

Department of Liberal Education
Era University, Lucknow
Course Outline
Effective From: 2023-24

Name of the Program		B.A. / B.Sc. (LIBERAL EDUCATION)		Year/ Semester:		2 nd / 3 rd	
Course Name	Emerging Technology	Course Code:	ET101	Type	Theory(with activity based)		
Credits	02			Total Sessions Hours:	30 Hours		
Evaluation Spread	Internal Continuous Assessment:	100 Marks		End Term Exam:	NIL		
Type of Course	<input type="radio"/> Compulsory	<input type="radio"/> Core	<input type="radio"/> Creative	<input checked="" type="radio"/> Life Skill			
Course Description	The course of Emerging Technology, delves into the dynamic landscape of innovation and its impact on various domains of human society including socio-cultural, economic and political spheres of life. In this course, we would explore the cross cutting-edge advancements such as artificial intelligence (AI), data analytics, Chatbots, etc. analyzing their utilities, concerns and applications within diverse academic disciplines.						
Course Objectives	This course leads students <ul style="list-style-type: none"> • To understand the emerging technologies and its utility, role in multiple spheres of human life • To understand the influence of emerging technologies and their implications on ethics in personal and the global sphere • To understand the dynamic nature of technology and its synchronization with changing human attitude and expectations 						
Course Outcomes (CO): After the successful course completion, learners will develop following attributes:							
Course Outcome (CO)	Attributes						
CO1	• Understanding of technological shift from Industrial to Post-Industrial society						
CO2	• Sensitization for emerging cyber technologies and tools and its implications on society						
CO3	• Visualize the application, and implications of emerging technologies as a whole						
CO4	• Awareness for issues, challenges and concern for cyber technologies						
Pedagogy	Demonstrations, games, interactive and activity-based class sessions, skills-based activities, field work, site visits and movie clips.						
Internal Evaluation Mode	Participation in class discussion (ongoing)- 10 Marks Activity-20 Marks Assignments/ Presentations – 20 Marks Projects – 50 Marks						
Session Details	Topic				Hours	Mapped CO	
Unit 1	Pathway of Emerging Technologies and Innovation <ul style="list-style-type: none"> • Industrial to Post-Industrial society • Machine Learning and Origin of Internet • Pathway to Cyber World Activity: Creating internet puzzle in groups				7 Hours	CO1, CO3	
Unit 2	Emerging Technologies of 21st century <ul style="list-style-type: none"> • Architecture of Internet of things IOT • Current trends in emerging technologies (ChatGPT, Bing A.I, Jasper, Claude,) • A.I and Netiquettes Datafication and its Utility Activity: Collection of emerging cyber-cultural traits				8 Hours	CO1, CO3	

Unit 3	Challenges of Emerging Technologies and Issues <ul style="list-style-type: none"> Virtual and Augmented Reality and its implication Dark Web, Deep Web, Surface Web(Utilities in various domains of society) Cyber World: Threat and security Activity: Sample application with hands on activity related with cyber Security	8 Hours	CO2, CO3, CO4
Unit 4	Insights for Future Emerging Technologies <ul style="list-style-type: none"> Nanotechnology, Nano-architectonics AI technology in Energy, Environment, Ethics (EEE) Autonomic computing Robotics, Cyborgs Activity: Case study/Project on a new technology	7 Hours	CO3, CO1

Total Hours **30 Hours**

CO-PO and PSO Mapping

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	P O8	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	2	3	1	1	2	2	2	1	2	1	2	2	2	2
CO2	1	2	1	2	2	2	2	2	2	1	1	2	3	2
CO3	2	3	3	2	1	3	1	2	2	1	3	2	2	2
CO4	3	1	1	1	3	2	3	3	3	2	1	3	1	2

Strong contribution-3, Average contribution-2, Low contribution-1

Suggested Readings:

Reference Books	<ul style="list-style-type: none"> Peter H Diamonds and Kotler Steven, 'The Future is Faster Than You Think: How Converging Technologies are Transforming Business, Industries, and Our Lives', Simon & Schuster Publishing, New York, 2020 Kissinger Henry, Schmidt Eric and Huttenlocher Daniel, 'The Age of A.I.', John Murray, London 2021
Para Text	<ul style="list-style-type: none"> https://youtu.be/fMVpOPiVmCU?si=cUWkG5gIGl66Qryt https://youtube.com/shorts/IOC1EJ-kXMA?si=5adUGuoOpqJzyvgs https://youtu.be/LWiM-LuRe6w?si=0Zcc5w2KLboyLRTM https://www.kaspersky.com/resource-center/threats/deep-web

Recapitulation & Examination Pattern

Internal Assessment: 100 Marks of the course grades

Internal Assessment (100)

- Activity (20): Activity will be unit/topic wise.
- Participation in discussion: 10
- Assignments/Presentation (20): Four Assignments will be submitted by the students
- Final Project (50): Live Projects

Internal Continuous Assessment:

Component	Marks	Pattern
Mid Semester	-	NIL
Activity	20	Will be decided by subject teacher
Participation in discussion	10	Students' role and activities in class discussion
Assignment/ Presentation	20	Assignment to be made on topics and instruction as per units
Final Project	50	Live Projects
Total Marks	100	

Course created by: Ms. Hershika Verma

Signature:



Approved by:

Signature: