆ Describe process of attention and its aspects
- ◆ Define Perception
- ◆ Describe the role of perception in the process of learning
- ◆ State types of memory
- ◆ State various factors affecting/related to memory
- ◆ Identify Learning styles of learners

**Content:**

1. Psychological Processes associated with Learning
  - Attention
  - Perception
  - Memory
2. Learning styles
  - Concept and significance in TLP
  - Measuring Learning Styles

## **Module 123: Theories of Learning**

**Credit 1**

**Objectives:** Learners will be able to

- ◆ Compare various theories of learning
- ◆ Explain the implications of theories of learning for classroom teaching
- ◆ Apply theories of learning to Instructional Design

**Content:**

Theories of Learning and their educational implications for classroom teaching

1. Behaviourism
2. Cognitivism
3. Constructivism
4. Humanism

## **Module 124: Brain Based Learning and Adult Learning**

**Credit 1**

**Objectives:** Learners will be able to

- ◆ Explain brain structure.
- ◆ Relate brain structure to process of learning
- ◆ Develop places of learning as an application of BBL.
- ◆ Differentiate between Pedagogy and andragogy
- ◆ Enumerate special characteristics of Adult Learning

**Content:**

The Brain: Structure and functions of parts of brain

- How Brain learns: Learning from Neuropsychological research.
- Brain Based Learning (BBL)
- Characteristics of adult learning
- Comparison between pedagogy and andragogy

### **Course 120013: Instructional Systems Design: Basics**

**4 Credits, 100 marks**

**Course Objectives:** Learners will be able to

- ◆ Define Instructional Design
- ◆ Trace the historical development of the Instructional Design
- ◆ Explain the need for and importance of Instructional Design
- ◆ Explain various steps in ADDIE approach
- ◆ Prepare an ID note on given topic using ADDIE approach.
- ◆ Select media appropriate to objectives and Instructional strategies

### **Module 131: Instructional Design: Concept and Views**

**Credit 1**

**Objectives:** Learners will be able to

- ◆ Define Instructional Design
- ◆ Trace the historical development of the Instructional Design
- ◆ Compare different views on Instructional Design
- ◆ Explain the need for and importance of Instructional Design

**Content:**

- Instructional Design
  - Concept (Process, Product)
  - Need and Importance in teaching/training
- Historical Development of the Instructional Design
- Characteristics of Instructional Design

## **Module 132: ADDIE Approach for ILT**

**Credit 1**

**Objectives:** Learners will be able to

- ◆ Describe ADDIE approach of Instructional Design
- ◆ Explain various steps in ADDIE approach (Analysis, Design, Develop, Implement, Evaluate)
- ◆ Prepare an ID note on given topic using ADDIE approach.

**Content:**

- ADDIE Approach
  - Concept
  - Historical Perspective
  - Steps in the ADDIE and their relationship with each other
    - Analysis, Design, Develop, Implement, Evaluate

## **Module 133: Development of Instructional Material and Media**

**Credit 1**

**Objectives:** Learners will be able to

- ◆ Describe the process of material development for the ILT
- ◆ Select media appropriate to objectives and Instructional strategies
- ◆ Develop Session Plan for the face-to-face session using ADDIE approach

**Content:**

- Instructional Media
  - Characteristics, Classification of Media
  - Five generations of media
  - Criteria for selection of media
- Preparation of Teaching and Learning Material

## **Module 134: Preparation and Implementation of session Plan**

**Credit 1**

**Objectives:** Learners will be able to

- ◆ Design template for session plan
- ◆ Prepare a session plan

**Content:**

- Session Plan (Face-to-Face)
  - Concept, Features, Characteristics
  - Template for developing Session plan
  - Evaluation of the Session Plan

## **Course 120014: Open and Flexible Distance Learning Systems**

**4 Credits, 100 marks**

**Course Objectives:** To enable learners to

- ◆ Discuss theoretical framework of Open Learning and Distance Education Systems
- ◆ Analyse Organizational structure of the given ODL organization
- ◆ Plan for assessments and evaluation in ODDL systems
- ◆ Develop ODLM

