KUMARAGURU COLLEGE OF TECHNOLOGY
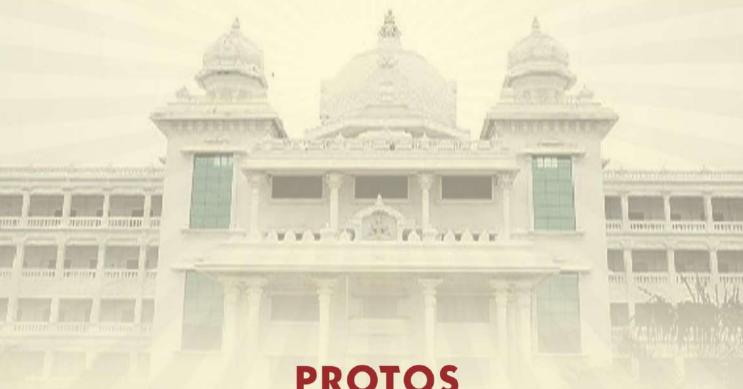## CHARACTER IS LIFE

PROTOS

DEPARTMENT OF COMPUTER APPLICATIONS ACADEMIC
YEAR 2022 & 2023(JUN 2022 TO DEC 2022)

DEPARTMENT FACULTY DETAILS

DR.M.MANIKANTAN , MCA, PH.D, HOD
ASSOCIATE PROFESSOR.

DR.V.GEETHA, MCA, PH.D
PROFESSOR.

DR.J.VIJAY PRAKASH, MBA, M.COM, PH.D
ASSOCIATE PROFESSOR.

DR.S.HAMEED IBRAHIM, M.C.A, PH.D
ASSISTANT PROFESSOR [SRG].

DR.P.PARAMESWARI, M.C.A, PH.D
ASSISTANT PROFESSOR [SRG].

DR.C.RAJANKRUPA, M.C.A, PH.D
ASSISTANT PROFESSOR [SRG].

DR.N.JAYAKANTHAN ,M.C.A, PH.D
ASSISTANT PROFESSOR III.

DR.M.C.S GEETHA, M.C.A M.PHIL PH.D
ASSISTANT PROFESSOR.

MS.V.JALAJA JAYALAKSHMI, M.C.A
ASSISTANT PROFESSOR II.

MS. M. AMALA JAYANTHI, M.C.A M.PHIL
ASSISTANT PROFESSOR II.

FACULTY ZONE

• DR.M.MANIKANTAN, ACTED AS BOS MEMBER IN BOS–DAB MEETING CONDUCTED BY COIMBATORE INSTITUTE OF TECHNOLOGY ON **05.11.2022**.

• DR.M.MANIKANTAN,ASP, DR. C.RAJANKRUPA ,AP(SRG) AND DR.L.DHANABAL AP III ATTENDED A NATIONAL SEMINAR ON AWS EDUCATOR MASTER CLASS ON **11-10-2022** IN KCT.

• DR.P.PARAMESWARI, AP(SRG), PRESENTED A PAPER IN INTERNATIONAL CONFERENCE ON INFORMATION AND COMMUNICATION TECHNOLOGY FOR COMPETITIVE STRATEGIES (ICTCS–**2022**) ORGANIZED BY GLOBAL KNOWLEDGE RESEARCH FOUNDATION, INDIA FROM **9.12.2022** TO **10.12.2022**. THE TITLE OF THE PAPER IS CROP SPECIFIC CULTIVATION RECOMMENDATION SYSTEM USING DEEP LEARNING.

• DR. P.PARAMESWARI,AP(SRG),DR.C.RAJAN KRUPA AND MS.M.C.S.GEETHA,AP ATTENDED A WORKSHOP ON DESIGN AND DEVELOPMENT OF OUTCOME BASED CURRICULUM ON **17/10/2022** IN KCT.

• DR.R.K.KAVITHA,AP-III ATTENDED A NATIONAL LEVEL REFRESHER COURSE ON PATENT ANALYTICS FROM **07-07-2022** TO **16/07/2022** ORGANIZED BY TURNIP INNOVATIONS PVT. LTD, KOLKATA.

- DR.R.K.KAVITHA, AP-III COMPLETED CERTIFICATION ON BASICS OF PYTHON FROM 18/07/2022 TO 23/07/2022 BY INFOSYS LTD.

