



VIGNAN'S INSTITUTE OF MANAGEMENT AND TECHNOLOGY FOR WOMEN

(An Autonomous Institution)

[Sponsored by Lavu Educational Society, Affiliated to JNTUH & Approved by AICTE, New Delhi]
Kondapur (V), Ghatkesar (M), Medchal - Malkajgiri (D) - 501 301. Phone: 96529 10002/3



Department of CSE (Artificial Intelligence & Machine Learning)

IV B.Tech II Semester

Subject : AM855PE Ad-hoc & Sensor Networks

CO	Course Outcome (CO) Statement
CO1	Understand the concepts of sensor networks and applications
CO2	Understand and compare the MAC and routing protocols for adhoc networks
CO3	Understand the transport protocols of sensor networks
CO4	Understand Basics of Wireless Sensors and Lower Layer Issues-
CO5	Demonstrate Adapting to the inherent dynamic nature of WSNs.

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	2	1	1	1						1	3	2	2
CO2	3	3	2	2	2							1	3	3	2
CO3	3	2	2	2	2							1	3	3	2
CO4	3	2	2	1	2							1	3	2	2
CO5	3	3	3	3	2	1			1	1	1	2	3	3	3
AVERAGE	3.0	2.4	2.2	1.8	1.8	1.0			1.0	1.0	1.0	1.2	3.0	2.6	2.2



VIGNAN'S INSTITUTE OF MANAGEMENT AND TECHNOLOGY FOR WOMEN

(An Autonomous Institution)

[Sponsored by Lavu Educational Society, Affiliated to JNTUH & Approved by AICTE, New Delhi]
Kondapur (V), Ghatkesar (M), Medchal - Malkajgiri (D) - 501 301. Phone: 96529 10002/3



Subject : AM865PE Conversational AI

CO	Course Outcome (CO) Statement
CO1	Understand the basic technologies required for building a conversational system.
CO2	Learn the rule-based dialogue system
CO3	Involve AI in building conversational system and build advanced systems that are cognitively inclined towards human behaviour.
CO4	Develop a real time working conversational system for social domain that can intelligently process inputs and generate relevant replies.
CO5	Deployment of Neural Conversational Model

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	2	1	1							1	3	2	2
CO2	3	3	2	2	1							1	3	2	2
CO3	3	3	3	3	2							1	3	3	3
CO4	3	3	3	3	3							2	3	3	3
CO5	3	3	3	3	3							2	3	3	3
AVERAGE	3.0	2.8	2.6	2.4	2.0							1.4	3.0	2.6	2.6



VIGNAN'S INSTITUTE OF MANAGEMENT AND TECHNOLOGY FOR WOMEN

(An Autonomous Institution)

[Sponsored by Lavu Educational Society, Affiliated to JNTUH & Approved by AICTE, New Delhi]
Kondapur (V), Ghatkesar (M), Medchal - Malkajgiri (D) - 501 301. Phone: 96529 10002/3



Subject : Project Stage – II including Seminar AM801PC

CO	Course Outcome (CO) Statement
CO1	Design and develop a complete software system by applying advanced concepts from multiple domains including algorithms, databases, networks, and software engineering principles.
CO2	Implement the proposed system using appropriate technologies, frameworks, and tools while following industry-standard coding practices and design patterns.
CO3	Evaluate system performance, conduct comprehensive testing (unit, integration, system), and validate the solution against specified requirements and quality standards.
CO4	Document the entire project lifecycle including system architecture, implementation details, testing results, and user manuals following professional documentation standards.
CO5	Demonstrate effective project management, teamwork, and communication skills through presentations, peer collaboration, and stakeholder interactions while adhering to ethical guidelines and timelines.

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	3	2	2	2		2	2	2	3	2	3	3	2
CO2	3	3	3	3	3	2		3	3	2	3		3	3	2
CO3	3	3	3	3	3	2	3	3	2	2	2	2	3	3	2
CO4	2	2	2	2	3	2		2	2	3	2	3	3	2	3
CO5	2	2	2	3	3	3	2	3	3	3	3		3	2	3
AVERA GE	2.6	2.6	2.6	2.6	2.8	2.2	2.5	2.6	2.4	2.4	2.6	2.3 3	3	2.6	2.4



VIGNAN'S INSTITUTE OF MANAGEMENT AND TECHNOLOGY FOR WOMEN

(An Autonomous Institution)

[Sponsored by Lavu Educational Society, Affiliated to JNTUH & Approved by AICTE, New Delhi]
Kondapur (V), Ghatkesar (M), Medchal - Malkajgiri (D) - 501 301. Phone: 96529 10002/3



Subject : AM731PE Internet of Things

CO	Course Outcome (CO) Statement
CO1	Analyze the impact and challenges of IoT networks and their influence on emerging IoT architectural models.
CO2	Compare smart object deployment methods and the technologies used to connect them to networks.
CO3	Evaluate IoT communication protocols for efficient network communication.
CO4	Examine the applications of IoT in industrial environments.
CO5	Design and implement basic IoT systems using sensors, communication modules, and cloud platforms.

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2		1									2		
CO2	2	3			2								2	1	
CO3	2	3		1	2								2	2	
CO4	2	2	1			1							2		1
CO5	2	2	3	1	3				1				3	2	
AVERAGE	2.2	2.4	2.0	1.0	2.3	1.0			1.0				2.2	1.7	1.0

Subject : Data Mining AM732PE

CO	Course Outcome (CO) Statement
CO1	Understand the need of data mining and pre-processing techniques.
CO2	Perform market basket analysis using association rule mining.
CO3	Utilize classification techniques for analysis and interpretation of data.
CO4	Identify appropriate clustering and outlier detection techniques to handle complex data.
CO5	Understand the mining of data from web, text and time series data.

[illegible]

Subject : Data Mining LAB AM732PE

CO	Course Outcome (CO) Statement
CO1	Apply preprocessing statistical methods for any given raw data.
CO2	Gain practical experience of constructing a data warehouse.
CO3	Implement various algorithms for data mining in order to discover interesting patterns from large amounts of data.
CO4	Apply OLAP operations on data cube construction
CO5	Analyze and interpret patterns discovered through data mining techniques.

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2			2								2		
CO2	2	2	2		2								2	2	
CO3	2	3	2	1	3								3	2	
CO4	2	2	1		2								2	2	
CO5	2	3	2	1	2								2	3	
AVERAGE	2.2	2.4	1.0	2.2									2.2	2.2	



VIGNAN'S INSTITUTE OF MANAGEMENT AND TECHNOLOGY FOR WOMEN

(An Autonomous Institution)

[Sponsored by Lavu Educational Society, Affiliated to JNTUH & Approved by AICTE, New Delhi]
Kondapur (V), Ghatkesar (M), Medchal - Malkajgiri (D) - 501 301. Phone: 96529 10002/3



Subject : AM735PE Cloud Computing

CO	Course Outcome (CO) Statement
CO1	Understand different computing paradigms and potential of the paradigms and specifically cloud computing
CO2	Understand cloud service types, cloud deployment models and technologies supporting and driving the cloud
CO3	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
CO4	Understand the security concerns and issues in cloud computing
CO5	Acquire the knowledge of advances in cloud computing.

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2			1								2		
CO2	3	2			2								2	1	
CO3	2	3	2		3								3	2	
CO4	2	2		1	2				1				2	2	
CO5	2	2	1	1	2								2	2	
AVERAGE	2.4	2.2	1.5	1.0	2.0				1.0				2.2	1.8	



VIGNAN'S INSTITUTE OF MANAGEMENT AND TECHNOLOGY FOR WOMEN

(An Autonomous Institution)

[Sponsored by Lavu Educational Society, Affiliated to JNTUH & Approved by AICTE, New Delhi]
Kondapur (V), Ghatkesar (M), Medchal - Malkajgiri (D) - 501 301. Phone: 96529 10002/3



Subject : AM735PE Cloud Computing lab

CO	Course Outcome (CO) Statement
CO1	Understand various service types, delivery models and technologies of a cloud computing environment.
CO2	Understand the ways in which the cloud can be programmed and deployed.
CO3	Understand cloud service providers like Cloudsim, Globus Toolkit etc.
CO4	Examine various programming paradigms suitable to solve real world and scientific problems using cloud services.
CO5	Deploy and deliver models and technologies of a cloud computing environment.

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2			1								2		
CO2	2	2	2		2								2	2	
CO3	2	3		1	2								2	2	
CO4	2	3	2	1	2				1				2	2	
CO5	2	2	3		3				1				3	2	
AVERAGE	2.2	2.4	2.3	1.0	2.0				1.0				2.2	2.0	



VIGNAN'S INSTITUTE OF MANAGEMENT AND TECHNOLOGY FOR WOMEN

(An Autonomous Institution)

[Sponsored by Lavu Educational Society, Affiliated to JNTUH & Approved by AICTE, New Delhi]
Kondapur (V), Ghatkesar (M), Medchal - Malkajgiri (D) - 501 301. Phone: 96529 10002/3



Subject : Full Stack Development

CO	Course Outcome (CO) Statement
CO1	Understand the architecture of full stack web applications, client-server communication, RESTful API design principles, and modern web development frameworks to build scalable web solutions.
CO2	Design and implement responsive front-end user interfaces using HTML5, CSS3, JavaScript, and modern front-end frameworks (React/Angular/Vue.js) with emphasis on user experience and accessibility standards.
CO3	Develop robust back-end services using server-side technologies (Node.js/Express, Python/Django, Java/Spring), implement business logic, handle authentication and authorization, and ensure secure server-side operations.
CO4	Integrate and manage databases (SQL and NoSQL), design database schemas, implement CRUD operations, optimize queries, and handle data persistence for full stack applications effectively.
CO5	Deploy full stack applications using cloud platforms and DevOps practices, implement testing strategies, debug and optimize application performance, document code and APIs effectively, and evaluate security vulnerabilities while demonstrating ethical responsibility in web development.

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	3	2	2						1	2	3	3	2
CO2	3	3	3	2	3						1	3	3	3	2
CO3	3	3	3	3	3						2	3	3	3	3
CO4	3	3	3	3	3						2	3	3	3	2
CO5	3	3	3	3	3	3				3	3	3	3	3	3
AVERAGE	3	3	3	2.6	2.8	3				3	1.8	2.8	3	3	2.4