### **Module 141: OFDL Systems      Credit 1**

**Objectives:** Learners will be able to

- ◆ Differentiate between Open Learning and Distance Education Systems
- ◆ Analyse ODL system in India
- ◆ Explain the organisational structure of Head Quarter in ODL
- ◆ Enlist roles and responsibilities of program coordinator

**Content:**

Concepts of Open Learning, Flexible learning, Distance learning  
ODL in India  
Characteristics of Distance Learners  
Organisational Structure of Head Quarter in ODL  
Roles and responsibilities of Program Coordinator

### **Module 142: Program Implementation and Evaluation System in ODL      Credit 1**

**Objectives:** Learners will be able to

- ◆ Explain the importance of Student Support Services
- ◆ Explain the structure and functions of Regional Centers
- ◆ Design systems for Study centers
- ◆ Plan evaluation for ODL

**Content:**

Student Support Services  
Study centers  
Evaluation System in ODL

### **Module 143: ODLM development      Credit 1**

**Objectives:** Learners will be able to

- ◆ Develop ODL modules

- ◆ Edit given ODL module

**Content:**

Nature and characteristics of ODLM  
Design and development of ODLM  
Assessment strategies in ODLM

**Module 144: Writing Skills for ODLM**

**Credit 1**

**Objectives:** To enable learners to

- ◆ Use appropriate language for writing ODLM

**Content:**

Language of ODLM  
Accuracy of Language Structure in ODLM

**Course 120015: Information Technology**

**4 Credits, 100 marks**

**Course Objectives:** Learners will be able to

- ◆ Explain the structure of computer system.
- ◆ Appreciate the developments in computer and its application
- ◆ Use application software to present information
- ◆ Use application software to create data
- ◆ Explore FOSS software for Graphics creating and editing
- ◆ Explore FOSS software for photo-editing

**Module No. 151: Hardware System, Networking and Operating System**

**Credit 1**

**Objectives:** Learners will be able to

- ◆ Describe the concept of Information Technology.
- ◆ Explain the structure of computer system.
- ◆ State characteristics of LAN and WAN
- ◆ Appreciate the developments in computer and its application

**Content:**

- Information Technology: Overview  
Information Systems  
IT in Business, Education, Entertainment, Science and Engineering
- Computer System Hardware Orientation  
Types of Computers  
Basic structure of Computers:  
CPU  
Input-Output and Storage Devices (including cloud storage)
- Logical algorithm
- User Interface of OS
- Folder and files systems,
- effective use of browsers, appropriate use of search engines,
- database searches, bookmarking tools such as Diigo
- Google Drive tools

**Module No. 152: Application Software: Office**

**Credit 2**

**Objectives:** Learners will be able to

- ◆ Use application software to present information
- ◆ Use application software to analyse information
- ◆ Use application software to create data

**Content:**

- Application Packages  
Open Source Software
- Computer Applications  
Word Processing  
Spreadsheet & Data Base Applications  
Presentation software

**Module No. 153: Application Software: Graphics and Photo-editing**

**Credit 2**

**Objectives:** Learners will be able to

- ◆ Use Graphics software effectively
- ◆ Use GIMP to edit graphics/photo
- ◆ Explore FOSS software for Graphics creating and editing

- ◆ Explore FOSS software for photo-editing

**Content:**

- Infographic and one or two concept-mapping tools
- Graphics Software
  - Smart Drawing tool, smooth the curves, create perfect forms
  - Incorporate text, edit text
  - Inserting clip art images, photos and objects
  - Effects filters
  - Create backgrounds
- GIMP
  - image-editing capabilities, enhanced color-correction, cloning and healing
  - new Smart Filters, visualizing different image effects
  - multiple layers
- FOSS for graphic editing, photo editing

## Semester II

Courses	Internal	External	Credits
220011 Instructional System Design: Theories and Models	50	50	4
220012 Instructional Strategies for Face-to-face learning	50	50	4
220016 eLearning	50	50 (Pract)	4
220014 Research Methodology	50	50	4
220015 OER Development	50	50 (Pract)	4

### Course 220011: Instructional System Design: Theories and Models

**4 Credits, 100 marks**

**Course Objectives:** Learners will be able to

- ◆ Elaborate Instructional Design theories
- ◆ State various steps in ISD given by Dick and Carey Model
- ◆ Develop ISD for CBT using Dick and Carey Model