- DR.R.K.KAVITHA, AP-III ATTENDED A FDP ON 'SMART TOOLS AND METHODOLOGIES FOR ACADEMIC RESEARCH' FROM 1/8/2022 TO 5/8/2022 ORGANIZED BY MAHATMA GANDHI INSTITUTE OF TECHNOLOGY, GANDIPET, HYDERABAD.

- DR.R.K.KAVITHA, AP III, ATTENDED A NATIONAL LEVEL ONLINE FDP ON ' D A T A SCIENCE : A REVELATION OF THE MODERN DIGITAL ERA', FROM 29/08/2022 TO 09-10-2022 ORGANIZED BY SRM INSTITUTE OF SCIENCE & TECHNOLOGY, RAMAPURAM CAMPUS.

- DR.R.K.KAVITHA, AP III, COMPLETED INTERNATIONAL CERTIFICATION ON 'PYTHON FOR DATA SCIENCE AND MACHINE LEARNING BOOTCAMP' CONDUCTED BY UDEMY.

- DR.R.K.KAVITHA AP III PRESENTED PAPER ENTITLED 'PREDICTING ACADEMIC HELP-SEEKING BEHAVIOR AMONG STUDENTS USING FUZZY LOGIC APPROACH' IN NTER-NATIONAL CONFERENCE ON MATHEMATICAL SCIENCES, MODELING AND COMPUTA-TIONAL INTELLIGENCE (ICMSMCI-22).' ORGANIZED BY KCT FROM 29/09/2022 TO 30/09/2022.

- DR.R.K.KAVITHA, AP III PRESENTED A PAPER ENTITLED 'AUTOMATED DETECTION OF BRAIN ABNORMALITIES IN MRI IMAGES USING INTEGRATED DEEP CONVOLUTIONAL NEURAL NETWORKS WITH K-MEANS ALGORITHM' , IEEE 3RD GLOBAL CONFERENCE FOR ADVANCEMENT IN TECHNOLOGY (GCAT) ORGANIZED BY NAGARJUNA COLLEGE OF ENGI-NEERING AND TECHNOLOGY , BANGALORE FROM 7/10/2022.

- DR. RAJANKRUPA CAP (SRG),,ATTENDED A NATIONAL LEVEL ONLINE FDP ON 'DATA SCIENCE : A REVELATION OF THE MODERN DIGITAL ERA', FROM 29/08/2022 TO 09-10-2022 ORGANIZED BY SRM INSTITUTE OF SCIENCE & TECHNOLOGY, RAMAPURAM CAMPUS.

- DR.C.RAJAN KRUPA , AP(SRG) PRESENTED PAPER ENTITLED ' MEASURING THE SIZE AND EFFORTS FOR E-LEARNING PROJECTS USING FUNCTION POINT ANALYSIS ' IN IN-TERNATIONAL CONFERENCE ON MATHEMATICAL SCIENCES, MODELING AND COMPUTA-TIONAL INTELLIGENCE (ICMSMCI-22). ORGANIZED BY KCT FROM 29/09/2022 TO 30/09/2022.

- DR.C.RAJANKRUPA, AP(SRG),ACTED AS A RESOURCE PERSON FOR THE TOPIC ON 'DATABASE - NORMALIZATION' IN THE WORKSHOP ORGANIZED BY KCT-MBA BUSINESS SCHOOL ON 28/10/2022.

- DR.C.RAJANKRUPA C, AP(SRG) AND DR. L. DHANABAL AP III ATTENDED WORK-SHOP ON "OBE BASED REVISED BLOOM'S TAXONOMY, DELIVERY METHODS AND ASSESS-MENT TOOLS" ON 18/11/2022 IN KCT.

- DR.L.DHANABAL,AP III, COMPLETED CERTIFICATION ON "INTRODUCTION IOT"OFFERED BY NPTEL.

- MS. V.JALAJA JAYALAKSHMI,AP II COMPLETED CERTIFICATION ON 'DESIGN AND IMPLEMENTATION OF HUMAN COMPUTER INTERFACES' OFFERED BY NPTEL.

