SNDT Women's University, Mumbai

Master of Arts (eLearning)
&
Master of Science (eLearning)
M.A./M.Sc. (eLearning)

as per NEP-2020

Syllabus

(2023-24)

Prof. Jayashree Shinde
Chairperson, BOS in
Educational Technology

Prof. Jayashree Shinde
Dean,
Interdisciplinary Studies (Add. Charge)

Programme		**M.A.** **M.Sc.**
Specialization		**eLearning**
Preamble		The programme is aimed at developing a woman graduate into a skilled professional who can efficiently work in the field of educational technology and eLearning. She would be skilled in analysing a macro-level problem related to educational system to a micro-level problem related to a teaching-learning-evaluation from systems approach and design solutions systematically. M.A./M.Sc. eLearning graduate can design teaching-learning environments for online, offline and blended environments with innovative, learner-centred strategies as well as design continuous comprehensive evaluation strategies. These DET post-graduates can develop scripts, storyboards as well as develop eContents. Most importantly, DET post-graduates value the Open Education systems and can contribute effectively to the pool of Open Educational Resources.
Programme Outcomes (POs)		After completing this programme successfully, learners will be able to • Understand the scope of the field of educational technology in India and Abroad • Develop the Instructional Design document • Design storyboards for interactive eContent • Develop and share Open Educational Resources • Generate knowledge by co-creation • Conduct research study on an identified topic related to the field of educational technology and/or eLearning • Acquire first-hand experience of the field of instructional design through internship • Develop own's ePortfolio

Programme Specific Outcomes (PSOs)		After completing this programme, learners will be able to • Trace the development of the field of educational technology • Identify functions of various educational technology organisations in the country and abroad • Design analysis document of the given or selected topic • Define Programme Outcomes, Course Outcomes and Learning Outcomes • Develop the Instructional Design document • Apply principles from different learning theories and development for an effective instruction • Design visual presentations and documents effectively and aesthetically with appropriately edited graphics • Design a research proposal for the appropriate area related to the field of ET and eLearning • Establish significance of SDGs in general, SDG4 in particular in the national and international context. • Plan instructional activities towards the development of 21st century skills • Apply advanced models of Instructional Systems Design (ISD) to develop ID documents and related learning material • Design co-operative and constructivist learning environments • Plan large group, small group and individualized learning strategies for the given learning context • Illustrate significance of Open Educational Resources in the global and national education • Develop Open Educational Resources based course with different formats of OER • Paraphrase significant learnings from NEP-2020 related to Higher Education • Paraphrase significant learnings from NEP-2020 related to ECCE and School Education • Apply fundamental principles given in NEP2020 into the planning of curriculum, instruction and evaluation • Plan Online Learning courses • Design Blended Learning environments • Design interface for a resource portal • Develop own ePortfolio • Develop an educational organisation's website interface • Develop project management cycle documents • Conduct a research study related to the field of educational technology or eLearning with multidisciplinary approach • Explore disruptive technologies impacting field of education

Eligibility Criteria for Programme		➢ Women graduates in any subject with min 50% marks (45% for reserved category) ➢ Minimum 47% marks at graduation if secure first class at post-graduation or B.Ed. ➢ Min 50% marks in English competency-based entrance test
Intake of M.A./M.Sc. (eLearning) (For SNDT WU Departments and Conducted Colleges)		**20**

SN	Courses	Type of Course	Credits	Marks	Int	Ext
	Semester I					
111211	Educational Technology & Curriculum Development	Major (Core)	4	100	50	50
111212	Basic Instructional Systems Design	Major (Core)	4	100	50	50
111223	Information Technology and Graphic editing#	Major (Core)	4	100	50	(Pract) 50
111214	Learning Theories	Major (Core)	2	50	0	50
121221 OR Respective Code	SDGs and 21st Century Skills* OR SWAYAM/ Coursera/ EdX/ NPTEL MOOCs OR CHETNA courses OR CBCS Courses *related to* Educational Technology, eLearning, Education, Special Education & ICT	Major (Elective)	4	100	50	(Pract) 50
131211	Basics of Research Methodology	Minor Stream (RM)	4	100	50	50
			22	**550**	**250**	**300**
	Semester II					
211211	Instructional Design: Models & Theories	Major (Core)	4	100	50	50
211212	Instructional Strategies and Approaches	Major (Core)	4	100	50	50
211223	Open Educational Resources	Major (Core)	4	100	50	(Pract) 50
211214	Basics of eLearning	Major (Core)	2	50	50	0
221211 OR 221212	National Education Policy-2020 for Higher Education * # OR National Education Policy-2020 for Early Childhood and School Education * #	Major (Elective)	4	100	50	50
241241	Internship	OJT	4	100	50	50
			22	**550**	**300**	**250**

*Elective for M.A./M.Sc. eLearning students   #CBCS for students from other Departments

Exit option (44 credit):
Post Graduate Diploma in eLearning

Year II

SN	Courses	Type of Course	Credits	Marks	Int	Ext
	Semester III					
311211	Interactive Multimedia: Concept and Development	Major (Core)	4	100	50	50
311212	Online Learning: Planning and implementation on LMS	Major (Core)	4	100	50	50
311213	Modern Techniques in Educational Technology	Major (Core)	4	100	50	50
311224	Visual Communication and ePortfolio	Major (Core)	4	100	50	(Pract) 50
361221 OR Respective Code	Language Communication Skills * OR SWAYAM/ Coursera/ EdX/ NPTEL MOOCs OR CHETNA courses OR CBCS Courses	Open Elective Courses (OEC)	2	50	0	(Pract) 50
351221	Research Project	RP	4	100	50	(Pract) 50
			22	**550**	**250**	**300**
	Semester IV					
411211	Web-Application Skills	Major (Core)	4	100	50	50
411212	Disruptive Technologies for Education	Major (Core)	2	50	50	0
421211 OR Respective Code	Project Management * OR SWAYAM/ Coursera/ EdX/ NPTEL MOOCs OR CHETNA courses OR CBCS Courses *related to* Educational Technology, eLearning, Education, Special Education & ICT	Major (Elective)	2	50	0	50
451231	Research	RP	6	150	50	100
441241	Internship	OJT	8	200	150	50
			22	**550**	**300**	**250**

*Elective for M.A./M.Sc. eLearning students

Mode: Blended (minimum 60% face-to-face and upto 40% online mode will be used)

MA/MSc (eLearning)
Syllabus 2023-24
Semester I
(22 credits)

SN	Courses, Modules and Outcomes	Course Contents	Cr
	Semester I		
111211	**Educational Technology & Curriculum Development Major (Core)**		**4**
	Course Outcomes: **Learners will be able to:** • Identify problems and issues in Indian education systems • 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 • Compare different models of Curriculum Design		
Module 111	**Educational Technology: Concept and development**		**1**
	Learning Outcomes (LOs): **Learners will be able to:** • Identify problems and issues in education systems • Categorize identified problems in macro-level and micro-level problems • Identify problems which can be solved by a teacher and/or educational technologists • Conceptualize the term 'Educational Technology' • Trace development of the field of educational technology • Differentiate between ET1 and ET2 • Establish significance of interactivity and inter-connectivity in the field of education • Discuss Systems Approach • Identify stages of a Systems Approach towards problem-solving in an educational context • Discuss roles of sender and receiver in the Communication process	**Module Contents** • Micro-level Problems in Educational systems • ET1 to ET5 and beyond • Organizations and Journals in ET • Systems Approach • Communication Approach	