### Module 211: Overview of Theories and Models of ISD

**Credit: 1**

**Objectives:** Learners will be able to

- ◆ State importance of Gagne's nine events of learning
- ◆ Apply Component Display Theory of ISD
- ◆ Apply Reigluth's Elaboration theory of ISD and develop ISD at Macro level.
- ◆ Apply learning theories (e.g. Behaviorists, Cognitivist and Constructivist) approach to ISD

**Content:**

- Theory of Instructional Design
  - Bruner's Theory of Instruction
  - Kirk and Gusfatson, Reigluth's David Merrill's, Gagne's theories
- Theory and its application to ISD

## **Module 212: Dick and Carey Model: Analysis**

**Credit: 1**

**Objectives:** Learners will be able to

- ◆ State various steps in ISD given by Dick and Carey Model
- ◆ Write analysis using Dick and Carey Model
- ◆ Identify goals as per Dick and Carey Model

**Content:**

- Introduction to Dick and Carey Model
- Identify instructional goals
- Conduct Instructional Analysis
- Analyse learners and context

## **Module 213: Dick and Carey Model: Design and Development**

**Credit: 1**

**Objectives:** Learners will be able to

- ◆ Write performance objectives
- ◆ Develop criterion-reference tests
- ◆ Plan strategy and material

**Content:**

- Write performance objectives
- Develop assessment instruments
- Develop instructional strategy
- Develop and select instructional materials

## **Module 214: Dick and Carey Model: Design: Evaluation**

**Credit: 1**

**Objectives:** Learners will be able to

- ◆ Design formative evaluation strategies as per Dick and Carey Model
- ◆ Design summative evaluation strategies as per Dick and Carey Model

**Content:**

- Design and conduct formative evaluation of instruction
- Revise instruction
- Design and conduct summative evaluation
- Application of the Model

**Course 220012: Instructional Strategies for Face-to-face learning**  
**4 Credits, 100 marks**

**Course Objectives:** Learners will be able to

- ◆ Plan large group instructional strategies for classroom sessions
- ◆ Plan co-operative learning activities for the class
- ◆ Design constructivist learning environments
- ◆ Plan for individualized learning opportunities
- ◆ Prepare a workshop plan

**Module 221: Large group instructional strategies**

**Credit: 1**

**Objectives:** Learners will be able to

- ◆ Plan sessions with large group teaching methods
- ◆ Design session with Concept-attainment model
- ◆ Design session with Role Play model
- ◆ Design session with Assertive training model
- ◆ Design session with Synectics model

**Content:**

Lecturette, Demonstration, Story-telling  
Learner-centred large group strategies: Brain-storming  
Models of teaching: families, syntax  
    Concept-attainment Model,  
    Role-play Model,  
    Inquiry training Model,  
    Advance Organiser Model

**Module 222: Co-operative instructional strategies Credit: 1**

**Objectives:** Learners will be able to

- ◆ Plan sessions with Co-operative instructional strategies
- ◆ Write procedures for conducting Co-operative instructional strategies

**Content:**

Psychological foundation for constructivist strategies  
Classification of co-operative learning strategies  
Procedure of at least 5 Strategies  
Planning for co-operative learning strategies

## **Module 223: Individualised learning strategies**

**Credit: 1**

**Objectives:** Learners will be able to

- ◆ Plan individualized instructional strategies
- ◆ Identify characteristics of various individualized instructional materials

**Content:**

Individualised learning: characteristics  
Programmed Instruction  
Computer-Assisted Learning  
Self-learning material: Overview

## **Module 224: Planning Workshop**

**Credit: 1**

**Objectives:** Learners will be able to

- ◆ Design workshop planning template
- ◆ Write a workshop session plan

**Content:**

Workshop plan template design  
Ananalysis of Content  
Designing Objectives  
Identification of strategies  
Planning of session  
Material Development for Workshop

## **Course 220016: eLearning**

**4 Credits, 100 marks**

**Course Objectives:** Learners will be able to

- ◆ Define the concept of eLearning
- ◆ Compare on-campus, Online and Blended Modes of Learning
- ◆ Analyze models of Blended Learning
- ◆ Design a course through MOOC
- ◆ Explain the new trends in eLearning

