DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING (AI&ML)

3.1.1. Course Outcome

Year/Sem:	IV/I	Regulations:	R23
Course Name:	Deep Learning	Course Code:	CS423
CO Number	Course Outcomes(CO)		
CS423.1	Understand machine learning basics and neural networks		
CS423.2	Understand optimal usage of data for training deep models		
CS423.3	Apply CNN and RNN models for real-world data		
CS423.4	Evaluate deep models		
CS423.5	Develop deep models for real-world problems		

Year/Sem:	IV/I	Regulations:	R23
Course Name:	Reinforcement learning	Course Code:	CS444
CO Number	Course Outcomes(CO)		
CS444.1	Understand basics of RL.		
CS444.2	Understand RL Framework and Markov Decision Process.		
CS444.3	Analyzing ning through the use of Dynamic Programming and Monte. Carlo		
CS444.4	Understand TD(0) algorithm, TD(λ) algorithm.		
CS444.5			

Year/Sem:	IV/I	Regulations:	R23
Course Name:	Cloud Computing	Course Code:	CS325
CO Number	Course Outcomes(CO)		
CS325.1	Understand different computing paradigms and potential of the paradigms and specifically cloud computing		
CS325.2	Understand cloud service types, cloud deployment models and technologies supporting and driving the cloud		
CS325.3	Acquire the knowledge of programming models for cloud and development of software application that runs the cloud and various services available from major cloud providers		
CS325.4	Understand the security concerns and issues in cloud computing		
CS325.5	Acquire the knowledge of advances in cloud computing.		

Year/Sem:	IV/I	Regulations:	R23
Course Name:	Mobile Application Development	Course Code:	CS415
CO Number	Course Outcomes(CO)		
CS415.1	Understand the working of Android OS Practically.		
CS415.2	Develop Android user interfaces		
CS415.3	Develop, deploy and maintain the Android Applications.		
CS415.4			
CS415.5			

Year/Sem:	IV/I	Regulations:	R23
Course Name:	Human Computer Interaction	Course Code:	CS427
CO Number	Course Outcomes(CO)		
CS427.1	Apply HCI and principles to interaction design		
CS427.2	Design certain tools for blind or PH people		
CS427.3	Understand the social implications of technology and ethical responsibilities as engineers		
CS427.4	Understand the importance of a design and evaluation methodology		
CS427.5			

Year/Sem:	IV/I	Regulations:	R23
Course Name:	Internet of Things	Course Code:	CS436
CO Number	Course Outcomes(CO)		
CS436.1	Interpret the impact and challenges posed by IoT networks leading to new architectural models.		
CS436.2	Compare and contrast the deployment of smart objects and the technologies to connect them to network.		
CS436.3	Appraise the role of IoT protocols for efficient network communication.		
CS436.4	Identify the applications of IoT in Industry.		
CS436.5			

Year/Sem:	IV/I	Regulations:	R23
Course Name:	Speech and Language Processing using Deep Learning	Course Code:	CS445
CO Number	Course Outcomes(CO)		
CS445.1			
CS445.2			
CS445.3			
CS445.4			
CS445.5			

Year/Sem:	IV/I	Regulations:	R23
Course Name:	Semantic Web	Course Code:	CS426
CO Number	Course Outcomes(CO)		
CS426.1	Introduce Semantic Web Vision and learn Web intelligence.		
CS426.2	Understanding about XML, RDF, RDFS, OWL.		
CS426.3	Querying Ontology and Ontology Reasoning.		
CS426.4	To learn Semantic Web Applications, Services and Technology.		
CS426.5	To learn Knowledge Representation for the Semantic Web.		

Year/Sem:	IV/I	Regulations:	R23
Course Name:	Quantum Computing	Course Code:	CS428
CO Number	Course Outcomes(CO)		
CS428.1	Understand basics of quantum computing		
CS428.2	Understand physical implementation of Qubit.		
CS428.3	Understand Quantum algorithms and their implementation		
CS428.4	Understand The Impact of Quantum Computing on Cryptography		
CS428.5			

Year/Sem:	IV/I	Regulations:	R23
Course Name:	Expert Systems	Course Code:	CS447
CO Number	Course Outcomes(CO)		
CS447.1	Apply the basic techniques of artificial intelligence.		
CS447.2	Discuss the architecture of an expert system and its tools.		
CS447.3	Understand the importance of building an expert systems.		
CS447.4	Understand various problems with an expert systems.		
CS447.5			

Year/Sem:	IV/I	Regulations:	R23
Course Name:	Mobile Computing	Course Code:	CS448
CO Number	Course Outcomes(CO)		
CS448.1	Understand the concept of mobile computing paradigm, its novel applications and limitations.		
CS448.2	Analyze and develop new mobile applications.		
CS448.3	Understand the issues of various layers of mobile networks and their solutions.		
CS448.4	Classify data delivery mechanisms.		
CS448.5			

Year/Sem:	IV/I	Regulations:	R23
Course Name:	Applied Data Science with Python	Course Code:	CS449
CO Number	Course Outcomes(CO)		
CS449.1			
CS449.2			
CS449.3			
CS449.4			
CS449.5			

