Name of the Programme: MCA
Course code: CSA-602
Title of course: Educational Technology
Number of Credits: 4 (2L-2T-0P)
Effective from AY: 2022-23

Prerequisites for the course	Web Technology	
Objectives	Course aims at Software Developers who wish to develop technology solutions for using Educational Technology in classroom and online mode. Course will offer students an overview of the theories and practices involved in Educational Technology Students will present examples showing the use of technology for classroom management, administration, teaching and learning. Students will select and evaluate appropriate software and hardware for application in the classroom Students will demonstrate legal and ethical use of technology in the classroom. Students will apply technology to develop higher-order skills and creativity	
Content	Learning theories. Learning objectives and Bloom's taxonomy; constructivist and situated theories of learning; factors affecting and facilitating learning; learning styles	8 hours
	Technologies for creating new resources. Examples include video, multimedia, animations and simulations, Web 2.0/3.0.	4 hours
	Instructional Design (ID). Basic ID models (eg ADDIE model), ID models for e-learning and blended learning (eg Dick and Carey model), online course development using ID. Digital Storytelling	8 hours
	Technologies for content delivery. Examples include Learning Management Systems (e.g. Moodle) classroom management systems (e.g. Jhoomla), Open Education Resources, intelligent tutoring systems.	5 hours
	Case Studies: MOOC such as EdX/Coursera, Swayam-NPTEL	5 hours
	Assignments during Tutorial Slots…	
	Introduction to various types of Education Technology tools.	2 hours
	Content Authoring Tools: eg Raptivity, Articulate	3 hours
	Assessment Tools: Hot Potato,	2 hours
	Concept Mapping Tools: e.g. CMAP, MindMap, Compendium	2 hours
	Visualization Tools: e.g. R, Highcharts	3 hours
	Analytics Tools: e.g. SPSS, R-language, CAQDAS	3 hours
	Learning Management System: e.g. Moodle, Sakai	4 hours
	Educational Data Mining: e.g. Weka, Rapidminer, KNIME	2 hours
	MOOC: e.g. EdX	4 hours
	Collaboration Tools: e.g. Wiki	1 hour
	Tutoring system development. e.g. CTAT, ASPIRE	1 hour
	Animation tools. E.g. Flash, Gimp, Others: Camstudio for the screencast, image editing, audio editing (audacity), video management, etc	3 hours

Pedagogy	Hands-on assignments / tutorials / peer-teaching /active learning	
References/ Readings	● Foundations of Educational Technology: Integrative Approaches and Interdisciplinary Perspectives (Interdisciplinary Approaches to Educational Technology) by J. Michael Spector, Routledge; 2nd edition ● Websites/tutorials for the tools	
Learning Outcomes	● Create a portfolio-like presentation with samples reflecting ways technology can support classroom management, administration, and teaching. ● Create and evaluate products that critique various software and hardware tools for instructional purposes ● List and describe legal and ethical issues for using technology in the classroom	

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