Information Technology

Academic Year 2021-22
Semester – VII

VII	ITC701	Enterprise Network Design	5.ITC701.1	To understand and describe the SDN and Openflow.	
			5.ITC 701.2	To identify customer requirement, articulate them and describe methodology required for network design.	
			5.ITC 701.3	To understand the modules for a given network based on identified customer requirements and use them in network design.	
			5.ITC 701.4	To detail the design considerations and design the remote connectivity for a network.	
			5.ITC 701.5	To discuss the enterprise campus design considerations and design the IP addressing for a network.	
			5.ITC 701.6	To articulate the enterprise campus design considerations and select a routing protocol for a network.	
VII	ITC702	Infrastructure Security	5.ITC702.1	Study the concept of vulnerabilities, attacks and protection mechanisms.	
			5.ITC702.2	Understand and examine software vulnerabilities and attacks on databases and operating systems.	
			5.ITC702.3	Explain the need for security protocols in the context of wireless communication.	
			5.ITC702.4	Apply various security solutions for Web and Cloud infrastructure.	
			5.ITC702.5	Detect and Diagnose different attacks on Open Web Applications and Web services	
			5.ITC702.6	Design appropriate security policies to protect infrastructure components.	
			7.ITC703.1	Define and Demonstrate knowledge of the building blocks of AI as presented in terms of intelligent agents.	
			7.ITC703.2	Analyze and formalize the problem as a state space, graph, design heuristics and select amongst different search or game based techniques to solve them,. and also design intelligent systems for Game Playing.	

			7.ITC703.3	Cast the different types of constraint satisfaction problems as search and Develop intelligent algorithms for constraint satisfaction problems.
VII	ITC703	Artificial Intelligence	7.ITC703.4	Attain the capability to represent various real life problem domains using logic based Techniques and infer or devise plan.
			7.ITC703.5	Represent the problem involving uncertain knowledge in terms of probabilistic statement, and Apply Bayes rule and product rule for inferencing using Bayesian approaches.
			7.ITC703.6	Apply concept Natural Language processing to problems leading to understanding of Cognitive computing.
			9.ILO7013.1	To describe android platform, architecture and various services of android.
			9.ILO7013.2	Use Intent, broadcast receivers and internet services for developing android activity.
			9.ILO7013.3	To identify and investigate various security issues in android platform.
		Management Information System	9.ILO7013.4	To select various multimedia and location- based service for android app
			9.ILO7013.5	To design user interface with database application.
VII	ILO7013		9.ILO7013.6	To generate APK files for different android modules.
			7.ITDLO7035.1	List the facts and outline the different process carried out in fuzzy logic, ANN and Genetic Algorithms.
			7.ITDLO7035.2	Explain the concepts and meta-cognitive of soft computing.
			7.ITDLO7035.3	Apply Soft computing techniques the solve character recognition, pattern classification, regression and similar problems.
			7.ITDLO7035.4	Outline facts to identify process/procedures to handle real world problems using soft computing.
			7.ITDLO7035.5	Summarize various techniques of soft computing to defend the best working solutions.
VII	ITDLO7035	Soft Computing	7.ITDLO7035.6	Design hybrid system to revise the principles of soft computing in various applications
			9.IDLO7034.1	To understand various testing methodologies.
			9.IDLO7034.2	To describe various testing techniques.

VII	IDLO7034	Software Testing & Quality Assuarance	9.IDLO7034.3	To design test plan documentation.
			9.IDLO7034.4	To identify and use the automation tools.
			9.IDLO7034.5	To identify the testing techniques for specialized environment.
			9.IDLO7034.6	To understand the various software quality management standards.
VII	ITDLO7032	Application Development	4.ITDLO7032.1	To describe android platform, architecture and various services of android.
			4.ITDLO7032.2	Use Intent, broadcast receivers and internet services for developing android activity.
			4.ITDLO7032.3	To identify and investigate various security issues in android platform.
			4.ITDLO7032.4	To select various multimedia and location- based service for android app.
			4.ITDLO7032.5	To design user interface with database application
			4.ITDLO7032.6	To generate APK files for different android modules.
			7.ILO7016.1	Analyze & Classify Different Types of Cybercrime, Tools & Methods used to Conduct Cybercrime & Correlate it to Describe Crimes with Various Types of Cyber Law & Standard Security Compliances.
			7.ILO7016.2	Determine Cybercrime or Cyberoffences by Distinguishing types of Attacking Methods & Recognized Attacks on Wireless Devices & Apply Different Aspects of Cyber Law as per by Identification of Indian Law
			7.ILO7016.3	Describe & Counsel various Information Security Concept against Cyber crime related to Organizational Security Policies & Legal E-Documentation with the help of Identity Theft (ID Theft) & Discriminate Criminal Aspects of Cyber Law.
			7.ILO7016.4	Recognize or Ensure Global Perspective on Cybercrime & Evaluate Various factors of Security Challenges posed by Mobile and Wireless Devices and determine hacking methods to explain concept of cyberspace with the need of Indian IT Act
			7.ILO7016.5	Study & Explain Cybercrime and its offences by using various methods & tools to get the concept of Security and Intellectual Property Aspect in Cyber Law and Abstract Amendments of Indian IT Act according to the information Security Compliances.

