Central Hindu Military Education Society's.
Dr. Moonje Institute of Management & Computer Studies
(Affiliated to S.P. Pune University & Approved by AICTE New Delhi)
(Accredited by NAAC with B+ Grade)
Bhonsala Military College Campus Rambhoomi, Nashik – 422 005
☎ Ph. No. (0253) 2342840, 9175917050
PUN Code : IMMN017930, DTE Code : 5119, Exam Code : 0688
Email:office@moonjeinstitute.com Website:www.moonjeinstitute.com

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 I- Semester I

IT 11 : Python Programming

Course Outcomes:

CO#	Cognitive Domain	COURSE OUTCOMES
CO1	Apply	To learn and apply basic constructs of python such as data, operations, conditions, loops, data types.
CO2	Apply	To understand advance concepts of python and apply it for solving the complex problems.
CO3	Apply	To develop Python programs that incorporate OOPS concept, regular expressions and multithreading for complex problem-solving and performance enhancement.
CO4	Apply	To implement various types of database operations in MongoDB.
CO5	Apply	To develop comprehensive web applications using Django Framework

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MCA I- Semester I

IT 12 : Data Structure & Algorithms

Course Outcomes:

CO#	Cognitive Domain	COURSE OUTCOMES
CO1	Apply	Implement linear data structures and its various real time applications
CO2	Apply	Demonstrate linked list data structure and its types
CO3	Apply	Demonstrate dynamic linear data structures like stack, queue and analyze their various applications
CO4	Apply	Implement techniques of Non-Linear data structures like Tree and Graph
CO5	Apply	Demonstrate and compare various approaches of Searching, Sorting, Hashing and Heaps.

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MCA I- Semester I

IT 13 : Advanced DBMS

Course Outcomes:

CO#	Cognitive Domain	COURSE OUTCOMES
CO1	Apply	Demonstrating the concept of fundamentals of relational database systems include: data models, database & DDBS architectures, and ER features.
CO2	Understand	Understand the concepts of transaction concurrency control, Query Processing and Security aspects
CO3	Apply	Apply SQL & NoSQL development tools on different types of Schemas.
CO4	Apply	Demonstrate database design and Computation techniques for parallel and distributed database Technology.
CO5	Apply	Implement Real Time applications using Database tools

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MCA I- Semester I

MT 14 : Business Statistics

Course Outcomes:

CO#	Cognitive Domain	COURSE OUTCOMES
CO1	Understand	Understand the role and importance of statistics in business decision-making.
CO2	Apply	Apply measures of central tendency and dispersion to summarize data.
CO3	Understand	Understand basic probability concepts and rules.
CO4	Apply	Apply correlation and regression techniques to analyze relationships between variables
CO5	Apply	Apply time series analysis techniques to forecast business trends

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MCA I- Semester I

IT 14 : Software Engineering and Project Management

Course Outcomes:

CO#	Cognitive Domain	COURSE OUTCOMES
CO1	Apply	Apply concepts, principles of software engineering to develop comprehensive Software Requirement Specification
CO2	Apply	Use software engineering analysis and design modelling technique to represent systems.
CO3	Apply	Illustrate Software Project Management models for effective plan, manage and enhance projects.
CO4	Apply	Implement Agile methodologies to enhance project adaptability and responsiveness to changing requirements.
CO5	Apply	Employ Agile tools effectively to manage, navigate and facilitate collaboration and streamline project workflows in software development

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MCA I- Semester I

EC11 -1: Fundamentals of Cloud Computing

Course Outcomes:

CO#	Cognitive Domain	COURSE OUTCOMES
CO1	Understand	Describe the concepts of Cloud Computing, Dockers and Container.
CO2	Understand	Explore the various Cloud Service Models and Deployment Models.
CO3	Apply	Implement concepts, hypervisors, virtual machines, VMware, Microsoft Hyper-V, and Open-Source Virtualization Manager
CO4	Understand	Describe the Cloud Architecture and relate Cloud to SOA along with SLA management, cloud bursting strategies.
CO5	Analyze	Compare different Cloud Platforms – AWS, GCP, IBM Cloud.

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MCA I- Semester I

EC11-2: Web Development

Course Outcomes:

CO#	Cognitive Domain	COURSE OUTCOMES
CO1	Apply	Design appropriate user interfaces by implementing new features of HTML5
CO2	Apply	Design user interfaces and implement CSS3 features
CO3	Apply	Demonstrate the concept of responsive web design and its importance
CO4	Apply	Build Dynamic web pages using server-side PHP programming
CO5	Apply	Develop and deploy web application

MCA I- Semester I

EC11-3: Fundamental of Data Science

Course Outcomes:

CO#	Cognitive Domain	COURSE OUTCOMES
CO1	Understand	Understand the core concepts, techniques and methodologies used in data science
CO2	Apply	Apply Computational Mathematics concepts to solve data-related problems effectively.
CO3	Apply	Apply the principles of data collection, cleaning, and pre-processing.
CO4	Apply	Perform exploratory data analysis using Numpy and Pandas to derive insights from datasets.
CO5	Apply	Apply the strategies for visualizing the data.

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MCA I- Semester I

EC11-4: Introduction to Cyber Security

Course Outcomes:

CO#	Cognitive Domain	COURSE OUTCOMES
CO1	Understand	Understanding the knowledge of cybercrimes, cyber security and cyber-attacks, vulnerabilities, techniques
CO2	Apply	Illustrate the security aspects of social media, network platforms and ethical aspects associated with use of social media
CO3	Apply	Articulate the importance of personal data theft, financial frauds and identify data privacy and security
CO4	Apply	Apply existing legal framework and laws on cyber security
CO5	Understand	Understand the need of information security, standards and polices

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MCA I- Semester I

IT11L: Practical

Course Outcomes:

CO#	Cognitive Domain	COURSE OUTCOMES
CO1	Apply	Demonstrate Basics of Python and OOPs concepts.
CO2	Apply	Demonstrate CRUD Operation using MongoDB
CO3	Apply	Design and Develop web application using DJango.
CO4	Apply	Implement Linear data structure like stack, queue and Linked list and demonstrate various searching and sorting techniques
CO5	Apply	Implement various operation of non-Linear data structure like Tree and Graph

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MCA I- Semester I

ITC11 - Mini Project

Course Outcomes:

CO#	Cognitive Domain	COURSE OUTCOMES
CO1	Apply	Apply knowledge of software engineering principles and methodologies in designing and implementing the project.
CO2	Apply	Demonstrate the ability to develop a functioning software application or solution that meets specified requirements and objectives
CO3	Apply	Design comprehensive documentation that includes project requirements, design specifications, implementation details, testing strategies, and user manuals

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MCA I- Semester I

Indian Knowledge system (IKS)

Course Outcomes:

CO#	Cognitive Domain	COURSE OUTCOMES
CO1	Understand	Understand about Indianan philosophy, Culture, knowledge in different domains
CO2	Understand	Explore the ethical and moral perspectives within Indian philosophical and spiritual traditions.
CO3	Apply	Understand Indian knowledge system and apply in current area and applications.
CO4	Understand	Understand the basics of Indian ethics and values
CO5	Understand	Explore the Indian traditions and their application in modern contexts.