	• Compare simple model, mass-communication model, Osgood's model and general model of communication • Discuss role of a teacher in the instructional communication process		
Module 112	**Goal-oriented Learning**		1
	LOs: Learners will be able to: • Establish significance of learner-centred learning • Establish significance of outcome-based learning • State Vision and Purpose of National Education Policy 2020 (NEP-2020) • Differentiate between goals of education, organizational goals, Programme Outcomes, Course Outcomes and Learning Outcomes • Write LOs in an appropriate manner • Identify levels of given LOs as per revised taxonomy • Compare at least 2 of the taxonomies of objectives	**Module Contents:** • Learner-centred Learning • Outcome-based Learning • Vision and Purpose of National Education Policy 2020 (NEP-2020) • Organizational vision and goals • Programme Outcomes • Course Outcomes • Learning Outcomes • Taxonomies of Objectives • Revised Taxonomy of Bloom	
Module 113	**Evaluation Strategies**		1
	LOs: 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	**Module Contents:** • Evaluation Process • Types (Formative Evaluation, Summative Evaluation) • Process of developing an Achievement Test • Characteristics of Diagnostic Test • Mastery Learning	
Module 114	**Curriculum Development**		1
	LOs: Learners will be able to • Establish significance of a systematic Curriculum Design • Discuss salient features of models of curriculum • Illustrate models of curriculum • Illustrate principles of curriculum design	**Module Contents:** • Types of Models of Curriculum: Learner-centred, Problem-centred, subject-centred • Principles of Curriculum Design	

Assignments/ Activities towards CCE

- Prepare a chart of national and international level organisations active in the field of educational technology (Group-assignment with individual contribution)
- Identify at least online journal published in the area of educational technology and write abstracts of any two of the articles published in the identified journal.
- Identify a system related to the field of education, identify its components and show relationship among the human and non-human components.
- Design Learning Outcomes and state their levels as per Revised Taxonomy for the topic of your choice.
- Design a blueprint for the stated LOs and two parallel tests on the basis of the blueprint
- Provide illustrations of each model of curriculum design (Group-assignment with individual contribution)
- Draw an Infographic of principles of curriculum design

References/Recommended Readings:

7 Principles of Curriculum Design. https://blogs.glowscotland.org.uk/an/public/AngusParentCouncilGroup/uploads/sites/16/2011/06/7-Principles-of-Curriculum-Design-Leaflet.pdf

7 Principles of Good Curriculum Design. https://leadinglearner.me/2019/04/03/7-principles-of-good-curriculum-design/

Anderson, L., Bloom, B. S., Krathwohl, D., & Airasian, P. (2000). Taxonomy for learning, teaching and assessing: A revision of Bloom's Taxonomy of Educational Objectives. New York: Allyn& Bacon, Inc.

CURRICULUM DESIGN KEY PRINCIPLES. https://leadinglearnerdotme.files.wordpress.com/2019/04/7-principles-of-good-curriculum-design-1.pdf

https://www.colvee.org/course/mooc4dev/media-and-information-literacy

https://www.education.gov.in/shikshakparv/docs/Technology_Education_Background_note.pdf

K–12 Universal Curricula Design Principles https://portal.ct.gov/-/media/SDE/CT-Learning-Hub/K12-Universal-Curricula-Design-Principles-Handbook-FINAL-033022.pdf

Kulkarni, S. S. (1986) Introduction to Educational Technology: A Systems Approach to Micro Level Education. Oxford and IBH Publishing Co., New Delhi.

Reisser Robert and Dempsey John (2007) Trends and Issues in Instructional Design and Technology, Second edition, Pearson Education Inc., New Jersey.

Romiszowski Alexander (1988) The Selection Guide and Use of Instructional Media. Kogan Page, London.

Steiner, G. (1999) Learning: Nineteen Scenarios from Everyday Life. Cambridge University Press, U.K.

Tim Roberts and Joanne McInnerney (2007) Assessment in Higher Education. http://ahe.cqu.edu.au/ (Last accessed 2008)

111212	**Basic Instructional Systems Design** **Major (Core)**	**4**
	Course Outcomes: **In light of the instructional problem assigned, 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. • Classify instructional strategies using various criteria • Select media appropriate to outcomes and Instructional strategies • Design a session plan to implement ID in light of the identified problem. • Develop learning material and essential documents for implementation of the session plan	
Module 121	**Introduction to ADDIE**	1
	LOs: Learners will be able to • Define the concepts of 'Teaching', 'Learning', 'Instruction' and 'Instructional Design' • Explain the need for and importance of Instructional Design	**Module Contents:** Theoretical framework for a systematic problem-solving process in any instructional system: • Teaching Learning and Instruction • Instructional Design • Systems Approach to Instructional Design • ADDIE Approach	
Module 122	**Analysis**	1

	LOs:
	
	In light of the instructional problem Assigned, learners will be able to
	
	• Perform Need Analysis to identify gaps in the instructional system
	• Perform Content Analysis with reference to CDT Matrix
	• Analyse Target learners
	• Analyse Context of the instructional situation
		Module Contents:
		
		Problem-solving stages:
		
		• Analysis
		  • Need Analysis
		  • Content Analysis
		  • Learner Analysis
		  • Context Analysis	

Module 123	**Design & Development**		1

	LOs:
	In light of the instructional problem Assigned, with reference to the outcomes of the Analysis stage, learners will be able to
	
	• Design learning outcomes in terms of cognitive, affective and psychomotor skills and competences
	• Design a blueprint
	• Design continuous comprehensive assessment strategies
	• Design an instructional session plan of F2F mode for creating a conducive learning environment towards the solution of the instructional problem
	• Develop learning material, resources, handbooks, manuals, etc. as per the plan
		Module Contents:
		
		Problem-solving stages:
		
		• Design
		  • LOs
		  • Blueprint for cognitive skills
		  • Summative tests for testing LOs
		  • CCE strategies
		  • Template design for session-plan
		  • Designing own session-plan with appropriate interactions, learning strategies, evaluation strategies and feedback strategies
		• Development of material
		  • Characteristics, Classification of Media
		  • Five generations of media
		  • Criteria for selection of media
		  • Do's and don'ts while developing material	

Module 124	**Implementation & Evaluation**		1

	LOs:
	Learners will be able to
	In light of the instructional problem Assigned, with reference to the outcomes of the Analysis, Design and Development stages completed, learners will be able to
	
	• Decide strategies of making the learning environment ready
	• Identify sources for in-class and out-of-class (not online) interactions
	• Identify challenges and precautions for the implementation process
	• Derive strategies for avoiding or facing challenges of implementation
	• Decide ways of conducting evaluation as per the designed strategies
		Module Contents:
		
		Problem-solving stages:
		
		• Implementation
		  • Planning and Precautions for smooth implementation
		  • Evaluation
		  • Plan for effective evaluation of the instructional process
		• Evaluation
		  • Set evaluation Criteria for Session plan
		  • Develop a plan for smooth evaluation as per the plan	

Assignments/ Activities towards CCE

• Design an Infographic of teaching-learning-instruction
• Develop an IDD with all its Analysis and Design phases based on one selected instructional problem
• Develop a prototype of the proposed learning material \
• Design an evaluation strategy with sample items to test the LOs of the selected instructional problem

References/Recommended Readings:

Bray Tony (2006) The Training Design Manual: The Complete Practical Guide to Creating Effective and Successful Training Programs. Kogan Page, London

Clark Donald (2005) ADDIE – 1975. Big Dog, Little Dog. http://www.nwlink.com/~donclark/history_isd/addie.html (Last accessed 2008)

Commonwealth of Learning. Learning Design for Emerging Learning Environments https://www.colvee.org/course/technology-enabled-learning/learning-design-emerging-learning-environments

Learning Theories Knowledgebase (2008). ADDIE Model at Learning - Theories.com. http://www.learning-theories.com/addie-model.html

Mayfield, M. (2011). Creating training and development programs: using the ADDIE method. Development and Learning in Organizations: An International Journal, 25(3), 19-22.