Year/Sem:	IV/I	Regulations:	R23
Course Name:	Deep Learning Lab	Course Code:	CS424
CO Number	Course Outcomes(CO)		
CS424.1	Upon the Successful Completion of the Course, the Students would be able to:		
CS424.2	Learn the Fundamental Principles of Deep Learning.		
CS424.3	Identify the Deep Learning Algorithms for Various Types of Learning Tasks in various domains.		
CS424.4	Implement Deep Learning Algorithms and Solve Real-world problems.		
CS424.5			

Year/Sem:	IV/I	Regulations:	R23
Course Name:	UI Design-Flutter	Course Code:	CS326
CO Number	Course Outcomes(CO)		
CS326.1	Learns to Implement Flutter Widgets and Layouts		
CS326.2	Understands Responsive UI Design and with Navigation in Flutter		
CS326.3	Knowledge on Widges and customize widgets for specific UI elements, Themes		
CS326.4	Understand to include animation apart from fetching data		
CS326.5			

Year/Sem:	IV/II	Regulations:	R23
Course Name:	Ad-Hoc &Sensor Networks	Course Code:	CS419
CO Number	Course Outcomes(CO)		
CS419.1	Ability to understand the state-of-the-art research in the emerging subject of Ad Hoc and Wireless Sensor Networks.		
CS419.2	Ability to solve the issues in real-time application development based on ASN.		
CS419.3	Ability to conduct further research in the domain of ASN		
CS419.4			
CS419.5			

Year/Sem:	IV/II	Regulations:	R23
Course Name:	WEB SECURITY	Course Code:	CS458
CO Number	Course Outcomes(CO)		
CS458.1	Understand the Web architecture and applications.		
CS458.2	Understand client side and service side programming.		
CS458.3	Understand how common mistakes can be bypassed and exploit the application.		
CS458.4	Identify common application vulnerabilities.		
CS458.5			

Year/Sem:	IV/II	Regulations:	R23
Course Name:	**Social Network Analysis**	Course Code:	CS469
CO Number	**Course Outcomes(CO)**		
CS469.1	Ability to construct social net work maps easily		
CS469.2	Gain skills in tracking the content flow through the social media		
CS469.3	Use Node XL to perform social network analysis		
CS469.4			
CS469.5			

Year/Sem:	IV/II	Regulations:	R23
Course Name:	**Federated Machine Learning**	Course Code:	CS470
CO Number	**Course Outcomes(CO)**		
CS470.1	Knowledge of the basic concepts, architecture, and applications of FL.		
CS470.2	Understanding of new research and application trends in FL.		
CS470.3	Analyze horizontal federated learning		
CS470.4	UnderstandthesignificanceofFederatedLearningforVision,Language,and Recommendation		
CS470.5			

Year/Sem:	IV/II	Regulations:	R23
Course Name:	Augmented Reality And Virtual Reality	Course Code:	CS450
CO Number	Course Outcomes(CO)		
CS450.1	Describe how AR systems work and list the applications of AR.		
CS450.2	Understand and analyze the hardware requirement of AR.		
CS450.3	Describe how VR systems work and list the applications of VR.		
CS450.4	Understand the design and implementation of the hardware that enables VR systems to be built.		
CS450.5			

Year/Sem:	IV/II	Regulations:	R23
Course Name:	Speech And Video Processing	Course Code:	CS471
CO Number	Course Outcomes(CO)		
CS471.1	Describe the mechanisms of human speech production systems and methods for speech feature extraction.		
CS471.2	Understand basic algorithms of speech analysis and speech recognition.		
CS471.3	Explain basic techniques in digital video processing, including imaging characteristics and sensors.		
CS471.4	Apply motion estimation and object tracking algorithms on video sequence.		
CS471.5			

Year/Sem:	IV/II	Regulations:	R23
Course Name:	**Robotic Process Automation**	Course Code:	CS472
CO Number	Course Outcomes(CO)		
CS472.1	Describe RPA, where it can be applied and how it' implemented.		
CS472.2	Identify and understand Web Control Room and Client Introduction.		
CS472.3	Understand how to handle various devices and the workload.		
CS472.4	Understand Bot creators, Web recorders and task editors.		
CS472.5			

Year/Sem:	IV/II	Regulations:	R23
Course Name:	**Conversational Ai**	Course Code:	CS474
CO Number	Course Outcomes(CO)		
CS474.1	Understand the basic technologies required for building a conversational system.		
CS474.2	Learn the rule-based dialogue system		
CS474.3	Involve AI in building conversational system and build advanced systems that are cognitively inclined towards human behaviour.		
CS474.4	Develop a real time working conversational system for social domain that can intelligently process inputs and generate relevant replies.		
CS474.5			

Year/Sem:	IV/II	Regulations:	R23
Course Name:	Statistical Natural Language Processing	Course Code:	CS475
CO Number	Course Outcomes(CO)		
CS475.1			
CS475.2			
CS475.3			
CS475.4			
CS475.5			