

MCA Programme Outcomes (POs):

PO1	Computing Knowledge	Apply knowledge of computing fundamentals, computing specialization, mathematics, and domain knowledge appropriate for the computing specialization to the abstraction and conceptualization of computing models from defined problems and requirements.
PO2	Problem Analysis	Identify, formulate, research literature, and solve complex Computing problems reaching substantiated conclusions using fundamental principles of Mathematics, Computing sciences, and relevant domain disciplines
PO3	Design & Development	Design and evaluate solutions for complex computing problems, and design and evaluate systems, components, or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.
PO4	Research & Development	Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of information to provide valid conclusions
PO5	Prompt Tool Usage	Create, select, adapt and apply appropriate techniques, resources, and modern computing tools to complex computing activities, with an understanding of the limitations
PO6	Ethical Practices	Understand and commit to professional ethics and cyber regulations, responsibilities, and norms of professional computing practice.
PO7	Life Long Learning	Recognize the need, and have the ability, to engage in independent learning for continual development as a Computing professional.
PO8	Professional Skills	Demonstrate knowledge and understanding of computing and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO9	Communication Skills	Communicate effectively with the computing community, and with society at large, about complex computing activities by being able to comprehend and write effective reports, design documentation, make effective presentations, and give and understand clear instructions.
PO10	Societal Contribution	Understand and assess societal, environmental, health, safety, legal, and cultural issues within local and global contexts, and the consequential responsibilities relevant to professional computing practice.
PO11	Teamwork & Leadership	Function effectively as an individual and as a member or leader in diverse teams and in multidisciplinary environments
PO12	Innovation & Sustainability	Identify a timely opportunity and using innovation to pursue that opportunity to create value and wealth for the betterment of the individual and society at large.



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Program Specific Outcomes - MCA

PSO 1: To deliver latest programming language and tools to develop better and faster applications in the fields of Systems Designing, Application Software Development, Enterprise Resource Planning, Web Designing and Development, Database Administration, Cloud Computing etc .

PSO 2 : To impart all-inclusive knowledge, technical expertise, and hands-on experience in IT infrastructure and security management for implementing IT Infrastructure and security solutions to handle Industry Challenges

PSO 3 : To develop competent workforce in the field of Business Intelligence, Data Warehousing

,Data Mining Information Security Audits etc. which is important in any organization to take decisions, to prepare plans and to control activities.

PSO 4 : To develop basic and advanced skills in areas of Network Administration there by increasing the level of expertise in Computer Networks for career into Core Networking / Routing-n-Switching, System Administration etc .

PSO 5: To guide for Certifications like:

- a. Java Certifications
- b. .Net Certifications
- c. Certified Information Security Manager (CISM)
- d. ISACA Certifications
- e. Testing Certifications
- f. Red Hat Certified System Administrator (RHCSA)
- g. Red Hat Certified Engineer (RHCE)
- h. Microsoft certifications (MCSE)
- i. CCNA/CCNP Wireless Certification



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MCA II- Semester III

IT31: Mobile Application Development

Course Outcomes:

CO#	Cognitive Domain	COURSE OUTCOMES
CO1	Understand	Understand Various Mobile Application Architectures.
CO2	Apply	Apply different types of widgets and Layouts.
CO3	Understand	Describe Web Services and Web Views in mobile applications.
CO4	Apply	Implement data storing and retrieval methods in android.
CO5	Apply	Demonstrate Hybrid Mobile App Framework.



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MCA II- Semester III

IT 32: Data Warehousing and Data Mining

Course Outcomes:

CO#	Cognitive Domain	COURSE OUTCOMES
CO1	Understand	Understand Data warehouse concepts, architecture and models
CO2	Understand	Learn and understand techniques of preprocessing on various kinds of data
CO3	Apply	Apply association Mining and Classification Techniques on Data Sets
CO4	Apply	Apply Clustering Techniques and Web Mining on Data Sets
CO5	Understand	Understand other approaches of Data mining



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MCA II- Semester III

IT-33: Software Testing and Quality Assurance

Course Outcomes:

CO#	Cognitive Domain	COURSE OUTCOMES
CO1	Understand	Understand the role of software quality assurance in contributing to the efficient delivery of software solutions.
CO2	Apply	Demonstrate specific software tests with well-defined objectives and targets
CO3	Apply	Apply the software testing techniques in commercial environments
CO4	Analyze	Construct test strategies and plans for software testing.
CO5	Apply	Demonstrate the usage of software testing tools for test effectiveness, efficiency and coverage



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MCA II- Semester III

IT-34: Knowledge Representation and Artificial Intelligence: ML, DL

Course Outcomes:

CO#	Cognitive Domain	COURSE OUTCOMES
CO1	Understand	Understand basic building block of Artificial Intelligence and Knowledge Representation.
CO2	Apply	Apply Propositional Logic for knowledge representation.
CO3	Apply	Design various models based on Machine Learning methodology
CO4	Apply	Design various models based on Deep Learning methodology
CO5	Understand	Understand various hardware and software aspect used for AI and its application



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MCA II- Semester III

IT35 : Cloud Computing

Course Outcomes:

CO#	Cognitive Domain	COURSE OUTCOMES
CO1	Understand	Describe the concepts of Cloud Computing and its Service Models& Deployment Models.
CO2	Understand	Classify the types of Virtualization.
CO3	Understand	Describe the Cloud Management and relate Cloud to SOA
CO4	Apply	Interpret Architecture and Pharrell Programing of Cloud Computing.
CO5	Apply	Demonstrate practical implementation of Cloud computing



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MCA II- Semester III

IT31L: Practicals

This Practical course contains 2 sections.

1. List of Practicals – Mobile Application Development
2. List of Practicals – KR an AI, ML, DL

Course Outcomes:

Student will be able to

CO1: Develop mobile application. (Apply)

CO2: Develop ML, DL models using Python (Apply)



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MCA II- Semester III

ITC31: Mini Project

Course Outcomes:

Student will be able to

CO1: Create working project using tools and techniques learnt in this semester (Create)



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MCA II- Semester IV

IT41: DevOps

Course Outcomes:

CO#	Cognitive Domain	COURSE OUTCOMES
CO1	Understand	Describe the evolution of technology & timeline
CO2	Remember	Explain Introduction to various Devops platforms
CO3	Understand	Demonstrate the building components / blocks of Devops and gain an insight of the Devops Architecture.
CO4	Apply	Apply the knowledge gain about Devops approach across various domains
CO5	Apply	Build DevOps application



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MCA II- Semester IV

BM 41: PPM and OB

Course Outcomes:

CO#	Cognitive Domain	COURSE OUTCOMES
CO1	Understand	Describe and analyze the interactions between multiple aspects of management
CO2	Analyze	Analyze the role of planning and decision making in Organization
CO3	Analyze	Justify the role of leadership qualities, Motivation and Team Building
CO4	Analyze	Analyze stress management and conflict management
CO5	Understand	Describe Personality and Individual Behavior



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MCA II- Semester IV

IC41: Project

Course Outcomes:

CO1: Create working project using tools and techniques learnt in the programme
(Create)