Reisser Robert and Dempsey John (2007) Trends and Issues in Instructional Design and Technology, Second edition, Pearson Education Inc., New Jersey.

Walter Dick, Carey and Carey (2004). The Systematic Design of Instruction (5th Edition). New York: Haper Collins College Publishers

111213	**Information Technology** **Major (Core)**		**4**
	Course Outcomes: **Learners will be able to:** • Appreciate the developments in digital computing devices 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 131	**Fundamentals of Information Technology**		1

	LOs:
	Learners will be able to
	
	• Describe the process of Information systems.
	• Illustrate application of IT in different sectors such as business, entertainment, science and engineering, education, etc.
	• Identify the current input-output devices and tools
	• Write logical algorithms
	• Oragnise files and folders efficiently in own systems
	• Use browsers, search engines efficiently
	• Perform database search efficiently
	• Use bookmarking for reference work
	• Differentiate between FOSS, Open-Source and licensed software
	• Explore at least 5 different Google tools
		Module Contents:
		
		• Information Technology: Overview
		• Application of IT in Business, Education, Entertainment, Science and Engineering, etc.
		• Basic digital devices: recent developments
		• 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, Mendeley, Bib Me, etc.
		  • Concepts of Open-Source Software, FOSS, Freeware, Shareware
		  • Google Drive tools	

Module 132	**Office Tools for document writing and Presentations**		1

	LOs:
	Given a document for formatting, learners will be able to
	
	• Achieve text, line, paragraph formatting
	• Apply page setup features such as orientation, margins, header-footer, page numbers, etc.
	• Format inserted images as per the requirement
		Module Contents:
		
		• Document Formatting:
		  • Text, Paragraph, page
		  • Table formatting
		  • Image insertion and formatting
		
		• Presentation Development
		• Formatting of text, paragraph, images, etc.
		• Graphics, shapes and smart-art elements	

	- Use appropriate Graphics, shapes and smart-art elements - Create infographics for text-organisation aesthetically - Use animation wherever presents process - Use navigation features effectively	- Infographics for text-organisation aesthetically - Animation features - Navigation (Hyperlinking) settings	
Module 133	**Spreadsheet**		1
	LOs: In a problem situation where data-processing, analysis is required, learners will be able to - Use cell, row and column features effectively for formatting and organizing data - Process data to make a meaning out of it by using features such as sorting, filter, count, etc. - Analyse data by using appropriate formulae - Use spreadsheet features effectively for statistical analysis for research data	**Module Contents:** - Google Spreadsheet - Licensed or Libre/Open Office Spreadsheet: - Achieving various Functions such as sorting, computing functions, filters, etc. - Formulae and functions for statistical analysis	
Module 134	**Graphic Design and Photo Editing**		1
	LOs: In a problem situation where use of edited graphics and/or photos is required, learners will be able to - Use appropriate features of Graphic Creation software effectively - Use GIMP to edit graphics/photo - Use essential editing features of photo-editing FOSS effectively - Explore available tool to design infographics	**Module Contents:** - Exploration of Infographic and 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	

Assignments/ Activities towards CCE

- Present on any new trend in Information Technology as a group.
- Format a given Word document as per the provided sample.
- Develop slide presentation on a given topic as per the guidelines.
- Complete provided spreadsheet by referring to the task-sheet.
- Edit a given graphic and a photo as per the task-sheet.

11214	**Learning Theories** **Major (Core)**	**2**
	Course Outcomes: **Learners will be able to:** - Define process of learning - Describe the ARCS model of Motivation (Attention, Relevance, Confidence, Satisfaction) - Describe the role of perception in the process of learning - Identify Learning styles of learners - Explain the implications of process of learning for classroom teaching - Relate brain structure to process of learning - Develop places of learning as an application of BBL	
Module 141	**Processes and Factors Associated with Learning**	1

LOs: Learners will be able to	**Module Contents:**

- Describe Guibert's Model of Intelligence
- Identify multiple intelligences of an individual
- State significance of knowledge about learner's Emotional intelligence to a teacher
- Describe essential components of ARCS model of Motivation
- Discuss the role of perception in the process of learning
	- Learning related characteristics of the learners
	  - Intelligence
	  - Multiple Intelligences
	  - Emotional Intelligence
	
	- Psychological Processes associated with Learning
	  - Motivation (ARCS Model)
	  - Perception

Module 142	Process of Learning: Theoretical basis		1

	LOs: Learners will be able to
	
	• Bring out underlying principles of learning as a behavioural process
	• Compare underlying principles of learning as cognitive vs. constructive processes
	• Differentiate between individual vs social constructivist processes of learning
	• Illustrate principles of brain-based learning
		Module Contents:
		
		• Learning as a Behavioural process
		  • Pavlov and Skinnerian theories
		  • Implications of Skinnerian theory on the analysis of learning process
		• Learning as a Cognitive process
		  • Bruner's views on learning
		  • Piaget's Stages of Development
		• Learning as a Constructive process
		  • Individual Constructivism of Piaget
		  • Social Constructivism by Vygotski
		• Brain-based Learning
		  • Principles
		• Designing learning environments in light of constructivist learning and brain-based learning	

Practice	• Experiment on Multiple Intelligences – analyse our own pattern of intelligence using multiple intelligences inventory. • Experiments (3) on Attention, Perception and Memory		

References/Recommended Readings:

Designshare (2004) International Forum for Innovative Schools
How People Learn (HPL) theoretical framework
      https://iris.peabody.vanderbilt.edu/module/hpl/cresource/q1/p01/#content
How People Learn: Learning: From Speculation to Science
      https://nap.nationalacademies.org/read/9853/chapter/3
      http://www.fae.plym.ac.uk/tele/course/cognition3.html
      https://educationlibrary.org/model-of-motivation-arcs-instructional-design/
Lefrancois, Guy (2000) Psychology for Learning. Wadsworth, USA
Wheeler, Steve (2001) Individual Differences.