## **Module 231: Concept and Development of eLearning**

**Credit: 1**

**Objectives:** Learners will be able to

- ◆ Explain the concept of eLearning

- ◆ Differentiate between the various concepts related to eLearning
- ◆ Differentiate between the types of eLearning

**Content:**

Concept and history of eLearning  
 Concepts related to eLearning  
 Types of eLearning

**Module 232: Online and Blended Learning**

**Credit: 1**

**Objectives:** Learners will be able to

- ◆ Compare on-campus, Online and Blended Modes of Learning
- ◆ Define Online Learning, Blended Learning
- ◆ Analyze models of Blended Learning
- ◆ Design Blended learning sessions

**Content:**

Online and Blended Learning: concept  
 Characteristics of Online learners  
 Facilitator's role in Online Learning environment  
 Asynchronous communication tools  
 Synchronous communication tools  
 Models of Blended Learning  
 Session plan for blended learning

**Module 233: MOOCs and Its Deviated Formats**

**Credit: 1**

**Objectives:** Learners will be able to

- ◆ Define the concept of MOOCs
- ◆ Plan for MOOCs

**Content:**

Concept of MOOCs  
 Derivations of MOOCs  
 Learner analytics in MOOCs  
 Distributed classroom, digital classroom

**Module 234: New Trends in eLearning**

**Credit: 1**

**Objectives:** Learners will be able to

- ◆ Analyse mLearning environments

- ◆ Establish need of AR, VR, AI in education systems
- ◆ Differentiate between Web 2.0 and 3.0
- ◆ Illustrate integrated digital learning environments

**Content:**

mLearning  
 Augmented Reality  
 Virtual Reality, Artificial Intelligence  
 Web 2.0 and Web 3.0  
 Integrated digital learning environments and support systems

**Course 220014: Research Methodology**

**4 Credits, 100 marks**

**Course Objectives:** Learners will be able to

- ◆ Select appropriate Research Methodology
- ◆ Prepare a Research Proposal on a selected topic
- ◆ Write a research report using the International specifications
- ◆ Prepare a Bibliography

**Module 241: Research in Education**

**Credit: 1**

**Objectives:** Learners will be able to

- ◆ Describe various types of research
- ◆ Select appropriate sources of information for identifying a research problem
- ◆ Select appropriate type of research for the problem selected for research
- ◆ Prepare a Bibliography

**Content:**

- What is Research?
- Types of Research (Pure, Applied, Action Research)
- Steps in conducting research
- Basic Concepts in Research
- APA in Educational Research
- Literature and Research Review

**Module 242: Methodology of Research**

**Credit: 1**

**Objectives:** Learners will be able to

- ◆ Select appropriate research design
- ◆ State characteristics of research methods

- ◆ Explain various Experimental designs and select the most appropriate for the research problem in hand

**Content:**

- Methods of Research (Qualitative, quantitative)
- Types of quantitative researches
- Types of Descriptive researches
- Types of Experimental researches

**Module 243: Sampling, Instruments of Data Collection and Research Proposal Credit: 1**

**Objectives:** Learners will be able to

- ◆ Choose appropriate sampling procedures for a given research
- ◆ Prepare at least 2 instruments and 2 tests for data collection
- ◆ State the procedure for data collection
- ◆ Prepare a plan for data analysis
- ◆ Prepare research proposal

**Content:**

- Sampling
  - Sampling Procedure: Types
  - Procedure for Sample Selection
- Data Collection:
  - instruments and Techniques of data collection
  - Procedure for development of the instrument
  - Procedure for data collection
  - Scoring Procedure
  - Planning for data Analysis: coding of the responses
- Research Proposal

**Module 244: Statistical Techniques and Report Writing**

**Credit: 1**

**Objectives:** Learners will be able to

- ◆ Compute measures of Central Tendency
- ◆ Compute measures of Variability
- ◆ State statistical significance of the techniques used.
- ◆ Test hypothesis using appropriate statistical technique.
- ◆ Write a research report using the International specifications