- MS.AMALA JAYANTHI.M ,AP II PRESENTED A PAPER ENTITLED IMPACT OF PERSONALITY TRAITS ON STUDENTS'ACADEMIC PERFORMANCE IN 'INTERNATIONAL CONFERENCE ON HIGH PERFORMANCE AND INTELLIGENT COMPUTING (ICHPIC'22)' ORGANIZED BY PSG COLLEGE OF TECHNOLOGY FROM 7.12.2022 TO 9.12.2022

PAPER REVIEWED

- DR.S.HAMEED IBRAHIM REVIEWED A PAPER ENTITLED , AN ENSEMBLE DEEP LEARNING CLASSIFIER OF ENTROPY CONVOLUTIONAL NEURAL NETWORK AND DIVERGENCE WEIGHT BIDIRECTIONAL–LONG SHORT–TERM MEMORY FOR EFFICIENT DISEASE PREDICTION SUBMITTED TO INTERNATIONAL JOURNAL OF SYSTEM ASSURANCE ENGINEERING AND MANAGEMENT.

- DR.S.HAMEED IBRAHIM REVIEWED A PAPER ENTITLED , " AN ENHANCED REVERSIBLE IMAGE STEGANOGRAPHY USING DISTRIBUTIVE TIAN'S METHOD" SUBMITTED TO SECURITY AND PRIVACY ,SCOPUS.

BOOK CHAPTERS

- M. AMALA JAYANTHI, "A HOLISTIC ANALYSIS TO IDENTIFY THE EFFICIENCY OF DATA GROWTH USING A STANDARDIZED METHOD OF NON–FUNCTIONAL REQUIREMENTS IN GRAPH APPLICATIONS", DEMYSTIFYING GRAPH DATA SCIENCE: GRAPH ALGORITHMS, ANALYTICS METHODS, PLATFORMS, DATABASES, AND USE CASES, IET, SEPTEMBER 2022.

PAPER PUBLICATION

- AMALA JAYANTHI.M, PUBLISHED A PAPER ENTITLED 'QUEST_SA: PREPROCESSING METHOD FOR CLOSED–ENDED QUESTIONNAIRES USING SENTIMENT ANALYSIS THROUGH POLARITY,' IN MOBILE INFORMATION SYSTEMS, SEPTEMBER 2022.

PATENT

- M.C.S.GEETHA, PUBLISHED AN INDIAN PATENT ENTITLED, A COMPUTER VISION AND ARTIFICIAL INTELLIGENCE BASED IMAGE PATTERN RECOGNITION SYSTEM AND METHOD.

PROGRAM ORGANIZED

•A SESSION TITLED "HANDS-ON SESSION ON IOT ANALYTICS AND INTERNSHIP OPPORTUNITY" WAS CONDUCTED ON 2ND AUGUST 2022 FOR THE I MCA STUDENTS. THE WORKSHOP WAS ORGANIZED BY DR. L. DHANABAL AP-III/MCA & DR. S. HAMEED IBRAHIM AP(SRG)/MCA.
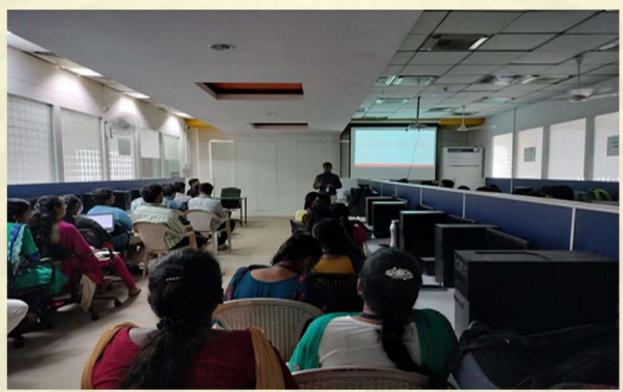

•A SESSION TITLED "PLACEMENT DRIVE FOR 2019 & 2020 BATCH MCA STUDENTS" WAS CONDUCTED ON 1ST AUGUST 2022 FOR THE 2019 & 2020 MCA STUDENTS. THE EVENT WAS ORGANIZED BY DR. L. DHANABAL AP-III/MCA & DR. S. HAMEED IBRAHIM AP(SRG)/MCA.

• A HANDS-ON WORKSHOP TITLED "BLOCK CHAIN DEVELOPMENT" WAS CONDUCTED ON 06 SEP 2022 BETWEEN 8.30 AM TO 10.30 AM FOR FIRST YEAR MCA STUDENTS. THE RESOURCE PERSON IS MR.M.VIVEK ANAND, AP-II, DEPARTMENT OF IT, KCT. THE RESOURCE PERSONS AND PARTICIPANTS WERE FORMALLY WELCOMED BY DR.N.JAYAKANTHAN OF MCA DEPARTMENT.