121221	**"SDGs and 21st Century Skills"** (Course to be offered by DET) OR SWAYAM/ Coursera/EdX/NPTEL MOOCs OR CHETNA courses OR CBCS Courses *related to* Educational Technology, eLearning, Education, Special Education & ICT **Major (Elective)**	**4**
	SDGs and 21st Century Skills	
	Course Outcomes: **Learners will be able to:** • Establish direct and indirect relationship of SDGs with Education • Discuss 7 targets of the 4th Goal of "Quality Education' in the context of India • Elaborate means of achieving SDG4 targets • Illustrate the role of Educational Technology in the context of SDG4 • Establish significance of 21st Century skills in education • Suggest strategies to develop 4Cs at school and higher education level • Discuss role of educational technology in development of 21st Century skills	
Module 151	**Sustainable Development Goals and SDG4**	1

	LOs: Learners will be able to
	
	• List 17 Sustainable Development Goals (SDGs)
	• Discuss significance of the Sustainable Development Goals in the global context
	• Discuss significance of the Sustainable Development Goals in Bharatiya Context
	• Establish direct relationship of literacy and education with any 5 SDGs
	• Establish direct relationship of literacy and education with any 5 SDGs
	• Discuss 7 targets of SDG4 Education
		Module Contents:
		
		• Sustainable Development Goals
		• Significance of each goal in the global and Bharatiya context
		• Relationships of other SDGs with literacy and education
		• 7 Targets of SDG4 goal
		  • 4.1 Universal primary and secondary education
		  • 4.2 Early childhood development and universal pre-primary education
		  • 4.3 Equal access to technical/vocational and higher education
		  • 4.4 Relevant skills for decent work
		  • 4.5 Gender equality and inclusion
		  • 4.6 Universal youth literacy
		  • 4.7 Education for sustainable development and global citizenship	

Module 152	**Means of achieving SDG4 Quality Education for All**		1

	LOs: Learners will be able to
	
	• Elaborate 3 means of achieving targets of SDG4
	• Report initiatives at National level for school education
	• Report initiatives at National level for higher education
	• Illustrate role of educational technology in achieving SGD4 targets
		Module Contents:
		
		• Means of achieving targets
		  • Effective learning environments
		  • Scholarships
		  • Teachers and educators
		• National level initiatives for SDG4 such as
		  • Samagra Shiksha
		  • Status of Higher Education in India
		  • National Education Policy 2020
		• Role of Educational Technology in achieving targets of SDG4	

Module 153	**21st century Skills**		1

	LOs: Learners will be able to
	
	• Describe components of 21st Century skills
	• Discuss 3Ls
	• Relate higher thinking skills with 4 Learning Skills
	• Describe IMTs
	• Discuss role of FLIPS in a life of a responsible and employable citizen of Bharat
	• Establish need of 21st Century skills in education
	• State broad outcomes of 21st Century Skills
		• 21st Century Skills
		• Components of 21st Century Skills
		  • 3 Ls: Learning Skills, Life Skills and Literacy Skills
		  • Learning Skills: 4Cs: Critical Thinking, Creativity & Innovation, Collaboration, Communication
		  • Literacy Skills: IMT: Information Literacy, Media Literacy, Technology Literacy
		  • Life Skills: FLIPS: Flexibility and Adaptability, Leadership and Responsibility, Initiative and Self-Direction, Social and Cross-Cultural Interaction
		• Broad outcomes of 21st Century Skills
		• Significance of 21st Century skills in education	

Module 154	**Pedagogy strategies for development of 21st Century Skills**		1
	LOs: Learners will be able to • Suggest at least 2 pedagogy strategies for development of each of the 4 Cs at school education • Suggest at least 2 pedagogy strategies for development of each of the 4 Cs at higher education • Illustrate contribution of Educational Technology in development of IMTs	• Development of 21st Century Skills through education • Pedagogy Strategies for Learning Skills: 4Cs: Critical Thinking, Creativity & Innovation, Collaboration, Communication in School Education • Pedagogy Strategies for Learning Skills: 4Cs: Critical Thinking, Creativity & Innovation, Collaboration, Communication in Higher Education • Role of Educational Technology in development of Literacy Skills	

| | • Relate FLIPS to overall development of HE learner with reference to employability skills
• Suggest at least 5 Curriculum reforms for development of 21st Century skills | (IMT), namely Information Literacy, Media Literacy, Technology Literacy
• Relationship between employability skills and FLIPS | |

Assignments/ Activities towards CCE
• Draw a comprehensive concept-map of all SDGs • Design a comic-strip for conveying national-level initiatives for achieving any 2 out of 7 targets of SDGs • Design a poster for propagating any one national level initiative for SDG4 • Write a script for a skit on emphasizing role of Educational Technology in achieving SDG4 (Group assignment) • Draw a flow-chart of all 21st Century Skills • Write a case-study with 3 characters demonstrating at least 3 of the 21st Century Skills • Design 2 instructional strategies for development of any two of the 21st Century Skills for a given target group of learners

References/Recommended Readings:

Aims of Education: Policies and reports
    https://egyankosh.ac.in/bitstream/123456789/8276/1/Unit-11.pdf
Central Board of Secondary Education, New Delhi (2020) 21st Century Skills: A Handbook. https://www.education.gov.in/covid-19/Hindi/assets-hi/img/pdf/21st_Century_Skill_Handbook.pdf
Koul, R. B., Sheffield, R., & McIlvenny, L. (2021). *Teaching 21st Century Skills*. Springer Singapore.
Kozma, R. (2009). Transforming education: Assessing and teaching 21st century skills. *The transition to computer-based assessment*, *13*.
Mays, Tony (2020) 21st Century Skills for Sustainable Development. COL, Canada https://oasis.col.org/items/586103df-7d3b-4bef-aff7-0e1a54798db4
Qualities of Successful Learning Environments http://ace.nd.edu/blog/surveying-learning-environment-part-1-qualities-successful-learning-environments
UN (2022) The Sustainable Development Goals Report 2022. https://unstats.un.org/sdgs/report/2022/The-Sustainable-Development-Goals-Report-2022.pdf
UNWOMEN (2023) Progress on the Sustainable Development Goals: The gender snapshot 2023 https://www.unwomen.org/en/digital-library/publications/2023/09/progress-on-the-sustainable-development-goals-the-gender-snapshot-2023?gclid=Cj0KCQiAr8eqBhD3ARIsAIe-buM14a4UM-k6E-5vBMrLcZ12Fv83AZYuBLECaNuj42Yym21hZ9b2WDYaAsf4EALw_wcB

131211	**Basics of Research Methodology** **Minor Stream (RM)**	**4**
	Course Outcomes: **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 161	**Research in Education**	1

	LOs: 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 • State examples of basic components of a research study such as title, operational definitions, hypothesis, objectives, etc. • Prepare a Bibliography as per APA style	**Module Contents:** • What is Research? • Types of Research (Pure, Applied, Action Research) • Steps in conducting research • Identification of a Research Problem • Basic Concepts in Research • Title • Operational definitions • Objectives • Hypothesis • Variables • APA in Educational Research • Literature and Research Review
Module 162	**Methodology of Research**	1
	LOs: Learners will be able to • Select appropriate research design • State characteristics of research methods • Select the most appropriate research method for the research problem in hand	**Module Contents:** • Approaches to Research (Qualitative, quantitative, mixed methods) • Quantitative research methods and Designs: Experimental Mthods, Descriptive Methods (Correlational, Survey, Causal-comparative, Evaluation, Historical) • Qualitative research methods and Designs (Phenomenological, Ethnographic, Narrative, Grounded theory, Case study, Content analysis) • Mixed methods research and Designs (Triangulation, Explanatory, Exploratory)