			7.ILO7016.6	List & Assemble various cyber offences on social engineering and emerging trends in mobility and tools like DOS & DDOS attacks and on addition compile legal Framework for electronic data interchange. Optimize support of Indian IT Act based on any Security compliances to compared different standard.
VII	ILO7016	Cyber Security and Laws		
VII	ITM705	Project-I	9.ITM705.1	Identify potential research areas in the field of IT
			9.ITM705.2	Conduct a survey of several available literature in the preferred field of study
			9.ITM705.3	Demonstrate an ability to work in teams and manage the conduct of the research study
			9.ITM705.4	Compare and analyse the several existing solutions for research challenge
			9.ITM705.5	Formulate a plan for creating a solution for the research plan identified
			9.ITM705.6	To Document and present the findings of the study conducted in the preferred domain
VII	ITL701	Network Design Lab	5.ITL701.1	Understand the requirements of an enterprise and outline its major design areas.
			5.ITL701.2	Identify functional areas to construct high level modules for enterprise architecture and analyze them.
			5.ITL701.3	Identify the networking devices, prepare a bill of materials and configure the devices as per the Core, Access and Distribution layers
			5.ITL701.4	Design the Server Farm for an enterprise network and discuss upgradations if needed.
			5.ITL701.5	Identify and select the technology for Remote site Connectivity, suitable IP addressing plan and routing protocol for an enterprise network.
			5.ITL701.6	Test and monitor the enterprise network using a tool.
			5.ITL702.1	Implement and analyze program and database vulnerabilities Buffer overflow and SQL Injection
			5.ITL702.2	Explore and analyze different security tools to secure mobile devices, web browser, wireless network and router

VII	ITL702	Advanced Security Lab		5.ITL702.3	Explore reconnaissance, attack and forensics tools in Kali Linux.
				5.ITL702.4	Learn security of system using personal firewall installation.
				5.ITL702.5	Understand AAA using RADIUS.
				5.ITL702.6	Understand AAA using TACACS.
			7.ITL703.4	7.ITL703.1	Design the building blocks of an Intelligent Agent using PEAS representation
				7.ITL703.2	Analyse and formalize the problem as a state space, graph, design heuristics and select amongst different search or game based techniques to solve them.
				7.ITL703.3	Develop intelligent algorithms for constraint satisfaction problems and also design intelligent systems for Game Playing.
				7.ITL703.4	Attain the capability to represent various real-life problem domains using logic-based techniques and use this to perform inference or planning.
				7.ITL703.5	Formulate and solve problems with uncertain information using Bayesian approaches.
				7.ITL703.6	Apply concept Natural Language processing and cognitive computing for creation of domain specific Chatbots
VII	ITL704	Android Apps Development Lab		ITL704.1	Experiment on Integrated Development Environment for Android Application Development.
				ITL704.2	Design and Implement User Interfaces and Layouts of Android App.
				ITL704.3	Use Intents for activity and broadcasting data in Android App
				ITL704.4	Design and Implement a Database Application and Content Providers.
				ITL704.5	Experiment with Camera and Location Based service.
				ITL704.6	Develop Android App with Security features
				ITM705.1	Identify potential research areas in the field of IT
				ITM705.2	Conduct a survey of several available literature in the preferred field of study
				ITM705.3	Demonstrate an ability to work in teams and manage the conduct of the research study

			ITM705.4	Compare and analyse the several existing solutions for research challenge
			ITM705.5	Formulate a plan for creating a solution for the research plan identified
VII	ITM705	Project-I	ITM705.6	To Document and present the findings of the study conducted in the preferred domain