**Content:**

- Statistical techniques
  - Types of Data (Nominal, Ordinal, Interval and Ratio Scale)

- Measures of Central Tendency: Mean, Median, Mode
- Normal Distribution
- Measures of Variability (Range, rank, percentile rank, Standard Deviation)
- Testing hypothesis for Correlation (Coefficient of Correlation) - using software for hypothesis testing
- Testing hypothesis for Comparison (Chi square, t-ratio, One-way ANOVA) - using software for hypothesis testing
- Report writing

### **Course 220015: OER Development**

**4 Credits, 100 marks**

**Course Objectives:** Learners will be able to

- ◆ Define OER
- ◆ Map OER movements across the world
- ◆ Explore OER repositories
- ◆ Design OER for various platforms and devices
- ◆ Develop OER for various platforms and devices

#### **Module 251: Conceptual Framework**

**Credit: 1**

**Objectives:** Learners will be able to

- ◆ Define OER
- ◆ Differentiate FOSS, OER and OCW
- ◆ Trace historical movements of OER
- ◆ Compare Creative Commons licenses

**Content:**

Concept of FOSS, OER, OCW  
 Characteristics of OER  
 Open Knowledge, IMS, Learning Objects  
 Historical development of OER  
 Copyright Issues, Creative Commons Licenses

#### **Module 252: OER Movement**

**Credit: 1**

**Objectives:** Learners will be able to

- ◆ Map OER movements across the world
- ◆ Explore OER repositories
- ◆ Compatibility Guidelines (IEEE standards)

**Content:**

OER Movements

Global Initiatives such as OER University, COL, OER Asia

OER standards

**Module 253: Types of OER      Credit 1**

**Objectives:** Learners will be able to

- ◆ Explore OER formats in eContents
- ◆ Compare different formats of OER

**Content:**

Video, Audio, Interactive animations, simulation formats in eContents

Digitized Library Collections

Open Textbooks

OER Courseware

**Module 254: Design and Development of OER**

**Credit 1**

**Objectives:** Learners will be able to

- ◆ Prepare a Storyboard for eContent
- ◆ Develop eContent for OER

**Content:**

Storyboarding for eContent

Multimedia development of eContent

Authoring tools for eContent development

### Semester III

Courses	Internal	External	Credits
320011 Interactive Multimedia: Concept and Development	100		4
320012 Online Learning: Planning and implementation	100		4
320014 Modern Techniques in Educational Technology	100		4
320015 Visual Communication and Language Communication	100		4
320888 Research	100		4

#### Course 320011: Interactive Multimedia (IMM): Concept and Development

**4 Credits, 100 marks**

**Course Objectives:** Learners will be able to

- ◆ State characteristics of CAI, CBT, CML
- ◆ Compare characteristics of major CAI modes
- ◆ Prepare an Instructional Design for IMM
- ◆ Prepare a [Storyboard](#) for IMM
- ◆ Plan activities for providing Interactivity in IMM
- ◆ Develop Multimedia projects

#### Module 311: CAI/CBT: Concept, Characteristics and Modes

**Credit: 1**

**Objectives:** Learners will be able to

- ◆ State characteristics of CAI, CBT, CML
- ◆ Distinguish between CAI, CML, CBT
- ◆ Compare characteristics of major CAI modes
- ◆ Prepare a [Storyboard](#) for CAI/CBT from the Instructional Design

**Content:**

- Concept, Definition, Characteristics of CAI, CAL, CML, CBT
- Characteristics of CAI
- CAI and CML, CAL and CBT, mLearning eContent

- Modes of CAI
- User Interfaces for desktop-based, mLearning devices

### **Module 312: Storyboard Writing for IMM**

**Credit: 1**

**Objectives:** Learners will be able to

- ◆ Prepare a [Storyboard](#) for IMM
- ◆ Define Navigation, Hyper-linking and Interactivity
- ◆ Review various views on Interactivity as defined by experts
- ◆ Define levels of Interactivity for CAI in one's own words
- ◆ Plan activities for providing Interactivity in IMM

**Content:**

- Storyboard Writing
  - Concept, Need and Styles of Storyboard writing
    - Steps in developing Storyboard for the given ID
- Interactivity: Concept, Need
- Techniques of building Interactivity in IMM