Module 163	**Sampling, Instruments of Data Collection and Research Proposal**		1
	LOs: Learners will be able to • Choose appropriate sampling procedures for a given research • State characteristics of instruments of data collection • State characteristics of techniques of data collection • Prepare at least 2 instruments and 2 tests for data collection • State the procedure for data collection • State ethical considerations in research • Prepare a plan for data analysis • Prepare research proposal	**Module Contents:** • Sampling • Sampling Procedure • Types: Probability (Simple random, Stratified, Systematic, Cluster)and non-probability (Convenience, Quota, Self-selection (volunteer), Snowball, Purposive (judgmental)) • Procedure for 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 • Ethical considerations in sampling • Research Proposal	
Module 164	**Statistical Techniques, Report Writing, Ethics of Research**		1
	LOs: 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	**Module Contents:** • 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 free calculators for hypothesis testing • Ethics of Research • Originality of work • Safeguarding privacy of stakeholders • Establishing authenticity of data • Report writing	

Assignments/ Activities towards CCE

- Prepare a Research Proposal on a selected topic
- Prepare a Bibliography for the selected Research Topic
- Review two research papers (Publisher in referred journals) and prepare a report on appropriateness of research method employed.
- Develop Experimental Design for a given research topic and suggest a plan for sample selection.
- Prepare two different tools for data collection and validate the same.
- Prepare parallel pre-test and post-test on a selected content.
- Compute Mean and SD of a given data
- Compute Percentile Rank of the given data.
- Compute Coefficient of Correlation (rho) for the given data.
- Test the hypothesis and write statistical significance for a given t-ratio or chi square for the given data.

References/Recommended Readings:

Best, John W. & James Kahn Research in Education (2006). 5th Edition Prentice Hall, Inc. Englewood Cliffs, New Jersey.

Creswell, J. (2014). Research Design: Qualitative, Quantitative and Mixed Method Apporaches, 4th ed. USA: Sage Publication.

Creswell, J. W. (2014). *A concise introduction to mixed methods research*. SAGE publications.

Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications. https://shorturl.at/xFQT1

Creswell, J. W., Shope, R., Plano Clark, V. L., & Green, D. O. (2006). How interpretive qualitative research extends mixed methods research. *Research in the Schools*, *13*(1), 1-11. https://shorturl.at/DMU35

Garrett, Henry and Woodworth, R.S. (1993) Statistics in Psychology and Education Vakils, Feffer and Siomans Pvt. Ltd.

Kothari C. R. (2000). Research Methodology: Methods and Techniques, 2nd ed. WishvaPrakashan, New Delhi.

Mehrad, A., & Zangeneh, M. H. T. (2019). Comparison between qualitative and quantitative research approaches: Social sciences. *International Journal For Research In Educational Studies, Iran*, *5*(7), 1-7. https://shorturl.at/dkmGR

Newman, M., & Gough, D. (2020). Systematic reviews in educational research: Methodology, perspectives and application. *Systematic reviews in educational research: Methodology, perspectives and application*, 3-22. https://library.oapen.org/bitstream/handle/20.500.12657/23142/1007012.pdf?sequenc#page=22

Noon, E. J. (2018). Interpretive phenomenological analysis: An appropriate methodology for educational research. *Journal of Perspectives in Applied Academic Practice*, *6*(1). https://pdfs.semanticscholar.org/f64f/e0d85fce0797b6e763807b978f4795ce2529.pdf

Ross, S. M., & Morrison, G. R. (2013). Experimental research methods. In *Handbook of research on educational communications and technology* (pp. 1007-1029). Routledge. https://shorturl.at/imuAT

Smith, J. A., Flowers, P., & Larkin, M. (2009). Interpretative phenomenological analysis: Theory, method and research. London: Sage

MA/MSc (eLearning)
Syllabus 2023-24
Semester II
(22 credits)

	Courses, Modules and Outcomes	Course Contents	Cr
211211	**Instructional Design: Models & Theories** **Major (Core)**		**4**
	Course Outcomes: **Learners will be able to:** • Elaborate Instructional Design theories • Compare at least 3 ISD Models • Elaborate components of the 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**		**1**
	LOs: Learners will be able to: • Develop ISD plan as per Gagne's Events of Instruction • Identify components of Kirk and Gustafson Model of ISD • Summarize Bruner's Theory of Instruction • Apply AGILE approach to instructional design	**Module Contents**: • Gagne's Events of Instruction • Bruner's Theory of Instruction • AGILE approach to instructional design • Kirk and Gustafson Model of ISD	
Module 212	**Dick and Carey Model: Stage of Analysis**		1
	LOs: Given an instructional problem, learners will be able to • Perform Task Analysis • Conduct instructional analysis • Analyse target learners • Write Context Analysis document	**Module Contents:** Components of Design and Analysis Stage in Dick and Carey Model • Instructional goals • Task Analysis • Instructional Analysis • Target Analysis • Context Analysis	
Module 213	**Dick and Carey Model: Stage of Design and Development**		1
	LOs: Given an instructional problem situation, learners will be able to • Write performance objectives • Develop assessment instruments • Plan appropriate instructional strategy • Curate appropriate instructional material	**Module Contents:** Components of Design and Development Stage in Dick and Carey Model • Performance objectives • Criterion-reference tests • Planning instructional strategy • Curation and creation of resources • Planning use and development of instructional material	

	• Design a plan development of appropriate instructional material		
Module 214	**Evaluation Stage of ISD**		1
	LOs: Given an instructional problem situation, learners will be able to • Design formative evaluation strategies according to Dick and Carey Model • Design summative evaluation strategies according to Dick and Carey Model • Discuss processes of validation of the learning process • Conduct field-evaluation of use of instructional material • Establish significance of evaluation in revising instruction • Elaborate ASPIRE framework of assessment	**Module Contents:** • Strategies for formative evaluation of instruction • Means of formative evaluation: one-to-one, small-group, and field evaluation • Significance of revising instruction • Strategies for summative evaluation • Try-out and validation of learning process and material	
Assignments/ Activities towards CCE			
• Prepare a Concept-map of any of the ISD theories or models. • Plan steps of ISD as per any one model. • Prepare an analysis document using Dick and Carey Model • Identify performance objectives • Plan for instructional strategy and material for session • Prepare evaluation tools for ISD document			

References/Recommended Readings:

Belanger France (2000) Evaluation and Implementation of Distance Learning: Technologies, Tools and Techniques

Department of Educational Technology (2008) Development of ODL Material (Unpublished)

Dick, W., Carey, L., & Carey, J. O. (2004). The systematic design of instruction (6th ed.). New York, NY: Allyn& Bacon

Hassell-Corbiell, Rives (2001) Developing Training Courses : A Technical Writer's Guide to Instructional Design and Development

Reigeluth, Charles (1999) Instructional-Design Theories and Models: A New Paradigm of Instructional Theory

Rigo Chaparro, Margaret Reaves, Carla B. Jagger, and J. C. Bunch (2023) Instructional Design Using the Dick and Carey Systems Approach. University of Florida. https://edis.ifas.ufl.edu/publication/WC294

Smith Patricia (2000) Instructional Design, 2nd Edition, Tillman Ragan

211212	**Instructional Strategies and Approaches** **Major (Core)**		**4**
	Course Outcomes: **Learners will be able to:** • Classify given instructional strategies into Large group, Small group and Individualized Learning Strategies • Establish significance of Learner-centred instructional strategies • Describe Innovative Pedagogy approach • State salient features of at least 3 Large group strategies • Suggest appropriate Cooperative Learning Strategy for a given context • Discuss characteristics of Self-learning strategies • Design a workshop plan		
Module 221	**Innovative Pedagogies**		1

