



VIGNAN'S INSTITUTE OF MANAGEMENT AND TECHNOLOGY FOR WOMEN

[Sponsored by Lavu Educational Society]

(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad.)

Kondapur (V), Ghatkesar (M), Medchal - Malkajgiri (D) - 501 301 Phone: +91 96529 10002/3



Department of Computer Science and Engineering

II B. Tech II Semester

SUBJECT: Discrete Mathematics (CS401PC)

At the end of the course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
CO1	Understand and construct precise mathematical proofs	2
CO2	Apply logic and set theory to formulate precise statements	3
CO3	Analyze and solve counting problems on finite and discrete structures	4
CO4	Describe and manipulate sequences	4
CO5	Apply graph theory in solving computing problems	3

MAPPING

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



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SUBJECT: Business Economics and Financial Analysis (SM402MS)

At the end of the course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
CO1	Understand the various Forms of Business and the impact of economic variables on the Business.	2
CO2	Understand the elasticity of the demand of the product, different types, and measurement of elasticity of demand and factors influencing on elasticity of demand and supply	2
CO3	Recognize the Production function, features of Iso-Quants and Iso-Costs, Market Structure, Pricing aspects are learnt.	3
CO4	Study the firm's financial position by analyzing the Financial Statements of a Company.	4
CO5	Evaluate different types of financial ratios knowing liquidity, solvency and profitability position of business.	5

MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	1	-	-	-	-	2	-	2	2	-	-	2	-	-	2
CO2	1	-	-	-	-	2	-	2	2	-	-	2	-	-	2
CO3	2	-	-	-	-	1	-	1	2	-	-	2	-	-	2
CO4	2	-	-	-	-	1	-	1	2	-	-	2	-	-	2
CO5	2	-	-	-	-	1	-	1	2	-	-	2	-	-	2
Average	1.5	-	-	-	-	1.5	-	1.3	2	-	-	2	-	-	2



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SUBJECT: Operating Systems (CS403PC)

At the end of the course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
CO1	Understand the structure and functions of operating systems	2
CO2	Control access to a computer and the files that may be shared	2
CO3	Demonstrate the knowledge of the components of computers and their respective roles in computing.	3
CO4	Recognize and resolve user problems with standard operating environments.	4
CO5	Gain practical knowledge of how programming languages, operating systems, and architectures interact and how to use each effectively.	5

MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2	2	2	1	1	-	-	3	2	3	-	1	2	2	1
CO2	3	3	3	2	2	-	-	2	3	2	-	2	3	3	2
CO3	3	3	3	3	2	-	-	1	2	2	-	2	3	2	2
CO4	2	3	3	2	2	-	-	2	2	1	-	2	3	3	2
CO5	3	3	3	3	3	-	-	2	2	2	-	3	3	3	3
Average	2.6	2.8	2.8	2.2	2	-	-	2	2.2	2.0	-	2	2.8	2.6	2

SUBJECT: Database Management Systems (CS404PC)

At the end of the course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
CO1	Gain knowledge of fundamentals of DBMS, database design and normal forms	1
CO2	Master the basics of SQL for retrieval and management of data.	6
CO3	Acquainted with the basics of transaction processing and concurrency control.	3
CO4	Familiarity with database storage structures and access techniques	4
CO5	Analyze transaction management, concurrency control, and recovery techniques	4

MAPPING

[illegible]



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SUBJECT: Software Engineering (CS405PC)

At the end of the course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
CO1	Translate end-user requirements into system and software requirements, using e.g. UML, and structure the requirements in a Software Requirements Document (SRD).	1
CO2	Identify and apply appropriate software architectures and patterns to carry out high level design of a system and be able to critically compare alternative choices..	2
CO3	Have experience and/or awareness of testing problems and will be able to develop a simple testing report	3
CO4	Evaluate software testing strategies, quality assurance techniques, and maintenance practices.	5
CO5	Demonstrate teamwork, documentation, and ethical responsibility in software project development.	1

MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	2	2	-	-	-	-	-	-	2	2	3	2	-
CO2	3	3	3	3	2	-	-	-	-	-	3	3	3	2	-
CO3	3	2	2	3	2	-	-	-	-	-	2	2	3	3	-
CO4	2	2	2	3	2	-	-	-	-	-	3	3	2	3	-
CO5	-	-	-	2		-	-	-	-	-	2	2	2	-	-
Average	2.75	2.25	2.25	2.6	2	-	-	-	-	-	2.4	2.4	2.6	2.5	-



