DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

COURSE OUT COMES (COs)

Semester: VII

Course Name: Software Architectures		**Course Code: CS-701**
Students will be able to:		
CO1:	Describe the Fundamental so software architecture, qualities and terminologies	
CO2:	Recognize major software architectural styles, design patterns, and frameworks.	
CO3:	Use implementation techniques of software architecture for effective software development.	
CO4:	Identify and assess the quality attribute so far system at the architectural level.	
CO5:	Applycorevaluesandprinciplesofsoftwarearchitecturesforenterpriseapplication development.	

Course Name: Departmental Elective (Wireless & Mobile Computing)		**CourseCode:CS-702(C)**
Students will be able to:		
CO1:	Explain the architecture and functionalities of traditional computer networks and the TCP/IP protocol stack, including IP addressing, subnetting, DNS, NAT, VLANs, and IPv6.	
CO2:	Analyze the working principles of routing and transport protocols, such as BGP, OSPF, RIP, TCP, and UDP, to evaluate network performance and reliability.	
CO3:	Illustrate the architecture, challenges, and protocols associated with wireless and mobile networks, including WLAN, IEEE 802.11, Mobile IP, and ad hoc routing protocols.	
CO4:	Compare different mobile transport layer protocols and cellular network technologies, such as GSM, I-TCP, and M-TCP, to assess their suitability for mobile communication systems.	
CO5:	Develop an understanding of mobile operating systems, SDK environments, and M-Commerce applications by identifying their design constraints, architectures, and security challenges.	

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Course Name: Open Elective (Data Mining and Warehousing)	**Course Code: CS-703**
Students will be able to:	
CO1:	Identify the need for designing enterprise data warehouses and analyze business problems to discover opportunities for deriving valuable business insights.
CO2:	Compare and contrast various methods for storing and retrieving data from different data sources and repositories.
CO3:	Identify the applications of Data Mining in various domains, and preprocess and visualize data for data exploration and mining tasks.
CO4:	Apply supervised and unsupervised learning techniques to different datasets and evaluate their performance for various applications.
CO5:	Apply association rule mining techniques to solve problems in various application domains.

Course Name: Departmental Elective Lab (WMC)	**Course Code: CS-704**
Students will be able to:	
CO1:	Explain the architecture and functionalities of traditional networks and TCP/IP protocol stack, including IP addressing, subnetting, DNS, NAT, VLANs, and IPv6.
CO2:	Analyzetheworkingprinciplesoftraditionalroutingandtransportprotocols(BGP, OSPF, RIP,TCP,UDP)to evaluate network performance and reliability.
CO3:	Illustrate the architecture, challenges, and protocols associated with wireless and mobile networks such as WLAN, IEEE 802.11, Mobile IP, and Ad hoc routing.
CO4:	Comparedifferentmobiletransportlayersandcellularnetworktechnologieslike GSM,I-TCP ,and M-TCP to assess their suitability form communication systems.
CO5:	Develop an understanding of mobile operating systems, SDK environments, and M-Commerce applications by identifying their design constraints, architectures, and security challenges.

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Course Name: Open Elective Lab(DM&W)	**Course Code: CS-705**
Students will be able to:	
CO1:	Understand the concepts of Data Warehousing and Data Mining.
CO2:	Understand and implement classical models and algorithms used in Data Warehousing and Data Mining.
CO3:	Apply Data Mining techniques in various application domains, including social, scientific, and environmental contexts.
CO4:	Identify and analyze the various algorithms used for information analysis in Data Mining.

Course Name: Major Project-I	**CourseCode:CS-706**
Students will be able to:	
CO1:	Apply fundamental and disciplinary concepts and methods appropriate to their principal areas of study.
CO2:	Demonstrate knowledge and proficiency in using current information technologies, tools, and techniques relevant to their professional field of study.
CO3:	Identify, analyze, and solve engineering problems creatively through investigation and critical thinking.
CO4:	Design and develop engineering projects, and communicate effectively with engineers and the wider community through written and oral presentations.

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Course Name: Evaluation of Internship III	**Course Code: CS607**
Students will be able to:	

CO1:	Apply the knowledge and skill sets acquired from the course and workplace training effectively in the assigned job functions.
CO2:	Solve real-life workplace challenges by analyzing the work environment and conditions, and by applying the appropriate skills acquired during the program.
CO3:	Communicate and collaborate effectively with professionals in the workplace through both written and oral communication.
CO4:	Demonstrate professional ethics and a positive attitude throughout the internship.

Approved By:-
Head of Department