	LOs:
	Learners will be able to
	
	• Describe concept of Innovative Pedagogy
	• Establish significance of Learner-centred Pedagogy
	• Classify instructional strategies into Large group, Small group and Individualized learning
	• Discuss precautions to be taken during Demonstration strategy
	• Differentiate between lecture and lecturettes
	• Discuss ways of making lecture effective
	• Illustrate techniques of effective Story-telling
	• Design a plan for a given Model of Learning
		Module Contents:
		
		• Classification of Instructional Strategies
		• Concept of Innovative Pedagogy
		• Large Group Strategies
		  • Lecture
		  • Lecturette
		  • Demonstration: Dos and Don'ts
		  • Story-telling techniques
		• Models of Teaching
		  • Concept-attainment Model
		  • Role-play Model
		  • Advance Organiser Model	

Module 222	**Cooperative Learning Strategies (CLS)**		1
	LOs: Learners will be able to • Illustrate principles of Cooperative learning • Identify an appropriate Cooperative Learning Strategy for a given context • Design a plan for a given Cooperative Learning Strategy • Conduct a given co-operative learning strategy on a defined group	**Module Contents:** • Fundamental principles of Cooperative Learning • Procedure of at least 6 Strategies • Planning for co-operative learning strategies • Planning Cooperative Learning Strategies (CLS) in Online mode • Implementation norms for CLS	

Module 223	**Individualized learning**		1
	LOs: Learners will be able to • Design framework for personalized learning • Illustrate characteristics of individualized learning • Differentiate between Linear, Branching and Mathetics types of Programmed learning • Identify salient features of Computer-Assisted Learning packages • State the process of validation of SLM	**Module Contents:** • Personalized learning • Individualized learning: characteristics • Programmed Instruction: Introduction and types • Computer-Assisted Learning • Self-learning material: Overview • Validation of individualized learning material	
Module 224	**Workshop Planning**		1

	LOs:
	Learners will be able to
	
	• Analyse existing templates of session planning
	• Design own template for planning a workshop
	• Identify suitable instructional mode and approach
	• Identify appropriate instructional strategies
	• Design a workshop session plan
	• Design learner manual for the workshop
	• Differentiate between instructor's manual and learner manual
		Module Contents:
		
		• Template of planning a workshop session
		  • Essential Components of a template
		  • Components of workshop planning for value addition
		• Skill of writing a detailed workshop plan
		  • Ananlysis of Content
		  • Designing Objectives
		  • Identification of strategies
		  • Design plan for material
		• Learner Manual
		• Instructor manual	

Assignments/ Activities towards CCE			

- Prepare a session plan with any one large group instructional method
- Write procedures for conducting sessions with any one model of teaching.
- Write procedures of one co-operative strategies other than discussed in the class
- Draw an infographic to compare Programmed Instruction, Interactive Multimedia Packages and Self-learning modules
- Design your own workshop planning template
- Write a workshop session plan for any one target group on a topic of your choice

References/Recommended Readings:

Konst, T., & Kairisto-Mertanen, L. (2020). Developing innovation pedagogy approach. On the Horizon, 28(1), 45-54.

Moore Kenneth (2012) Effective Instructional Strategies: From Theory to Practice Third Edition, SAGE Publications, Inc

Mynbayeva, A., Sadvakassova, Z., & Akshalova, B. (2018). Pedagogy of the twenty-first century: Innovative teaching methods. New Pedagogical Challenges in the 21st Century. Contributions of Research in Education, 7, 564-578. https://www.intechopen.com/chapters/58060

Reiser Robert, Dempsey John (2012) Trends and Issues in Instructional Design and Technology Pearson Education, Limited

Tucker Catlin (2012) Blended Learning in Grades 4–12: Leveraging the Power of Technology to Create Student-Centered Classrooms, Windsor Unified School District

University Grants Commission (2022). Guidelines for Innovative Pedagogical Approaches & Evaluation Reforms. https://www.ugc.gov.in/pdfnews/1031121_Guidelines-Innovative-Pedagogical-Approaches-Evaluation-Reforms.pdf

211213	**Open Educational Resources** **Major (Core)**	**4**
	Course Outcomes: **Learners will be able to:** • Define OER • Map OER movements across the world • Appreciate OER repositories at national and international level • Design OER course on a given topic • Develop OER of different formats for the designed course • License own work under Creative Commons	
Module 231	**Conceptual Framework for OER**	1

| | **LOs:**
Learners will be able to

• Define OER
• Differentiate between copyrighted and open licensed resources
• Differentiate between FOSS, OER, Open access and OCW
• Compare Creative Commons licenses
• Analyse IEEE standards of OER | **Module Contents:**

• Concept of FOSS, OER, OCW, Open access
• Characteristics of OER
• Copyright Issues, Creative Commons Licenses
• Compatibility Guidelines (IEEE standards) | |

Module 232	OER Movements across the Nation and Globe		1
	LOs: Learners will be able to • Map OER movements across the world • Explore OER repositories worldwide • Explore OER repositories at National level	**Module Contents:** • OER Movements across the world • Global Initiatives such as OER University, COL, OER Asia • National Repositories of OER for school and higher education • DIKSHA, NROER, ePG Pathshala, ePathshala, etc.	
Module 233	**Types and formats of OER**		1
	LOs: Learners will be able to • Explore OER formats in eContents • Compare different formats of OER • Map OER repositories and formats	**Module Contents:** • Video, Audio, Interactive animations, simulation media formats of OER • Digitized Library Collections • Open Textbooks • OER Courseware	
Module 234	**Design and Development of OER**		1
	LOs: Learners will be able to • Prepare a Storyboard for OER course • Identify appropriate formats for the OERs in the designed course • Develop eContent for OER • Assign appropriate Creative Commons license to own work	**Module Contents:** • Design OER course • Storyboarding for OER • Multimedia development of eContent • ICT tools for OER development • Licensing own work under Creative Commons	
Assignments/ Activities towards CCE			
• Present characteristics of OER with the help of examples • Compare at least 2 Creative Commons Licenses • Explore and elaborate one Global OER initiative • Make a group-presentation on 'Standards' for OER and submit a report. • Identify and compare at least two OER repositories • Identify and analyse at least 3 types of existing OER. • Design and develop at least 2 types of OER modules.			

References/Recommended Readings:

Miao, F., Mishra, S., Orr, D., & Janssen, B. (2019). Guidelines on the development of open educational resources policies. UNESCO Publishing.

Miao, F., Mishra, S., & McGreal, R. (2016). *Open educational resources: policy, costs, transformation*. UNESCO Publishing.

Open Educational Resources (OER) Pedagogy and Practices. (2019). United States: IGI Global/Information Science Reference.