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SUBJECT: Operating Systems Lab (CS406PC)

At the end of the course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
CO1	Simulate and implement operating system concepts such as scheduling, deadlock management, file management and memory management.	1
CO2	Implement C programs using Unix system calls	2
CO3	Apply memory management and file system operations using system calls	3
CO4	Develop shell scripts for automation and system administration tasks	6
CO5	Demonstrate teamwork, debugging, and documentation skills in lab assignments	1

MAPPING

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



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SUBJECT: Database Management Systems Lab (CS407PC)

At the end of the course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
CO1	Design and implement relational databases using SQL	6
CO2	Apply normalization techniques to optimize database design	3
CO3	Develop queries using relational algebra and SQL for data retrieval	6
CO4	Implement transaction management and concurrency control mechanisms	4
CO5	Demonstrate teamwork, documentation, and debugging skills in database projects	1

MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2	2	2	-	1	-	-	-	3	-	-	-	2	2	2
CO2	3	3	3	-	2	-	-	-	3	-	-	-	2	2	2
CO3	3	3	3	-	2	-	-	-	2	-	-	-	3	3	2
CO4	3	3	3	-	3	-	-	-	3	-	-	-	3	3	2
CO5	2	3	3	-	3	-	-	-	3	-	-	-	3	3	2
Average	2.6	2.8	2.8	-	2.2	-	-	-	2.8	-	-	-	2.6	2.6	2



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SUBJECT: Real-time Research Project/ Societal Related Project (CS408PC)

At the end of the course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
CO1	Analyze real-world problems and societal challenges to identify appropriate computing solutions through systematic research and requirement analysis aligned with software development life cycle principles.	4
CO2	Design and develop innovative software systems or research solutions that address contemporary societal issues by applying appropriate algorithms, technologies, and methodologies.	6
CO3	Implement and validate real-time project solutions using current software development tools, platforms, and industry-standard practices while ensuring system functionality and reliability.	3
CO4	Evaluate the social, ethical, environmental, and economic impact of proposed computing solutions on society and demonstrate professional responsibility in project execution.	4
CO5	Document, present, and defend project outcomes through comprehensive technical reports, presentations, and demonstrations while exhibiting effective communication and teamwork skills.	5

MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	2	3	2	-	-	2	-	2	2	3	3	2	-
CO2	3	3	3	3	2	-	-	2	-	2	3	2	3	3	-
CO3	3	3	3	2	3	-	-	2	-	2	3	2	-	3	-
CO4	3	3	3	2	3	-	-	2	-	-	3	2	3	-	-
CO5	2	2	2	2	2	-	-	2	3	3	3	2	3	2	-
Average	2.8	2.8	2.6	2.4	2.4	-	-	2	3	2.25	2.8	2.2	3	2.5	-



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SUBJECT: Node JS/ React JS/ DJANGO (CS409PC)

At the end of the course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
CO1	Build a custom website with HTML, CSS, and Bootstrap and little JavaScript.	3
CO2	Demonstrate Advanced features of JavaScript and learn about JDBC	2
CO3	Develop Server – side implementation using Java technologies like	6
CO4	Develop the server – side implementation using Node JS.	6
CO5	Design a Single Page Application using React.	6

MAPPING

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



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SUBJECT: Constitution Of India (MC409)

At the end of the course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
CO1	Understand the historical background and philosophy of the Indian Constitution	2
CO2	Discuss the growth of the demand for civil rights in India for the bulk of Indians before the arrival of Gandhi in Indian politics.	1
CO3	Discuss the intellectual origins of the framework of argument that informed the conceptualization of social reforms leading to revolution in India.	3
CO4	Discuss the circumstances surrounding the foundation of the Congress Socialist Party [CSP] under the leadership of Jawaharlal Nehru and the eventual failure of the proposal of direct elections through adult suffrage in the Indian Constitution	4
CO5	Discuss the passage of the Hindu Code Bill of 1956.	5

MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	-	-	-	-	-	1	-	3	1	2	-	2	-	-	3
CO2	-	-	-	-	-	2	-	3	2	3	-	3	-	-	3
CO3	-	-	-	-	-	2	-	3	2	2	-	3	-	-	3
CO4	-	-	-	-	-	2	-	3	3	3	-	3	-	-	3
CO5	-	-	-	-	-	3	-	3	3	3	-	3	-	-	3
Average	-	-	-	-	-	2	-	3	2.2	2.6	-	2.8	-	-	3