DEPARTMENT ASSOCIATION ACTIVITIES

KIRSTEN KENNEDY
PRESIDENT

ASWIN S
VICE PRESIDENT

HARISHMA NAIR S
LEAD PLACEMENTS

MADHUMITHA K
SECRETARY

SUBASH KARTHIK
JOIN SECRETARY

KAVIYARASU A
SPORTS COORDINATOR

SAMYUKTHA P
PLACEMENTS
COORDINATOR

THARUN RAJA K
PLACEMENTS
COORDINATOR

**NITHIESH
SOMASUNDARAM**
TREASURER

MOHANPATHI S
TECHNICAL
AMBASSADOR

BUVANYASHRI P
EXTRACURRICULAR
EXECUTIVE

RAMYA C
EXECUTIVE MEMBER

RAMESHKUMAR K
LEAD DOCUMENTATION

SALAI SOUMYA S
CONTENT STRATEGIST

HARISHBABU K
LEAD
MEDIA AND MARKETING

SHIYAM P
MEDIA AND MARKETING
COORDINATOR

SHUBHAKARINI S
PG FORUM
REPRESENTATIVE

KAVIN GUNASEKARAN
LEAD ENTREPRENEURSHIP

THARANYA K
STUDENT CHAPTER
COORDINATOR

SRISABARISH N
EXECUTIVE MEMBER

JOLENE ISABELLA MENEZES
LEAD ALUMNI RELATION

STUDENT ZONE

STUDENT PROGRESSION

PAPER PRESENTATION

ARUNKUMAR T
ALUMNI COORDINATOR

• S. HARISHMA **21MCA013** PRESENTED PAPER IN 'INTERNATIONAL CONFERENCE OF HIGH PERFORMANCE AND INTELLIGENT COMPUTING' ORGANIZED BY PSG COLLEGE OF TECHNOLOGY, COIMBATORE FROM **07/12/2022** TO **09/12/2022** . THE PAPER TITLE IS 'IMPACT OF PERSONALITY TRAITS ON STUDENTS ACADEMIC PERFORMANCE'

•S. HARISHMA 21MCA013 PRESENTED PAPER IN ' IEEE INTERNATIONAL SYMPOSIUM ON SUSTAINABLE ENERGY, SIGNAL PROCESSING AND CYBER SECURITY 'ORGANIZED BY GIET UNIVERSITY, ODISHA FROM 15/12/2022 TO 17/12/2022.THE PAPER TITLE IS 'PERFORMANCE ANALYTICS IN COLLABORATIVE LEARNING ENVIRONMENTS'

HACKATHON

(21MCA020) KIRSTEN KENNEDY K, (21MCA028) NITHYA SHREE M, (21MCA035) SAMYUKTHA RAGHAVI S R, PARTICIPATED IN SMART INDIA HACKATHON 2022, CONDUCTED FROM 25.08.2022 TO 30.08.2022 BY AICTE, KIET GROUP OF INSTITUTIONS , GHAZIABAD, UP.

STUDENT ACHIEVEMENT

1. FOLLOWING DETAILS IS THE STUDENT ACHIEVEMENT IN LOGIN 2022 ORGANIZED BY PSG COLLEGE OF TECHNOLOGY, COIMBATORE CONDUCTED FROM 15-10-2022 TO 16-10-2022

Roll number	Name of the student	Event	Achievements
21MCA06	Yuvansankar E S	Code Sprint	
21MCA020	Kirsten Kennedy K		First Prize
21MCA06	Yuvansankar E S	Quiz	
21MCA020	Kirsten Kennedy K		First Prize
21MCA028	Nithya Shree M	Nethunt	Second Prize
21MCA036	Sankeertha Br		
21MCA052	Surendiran S	Thinklytics	First Prize
21MCA015	Kaliraj J		

2. FOLLOWING DETAILS IS THE STUDENT ACHIEVEMENT IN NEC SYNECTICS ORGANIZED BY NANDHA ENGINEERING COLLEGE, ERODE CONDUCTED ON **23-11-2022**