Teaching Learning Centre, SNDT WU Open Educational Resources.
http://tlc.detsndt.ac.in/open-educational-resources/

UNESCO. Open Educational Resources
https://www.unesco.org/en/open-educational-resources

211214	**Basics of eLearning** **Major (Core)**	2
	Course Outcomes: **Learners will be able to:** • Define the concept of eLearning • Compare On-campus, Online and Blended Modes of Learning • Identify essential requirements for Online environments • Establish need of disruptive technologies such as AR, VR, AI in education systems • Illustrate integrated digital learning environments	
Module 241	eLearning, Online and Blended Learning Environments	1
	LOs: Learners will be able to • Identify different components of eLearning • Elaborate roles of learners and instructors in Online and Blended Learning environments • Compare Synchronous and Asynchronous communication • Illustrate essential characteristics of Blended Learning	**Module Contents:** • eLearning, Online and Blended Learning: concept • Characteristics of Online learners • Facilitator's role in Online Learning environment • Asynchronous communication tools • Synchronous communication tools • Characteristics of an ideal BL environment	

Module 242	Integrated digital learning environments		1
	LOs: Learners will be able to • Elaborate the concept of integrated digital learning environments • Establish need of disruptive technologies such as AR, VR, AI in education systems • Illustrate integrated digital learning environments • Establish significance of effective MOOC environments	**Module Contents:** • Concept of integrated digital learning environments Disruptive technologies such as Augmented Reality, Virtual Reality, Artificial Intelligence • Integrated digital learning environments and support systems • MOOCs: Concept and Types	
Assignments/ Activities towards CCE			
• Prepare a visual representation of the field of elearning. • Compare Online and Blended Environments via an infographic • Prepare a comic about roles of teachers and learners in blended learning environment. • Explore various derivatives of MOOCs and prepare a write up on any one. • Critique the effects of AI and VR on teaching-learning process. • Demonstrate a AR/VR learning resource available online.			

References/Recommended Readings:

Bullen, Mark (2014). What is eLearning? COL, Canada
https://oasis.col.org/items/752c3fdf-4b54-4abc-aa90-8159888a8415
Bates, Tony (2020). Online Learning in the (K-12) School System
https://oasis.col.org/items/22d3247c-816d-400f-8317-e1d1f58651d4
Shinde Jayashree (2021) Blend is Beautiful.
https://youtu.be/_yfRtCu9jEU?si=tEQ92bFoa5GHLO7J
University Grants Commission, New Delhi (2021).Blended Mode of Teaching and Learning: Concept Note https://www.ugc.gov.in/pdfnews/6100340_Concept-Note-Blended-Mode-of-Teaching-and-Learning.pdf

221211 OR 221212	**National Education Policy-2020 for Higher Education * #** **OR** **National Education Policy-2020 for Early Childhood and School Education * #** **Major (Elective)**	**4**
221211	**National Education Policy-2020 for Higher Education**	
	Course Outcomes: **Learners will be able to:** • Explain the problems facing Indian higher education ecosystem • Explain appropriateness of the key changes suggested by the NEP for addressing the problems facing HE • Identify recommendations for transforming HE to provide high quality education • Define "Multidisciplinary higher education" • Differentiate between the "multidisciplinary and Interdisciplinary" higher education • Describe and discuss implications of establishing Indian Higher Education Commission and four independent bodies for Standard setting, Funding, Accreditation and Regulation. • Explain importance of the two national level bodies recommended viz National Research Foundation and National Educational Technology Forum	
Module 2511	**Multidisciplinary higher education and transformation required in the structure of Higher Education to address the problems**	1
	LOs: Learners will be able to • List out the problems faced by Higher education ecosystem in India • Explain the appropriateness of key changes suggested to enhance quality of HE • Explain the concept of Multidisciplinary Undergraduate education • Explain the need and logic behind the small number of universities and large number of Autonomous degree granting colleges	**Module Contents:** • Problems faced by Indian Higher Education Ecosystem • Key changes suggested by the NEP-2020 for enhancing quality of HE • Multidisciplinary Higher Education (Especially Undergraduate Education) • Structure of Higher Education: Research Intensive Universities, Teaching Intensive Universities and large number of Autonomous degree granting colleges • Concept of Multiple Entry – Multiple Exit (MEME) • Concept of Academic Bank of Credits	

Module 2512	Four cornerstones of HE: Curriculum, Pedagogy, Assessment and Student Support	1
	LOs: Learners will be able to • Elaborate the need for multidisciplinary undergraduate education • Explain the concept of Multidisciplinary Education • Elaborate four aspects of transformation in Higher Education • Establish relevance of four aspects od HE with each other	**Module Contents:** • Transformation required in 4 aspects of Higher education • Curriculum: flexible curricular structures, Vocational education, Professional education and teacher education to be a part of Higher Education • Multidisciplinary approach of curriculum • Innovative Learner Centered Pedagogy (Face to face, Online and Blended learning strategies) • Outcome Based Assessment: Assessment for, as and of learning. Use of technology in assessment • Student support (Financial support, academic facilities on campus (including residential)	
Module 2513	Research, Open and Distance Learning, Internationalization of HE	1

	LOs:
	Learners will be able to
	
	• Establish the need for high quality research
	• Explain the role of NRF
	• Identify the need for good quality open and distance learning.
	• Suggest ways for improvement in the quality of ODL.
	• Identify the need for development of MOOCs
	• Explain the concept of Internationalization at home.
		Module Contents:
		
		• **Need for High quality research**
		  • Establishment of National Research Foundation (NRF)
		• **Open and Distance Learning**
		  • Online courses and digital repositories, credit-based recognition of MOOCs
		• **Internationalization of Higher Education**
		  • Concept of "Internationalization at home"
		  • Entry of foreign universities,
		  • Student & faculty mobility	

Module 2514	Technology Integration and Online and digital Education	1

	LOs:
	Learners will be able to
	
	• Explain the need to harness ICT for fulfilling various goals of higher education including increase in GER to 50% by 2035
	• Identify role of NETF
	• Explore areas affected by disruptive technologies and suggest ways to harness
		Module Contents:
		
		• Use and integration of technology to improve multiple aspects of education
		  • National Educational Technology Forum (NETF),
		  • technological interventions for
		  • improving teaching-learning and evaluation processes,
		  • supporting teacher preparation and professional development,	

	technology for improving quality of Higher Education	• enhancing educational access, and • streamlining educational planning, management, and administration • educational software • emerging disruptive technologies including AI, 3D/7D Virtual Reality • Key initiatives related to emerging importance of leveraging technology for teaching-learning at all levels from school to higher education	

Assignments/ Activities towards CCE

- Write a short essay establishing relationship between any 2 problems in HE and key changes suggested in NEP-2020
- Design a poster presenting Multidisciplinary nature of HE
- Design an infographic on Innovative Pedagogy at HE
- Select a topic of 1-credit from any HE syllabus. Design a table of mapping LOs, CCE and Pedagogy
- Critically analyse a given ODLM
- Suggest 2 strategies of making foreign students comfortable in Indian HE
- Present a 10-minute webinar on any technology initiatives suggested in NEP-2020

References/Recommended Readings:

Government of India Ministry of Human Resource Development (2020) National Education Policy 2020
https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf
https://www.education.gov.in/nep/about-nep
University Grants Commission (2023) Key Initiatives
https://www.ugc.gov.in/MajorInitatives.aspx
University Grants Commission (2023) Guidelines https://www.ugc.gov.in/guidelines.aspx
University Grants Commission (2023) UTSAH
https://utsah.ugc.ac.in/