### **Module 313: Designing scenes with Multimedia components**

**Credit: 1**

**Objectives:** Learners will be able to

- ◆ Create Multimedia screens
- ◆ Create animation scenes and movies

**Content:**

Interface  
 Toolbar and Menu bar  
 Exploring Timeline  
 Animating objects

### **Module 314: Building Interactivity**

**Credit: 1**

**Objectives:** Learners will be able to

- ◆ Develop Multimedia projects
- ◆ Create interactive multimedia scenes
- ◆ Insert sound in scenes
- ◆ Insert video in scenes

**Content:**

Adding basic Interactivity  
 Creating quizzes

Publishing project in stand-alone format  
Integration of audio in Multimedia  
Integration of video in Multimedia

## **Course 320012: Online Learning: Planning and implementation**

**4 Credits, 100 marks**

**Course Objectives:** Learners will be able to

- ◆ Describe various stages in offering online course
- ◆ Evaluate appropriateness of the online course activities.
- ◆ Select appropriate Cognitive Strategies for Instructional Design.
- ◆ Use various ID Models for developing web-based training.
- ◆ Conduct an online course using an LMS.
- ◆ Evaluate available e-portfolio (individual or course portfolio)
- ◆ Develop an evaluation rubric on a given topic.
- ◆ Use evaluation strategies for student evaluation

### **Module 321: Online Course Development**

**Credit: 1**

**Objectives:** Learners will be able to

- ◆ Describe features of online learning
- ◆ Describe various stages in offering online course
- ◆ Create various activities for the online course
- ◆ Evaluate appropriateness of the online course activities.

**Content:**

- A. Online Learning
  - Features
  - 5-stage Framework
- B. Creating Online Activities under each of these stages

### **Module 322: Cognitivism-Constructivism and e-learning**

**Credit 1**

**Objectives:** Learners will be able to

- ◆ Identify various Cognitive Strategies used in Instructional Design.
- ◆ Select appropriate Cognitive Strategies for Instructional Design.
- ◆ Describe Constructivist's approach to Instructional Design.
- ◆ Compare traditional Learning Communities with Community of Practices.

**Content:**

Constructivist strategies e-learning

- Problem Based Learning
- Learning Communities (Communities of Participation)
- Cognitive Strategies
  - Classification of cognitive strategies

### **Module 323: Creating an Online Course on LMS**

**Credit: 1**

**Objectives:** Learners will be able to

- ◆ Use LMS (Commercial or open Source) comfortably for offering an online course.
- ◆ Explain the structure of LMS
- ◆ Evaluate the GUI of a LMS
- ◆ Conduct an online course using an LMS.

**Content:**

- Instructional Design used by various Educational Organizations
  - Asynchronous Mode
  - Synchronous and Asynchronous Mode
  - Virtual Learning Environment (VLE)
- Planning of various communication modes
- LMS and its features: Facilitating student learning
  - Structure of LMS
  - Features facilitating student learning

### **Module 324: Evaluation Strategies for Online Learning**

**Credit: 1**

**Objectives:** Learners will be able to

- ◆ Explain the significance of Kilpatrick's Evaluation model.
- ◆ Create an e-portfolio.
- ◆ Evaluate available e-portfolio (individual or course portfolio)
- ◆ Develop an evaluation rubric on a given topic.
- ◆ Use evaluation strategies for student evaluation
- ◆ Use evaluation strategies for course evaluation

**Content:**

- Kirkpatrick's 4-level Model of Evaluation
- e-portfolio: Concepts, Aspects
- Rubrics for Evaluation
  - Need to create Rubrics
  - Steps in preparing Rubrics



## **Course 320015: Visual Communication and Language Communication**

**4 Credits, 100 marks**

**Course Objectives:** Learners will be able to

- ◆ Use appropriate language structures
- ◆ Evaluate various calligraphy, typography patterns with respect to multimedia
- ◆ Prepare Visual Designs for eContents
- ◆ Analyse User Interfaces

