#### **SEMESTERI**

Course: Critical Understanding of ICT Credits: 4

Course Code: BED109 MM: 100

(External 60+ Internal 40)

#### **Objectives of the course**

• To equip student – teachers in the effective use of ICT tools, software applications and digital resources.

- To familiarize them with the understanding and skills of integration of ICT in teaching learning, evaluation and management of an institution.
- To acquire the skill of organizing and creating her/his own digital resources.
- To sensitize them to practice safe, ethical and legal ways of using ICT.
- To enable them to use ICT for making classroom processes more inclusive and supportive in addressing multiple learning abilities.

#### **Course Content:**

### **Unit-I: ICT: Connecting with World**

1	National Policy on ICT in School Education	1 hour
2	Accessing the Web-Introduction to the Browser, Browsing and Web	1 hour
3	Search and Retrieval: Strategies and Techniques	1 Hour
4	Internet as a Learning Resource: Using Websites, Web based Learning objects, Simulations, Tutorials.	1 hour
5	Computing in Indian Languages – Fonts and Keyboard	
6	Using ICT to Create-Text, Data, Media	1 hour
7	Combining text, Graphics and Audiovisuals to create communication	
8	Web as a space for continuous learning	1 hour
	Total hours	6 Hours

## **Unit-II: ICT for Teaching-Learning: Possibilities and Concerns**

1	ICT for Supporting Teaching-Learning and Inclusive Education	
a	Exploration of ICT resources for Teaching – Learning, Appropriate ICT Infusion in developing of a lesson plan on a given topic using ICT resources.	1 hour
b	Critiquing and Curation of ICT resources: Need, Relevance, Validity, Appropriateness and Use	1 hour
c	ICT – based teaching-learning approaches in schools	1 hour
d	Educational Applications of ICT using appropriate hardware and software: Hardware:(CD/DVD, Projectors, Interactive boards etc. Software:(Single and multiple media, animations and simulations)	2 hours
e	Gaming Environments for Education – Range and Scope. Infusing games into Teaching –Learning and Creating appropriate Classroom environments, Evaluating Games and Gaming Environments	1 hour
f	Role of ICT in fostering the Creation of an Inclusive School and Classroom Environment	
g	Assistive Technologies and Devices to foster Inclusion	1 hour
h	Computing in Indian Languages to foster Inclusion	1 hour

2	Social, Ethical and Legal aspects:	
a	Impact of ICT on Work, Socialising and Other Areas	1 hour
b	Cyber Crimes: Concerns and Implications, Software Piracy and Legal Remedies, Plagiarism and Fair Use	1hour
c	Proprietary and Open Source Software;	1hour
d	Licencing of Software and Content, OER	
e	Intellectual Property and Copyright and Related Issues of Plagiarism and Fair Use.	1hour
f	Indian Initiatives in Open Source Software and Sharing of Digital Content	1hour
	Total Hours	13 hours

## **Unit-III: ICT for Evaluation, Documentation and Communication**

1	ICT for Evaluation:	
a	ICT: Scope and Techniques for Evaluation	1 hour
b	Exploring and using appropriate Software tools for Evaluation	1 hour
c	Constructing and Implementing ICT based Tests / Quizzes using ICT	1 hour
	Resources	
d	Managing Data, Analysis of results and tracking student achievement using ICT Software tools.	1 hour
2	<b>Documentation and Communication</b>	
a	Documenting and Communicating events and processes using ICT: Tools and Techniques	1 hour
b	Digital Story Telling and Storyboarding	1 hour
c	Publishing on the Web: Possibilities and Scope; Evaluating Choices	
	Total Hours	6 hours

# Unit-IV: ICT for Building Communities, Collectivising and Administration & Management of an Institution:

1	<b>Building Communities and Collectives:</b>	
a	Online Communities and Collectivising: Participating, Analysing Interaction and Evaluating Social Networking Forums	1 hour
b	Sharing thoughts and Ideas: Blogs, Social networking Websites, Discussion forums and Mailing lists	1 hour
c	Virtual Communities: Educational Applications	1 hour
2	ICT for Educational Administration and Management	
a	Role of information management, process and tools in Educational Administration and Management	1 hour
b	Tools and Techniques for Automation of Data Sources in Schools, Collection, Analysis and Interpretation	1 hour
c	UDISE: State and National Level Databases in Education	1 hour
	Total Hours	6 hours