221212	**National Education Policy-2020 for Early Childhood and School Education**	
	Course Outcomes: **Learners will be able to:** • Elaborate expected outcomes at school education level • Discuss significance of competency based and outcome-based learning • Discuss the implications of new structure of school education suggested by the NEP-2020 • State implications of outcome- based assessment at school level • Analyse assessment approaches as per NEP-2020 • Establish significance of increasing GER • Illustrate national level initiatives towards multilingualism and sign language • Discuss role of initiatives such as NIPUN Bharat • Highlight principles of NCF	
Module 2521	**Major Outcomes of school education and Competency based education**	1

	LOs: Learners will be able to
	
	• Enlist outcomes expected at the school level
	• Explore recommendations related to the achievement of outcomes
	• Illustrate at least 4 expected outcomes at school education with the help of national level initiatives
	• Suggest ways to achieve integration of subjects
	• Analyse curriculum frameworks from the perspective of outcome based education and competency based education
		Module Contents:
		
		• **Expected Outcomes at School education level**
		  • Universalization of Access from ECCE to Secondary
		  • Ensure equity and inclusion
		  • Bring back 2 crores out of school children
		  • Attain SDG -4 of retaining all children in schools until completion of secondary education
		  • Improve Quality and achievement of learning outcomes- Foundational Literacy and Numeracy (FLN)
		  • Focus on 21st Century Skills in teaching, learning and assessment
		  • Resource sharing- School Complex
		  • Effective Governance - separation of powers and common norms
		  • Overcoming the language barrier in learning
		  • Common standards for public and private school education
		
		• **Focus on Learning Outcomes and competencies**
		  • Competency based education
		  • Integration of subjects
		  • Development of scientific temper
		  • No Silos among subjects/ learning
		  • Emphasis on Digital literacy	

		• Promotion of multi-lingual teaching	
Module 2521	**New Curricular and Pedagogical structure Transformation of Curriculum and Pedagogy**		1
	LOs: Learners will be able to • Discuss the implications of new structure of school education suggested by the NEP-2020 • Design session plan with innovative pedagogy for achieving learning outcomes at school level • State implications of outcome-based assessment at school level • Compare new assessment strategies suggested by the NEP-2020 for assessment (for, of and as assessment) • Discuss role of NIPUN Bharat in the education system	**Module Contents:** • New Structure of school education (5+3+3+4 instead of 10+2+3) and its implications • New curriculum (includes Vocational education) with language proficiency, scientific temper, sense of aesthetics, ethical reasoning • Digital literacy, knowledge of India, current affairs etc. • Innovative Pedagogy (experiential learning) • Reforming of Assessment • Foundational Literacy and Numeracy (NIPUN Bharat)	
Module 2522	**Transformative recommendations of NEP-2020 for School education**		1
	LOs: Learners will be able to • Establish significance of increasing GER • Discuss at least 5 ways to increase GER at school level • Explore national level initiatives towards multilingualism • Appreciate national level initiatives towards sign language • Illustrate ways of bringing in roots of Bharatiya culture in school curriculum • Analyse State board and CBSC textbook from the perspectives of regional context	**Contents:** • Achieve universal participation (100% GER) at school level • School Infrastructure • School Complex • Power of language (Multilingualism) and Use of Sign Language • Rootedness in Bharatiya culture • National Textbooks with Local Content and Flavour • Regulation of School Education	

Module 2523	**Equitable and Inclusive Education: Learning for All**		1
	LOs: Learners will be able to • Suggest measures to ensure universal access to education at all levels • Suggest strategies for bringing drop-outs back to schools • Establish significance of building schools and alternate centres by philanthropists • Establish significance of emphasis of Outcome-based learning • Elaborate how peer-tutoring can play role in providing Universal access to education	**Contents:** • Universal Access to Early Childhood Care & Education (ECCE) • Ensuring Universal Access to Education at all levels • Multiple Pathways: Multiple pathways to learning; involving both formal and non-formal education modes • Bring Back Drop-outs: To bring drop out children back to school • Build Schools: Promoting both governments and non-governmental philanthropic organizations to build schools • Alternative Centers: Alternative and innovative education centers • Learning Outcomes: Focus on achieving desired learning outcomes at all levels • Peer Tutoring: Suitable for all categories business and personal presentation	

Module 2524	**National Curriculum Framework of**
	    A. Foundational Stage (NCFFS)-2022
	    B. School Education (NCFSE)-2023
			1

	LOs:
	Learners will be able to
	
	• Appreciate importance of NCF for Foundational Stage
	• Identify special features of NCF of Foundational Stage
	• Differentiate Learning Standards, Content, Pedagogy, Assessment across various stages of school education
	• Identify variety of strategies suggested for teaching various subjects
	• State importance of learning resources to be created and used at various stages of school education
		Contents:
		
		• **NCF for Foundational Stage**
		  ◦ Special features
		  ◦ Pedagogy suggested
		  ◦ Selection of content
		  ◦ Assessment
		  ◦ Supportive eco-system
		
		• **NCF for School Education**
		  ◦ Approach to Learning Standards, Content, Pedagogy, Assessment across Stages
		  ◦ Strategies and resources for teaching of various subjects at school level
			•

Assignments/ Activities towards CCE
- Identify illustrations of teaching-learning experiences in school curricula focusing on scientific temper, sense of aesthetics and ethical reasoning   - Suggest at least 2 innovative assessment strategies for school education   - Illustrate at least 2 illustrations how roots of Bharatiya culture are incorporated in Bharatiya school curriculum   - Select a topic from school text-books and design a scenario with local relevance to be incorporated in any of the lessons   - Identify a rural region in India and suggest strategies for bringing drop-outs back to schools (group-assignment with individual contribution)   - Design a poster highlighting any one special feature of NCF of Foundational Stage   - Design a poster highlighting any one special feature of NCF of School Education

References/Recommended Readings:

Central Institute of Educational Technology(CIET), National Council of Educational Research And Training (NCERT) Digital Education Initiatives
https://ciet.ncert.gov.in/
https://diksha.gov.in/
https://ciet.ncert.gov.in/initiative/diksha

National Council of Educational Research And Training (NCERT) Vocational Education
https://ncert.nic.in/vocational-education.php?ln=en

National Council of Educational Research And Training (NCERT) NCFs and XXI National Focus Group Position Papers
https://ncert.nic.in/focus-group.php?ln=

National Council of Educational Research And Training (NCERT) (2022). National Curriculum Framework for Foundational Stage
https://ncert.nic.in/pdf/focus-group/NCF-FS_2022.pdf

National Council of Educational Research And Training (NCERT). CCE packages
https://ncert.nic.in/dee/cce-package.php?ln=en

241241	Internship (OJT)	4
	Course Outcomes: **Learners will be able to:** • Apply instructional Design principles at the workplace • Follow stated work procedures as per the organization norms • Suggest innovative instructional approaches to the organization • Suggest appropriate eLearning tools to the organization for learner-centred pedagogy	

	Suggested Work-places:
	
	   • Undergraduate Institutes
	   • Postgradaute departments and Institutes
	   • eLearning Industries
	   • Distance Education Institutes
	
	Total Hours:
	100 Hours: Internship
	Average 5 Hours a Day - Monday to Friday (4 weeks)
	
	20 Hours: Daily Log, Report writing, Presentation
	
	Mode:
	Face-to-face or Online or Mixed
	
	Duration:
	Approx. 3-4 weeks depending on number of hours per day	

Reference:

- https://sndt.ac.in/pdf/det/internship-manual/det-internship-manual.pdf