### **Module 331: Basics of Visual Communication**

**Credit: 1**

**Objectives:** Learners will be able to

- ◆ Define Visual Communication
- ◆ Differentiate between signs and symbols
- ◆ Discuss the role of images in visual media
- ◆ Evaluate various calligraphy, typography patterns with respect to multimedia

#### **Content:**

Visual Communication: Concept, Definition and Scope  
Linguistic Signs and Symbols  
Calligraphy, Typography, Compugraphy, Type Design  
Graphics, Photographs, Illustrations as visual media

### **Module 332: Visual Design: Concept, Elements and Assembly**

**Credit: 1**

**Objectives:** Learners will be able to

- ◆ Define Visual Design
- ◆ State characteristics of effective Visual Design in Educational Media
- ◆ Discuss the role of Visual Design elements in Visual Assembly
- ◆ Prepare various Visual Design

#### **Content:**

Visual Design: Concept  
Elements of Visual Design: Abstract lines, tones, shapes, colour  
Progression, Subtraction, Addition of Elements  
Assembly of Visual Design Elements

### **Module 333: Language Structures and vocabulary**

**Credit: 1**

**Objectives:** Learners will be able to

- ◆ Use appropriate structures
- ◆ Use appropriate vocabulary

**Content:**

Tenses  
Voice  
Spelling rules  
Vocabulary  
UK and US dictionary

### **Module 334: Writing skills**

**Credit: 1**

**Objectives:** Learners will be able to

- ◆ Write effective letters
- ◆ Write appropriate scripts
- ◆ Prepare manuals

**Content:**

Letter writing  
Video script writing  
Storyboard writing in accurate language  
Dialogue writing  
Writing storyboard instructions  
Manual writing

## **Course 320014: Modern Techniques in Educational Technology**

**4 Credits, 100 marks**

**Course Objectives:** Learners will be able to

- ◆ Explore modern techniques in Educational technology
- ◆ Study at least four modern techniques/recent trends in depth
- ◆ Share own knowledge about three modern techniques using appropriate techniques of training
- ◆ Create Discussion Forum threads to discuss 5 new trends.

### **Module 341: Classroom Seminar on Modern Techniques**

**Credit: 1**

**Objectives:** Learners will be able to

- ◆ Present seminar to the class on a recent trend in Educational Technology

**Practical/ Internal Assignment:**

Perform content analysis for workshop  
Present a seminar

**Module 342: Workshop on Modern Techniques**

**Credit: 1**

**Objectives:** Learners will be able to

- ◆ Conduct a workshop for a different group on any recent trend in Educational Technology/ ICT in Education

**Practical/ Internal Assignment:**

Perform content analysis for workshop  
Design session plan for workshop  
Develop material for workshop  
Present a Workshop

**Module 343: Webinar on Modern Techniques**

**Credit: 1**

**Objectives:** Learners will be able to

- ◆ Present webinar on a recent trend in Educational Technology/ICT

**Practical/ Internal Assignment:**

Perform content analysis for webinar  
Present a webinar

**Module 344: Web-based Discussion on Modern Techniques**

**Credit: 1**

**Course Objectives:** Learners will be able to

- ◆ Create Discussion forum and keep it activated till at least 5 new topics of discussion

**Course 320888: Research**

**4 Credits, 100 marks**

**Course Objectives:** Learners will be able to

- ◆ Explore current research trends in Educational technology
- ◆ Identify Research problem suitable to the field

- ◆ Review related studies
- ◆ Design data collection tools

**Module 351:**

**Credit 1**

Identification of Topics and Sample  
Writing Concept-paper

**Module 352:**

**Credit 1**

Review of Related Literature and Studies

**Module 353:**

**Credit 1**

Preparation of Proposal  
Presentation of proposal

**Module 354:**

**Credit 1**

Designing Tools of data Collection

## Semester IV

Courses	Internal	External	Credits
420011 Web-Application Skills *	100		4
420012 Project Management	100		4
420888 Research	50	50	4
420999 Internship	150	50	8

### Course 420011: Web-Application Skills

**4 Credits, 100 marks**

#### Module 411: HTML and Web Development Environment

**Credit: 1**

**Course Objectives:** Learners will be able to

- ◆ Use HTML to create a Web Page
- ◆ Use web development environment to design a Web page

#### Content:

- HTML:
  - Basic HTML Tags
  - HTML colour palette
  - List, Tables, Links, Image Maps
  - Frame
  - HTML Forms
  - Scripts
- Website Development Environment:
  - Creating new site
  - Types of views
  - Inserting and embedding images, tables, interactive images, layers, frames, form objects, tabular data, date, link, special character
  - Aligning graphics
  - Sorting format table
  - Creating animations
  - Windows: Objects, Properties, Launch

## **Module 412: Design Issues of Website and web applications**

**Credit: 2**

**Objectives:** Learners will be able to

- ◆ Analyse stakeholders' need
- ◆ Analyse educational websites worldwide
- ◆ Design an effective navigational GUI for educational website
- ◆ Develop an interface for educational website

**Content:**

- Features and Components of website
- Use experience analysis
- User-interface of websites, site maps, navigational paths
- Facilities and functionalities
- Web-applications/ mobile applications
  - Functionality
  - Navigational paths
  - UX
  - Wizards: logical sequencing, wizard design

## **Module 413: ePortfolio Development**

**Credit: 1**

**Objectives:** Learners will be able to

- ◆ Evaluate User Interface of ePortfolio aesthetically
- ◆ Prepare effective GUI for ePortfolio
- ◆ Design ePortfolio

**Content:**

- User Interface (UI) for eportfolio
- e-portfolio design and development

## **Course 420012: Project Management**

**4 Credits, 100 marks**

**Course Objectives:** Learners will be able to

- ◆ Compare between Project, Programme and Portfolio Management,
- ◆ Manage eLearning projects
- ◆ Suggest strategies for monitoring and controlling process groups
- ◆ Design processes for all knowledge areas of Project Management
- ◆ Define project management processes for eLearning projects

## **Module 421: Introduction to Project Management Credit 1**

**Objectives:** Learners will be able to

- ◆ Define 'Project Management'
- ◆ Discuss characteristics of Project Life cycle

**Content:**

Concept and Meaning of Project Management  
Project Management, Programme Management and Portfolio Management  
Role of a Project Manager  
Project Life cycle: Characteristics  
Project phases

## **Module 422: Project Management Processes**

**Credit 1**

**Objectives:** Learners will be able to

- ◆ Discuss Project Management processes
- ◆ Suggest strategies for monitoring and controlling process groups

**Content:**

Initiating Process Group  
Planning process group  
Monitoring and controlling Process group  
Closing Process Group

## **Module 423: Project Management Knowledge Areas**

**Credit 1**

**Objectives:** Learners will be able to

- ◆ Discuss various project knowledge areas
- ◆ Design processes for all knowledge areas of Project Management

**Content:**

Project Integration Management  
Project Scope Management  
Project Time Management  
Project Cost Management  
Project Quality Management  
Project Human Resource Management  
Project Communications Management

## **Module 424: eLearning Project Management**

**Credit 1**

**Objectives:** Learners will be able to

- ◆ Define project management processes for eLearning projects
- ◆ Prepare eLearning project proposal

**Content:**

Defining eLearning projects  
 Planning project strategies  
 Writing project proposal  
 Open Source Project Management Software  
 Planning eLearning project evaluation strategies

**Course 420888: Research**

**4 Credits, 100 marks**

**Course Objectives:** Learners will be able to

- ◆ Analyse the data collected during the research
- ◆ Write research dissertation
- ◆ Appear for viva-voce

**Output:**

Continuation of research work done during Semester III  
 Data-analysis  
 Chapter-writing  
 Viva-voce

**Course 420999: Internship**

**8 Credits, 200 marks**

**Course Objectives:** Learners will be able to

- ◆ Apply the knowledge and skills learnt during Master's degree at the place of work
- ◆ Write internship report
- ◆ Appear for viva-voce

MA-ET students will work as Educational Technologists, eContent developers, Pedagogy consultants, Instructional Designers, etc. in educational organizations as well as eLearning industries.

Internship period: minimum 240 hours  
Two months full-time for 5 days a week

**Output:**

Formative evaluation of internship work through Evaluation Rubrics  
Internship-report writing  
Viva-voce