Roll number	Name of the student	Name of Event	Achievements (Awards/Recognitions/Prize, If any)
21MCA005	Aruna S	Icebreaker	Third prize
21MCA013	Harishma S	Icebreaker	Third prize
21MCA013	Harishma S	BrainStorm-Technical Quiz	First prize
21MCA060	Yuvan Shankar ES	BrainStorm-Technical Quiz	First prize
21MCA005	Aruna S	BrainStorm-Technical Quiz	Second prize
21MCA020	Kirsten Kennedy K	BrainStorm-Technical Quiz	Second prize

PLACEMENTS
BATCH -2022-2023

Company	Name
ORACLE	HARI KRISHNA
ZOHO	GOPINATH S
	PRAVEEN KUMARAN S
	RISHIKESH K M
	SHARAN MADHAV D
FORD	KEERTHANA M P
	NITHYA SHREE M
	SREEMATHI M
GENPACT	LATHA P
	LAVANYA R
	SANKEERTHA B K
	SOWMYA T
	SURENDIRAN S
LIFERAY	MOHAMMED FARHAAN
	SANTHOSH KUMAR
IBM	KIRSTEN KENNEDY
VIRTUSA	HARI KRISHNA

11

THE MATH COMPANY	ARUNNA S
	HARISHMA S
	SARANYA T
ASPIRE SYSTEMS	ASWIN S
	MUKESH B
CAPGEMINI	ARUNNA S
	ASWIN S
	AKSHATHA B
	NITHYASREE M
	SIDHATHAN T
	SREEMATHI M
COGNIZANT	LAVANYA R
	PREETHE B
	SRI BALAJI S
	SURENDIRAN S
ACCENTURE	HARISHMA S
	KIRUBAVATHY AMALYA A

Implementing Private Cloud Infrastructure in an Engineering College Environment

As digital transformation accelerates across higher education, engineering colleges are increasingly seeking innovative and cost-effective solutions to deliver essential software and learning resources. The traditional model—installing resource-intensive applications like AutoCAD, Java, and Python directly on individual PCs—leads to cumbersome maintenance, duplication, and increased security risks. To overcome these challenges and align with modern IT best practices, private cloud infrastructure is emerging as a compelling alternative.

What Is a Private Cloud?

A private cloud is a dedicated computing environment that provides on-demand access to software, storage, and computational power within the secure confines of an institution's own network. Unlike public clouds, a private cloud is exclusively operated for a single organization, offering enhanced data privacy, tighter access controls, and customizability to suit institutional needs.

Key Benefits for Engineering Colleges

- Centralized Software Management: Applications such as AutoCAD, programming languages, and simulation tools can be centrally installed, managed, and updated on the cloud, eliminating the need for repetitive installations on each individual PC.

- Scalability: Labs and departments can scale their resources—such as virtual machines and software licenses—according to demand, optimizing both cost and performance.

- Enhanced Security: Private clouds enable secure transactions and data exchanges between students, faculty, and administrative systems, using robust authentication and encryption mechanisms.

- Remote Accessibility: Students and staff can securely access lab environments and software from any location, fostering flexible learning opportunities.

- Disaster Recovery: Automated backups and failover systems improve data resilience, ensuring academic continuity in case of hardware or software failures.

Advantages of Private Cloud Compared to Traditional Methods

- Greater Control and Customization: Unlike traditional setups where software is tied to individual PCs, private clouds provide centralized control to customize infrastructure according to the institution's needs.

- Improved Security: Private clouds offer isolated environments reducing risks of unauthorized data access common in traditional PCs or shared networks.

- Cost Efficiency Over Time: Although initial setup may be higher, reducing repetitive software installations and maintenance on multiple machines lowers overall costs.

- Consistent Performance: Dedicated resources within private clouds provide stable and predictable performance compared to variable PC hardware configurations.

- Simplified Maintenance: Central management of software updates and licenses reduces IT staff workload compared to updating software on hundreds of individual machines.
- Enhanced Compliance: Easier to enforce policies regarding data privacy and access, critical for handling sensitive academic and administrative information.

Common Software Across Engineering Departments

Department	Commonly Used Software
CSE	Java, Python, C/C++, MATLAB, Eclipse, NetBeans, Visual Studio, Git, MySQL, Oracle DB, Docker, Kubernetes, Wireshark, AutoCAD (basics), Android Studio
ECE	MATLAB, Simulink, Multisim, LabVIEW, Cadence, Proteus, Xilinx ISE, ModelSim, AutoCAD Electrical, PSpice, OrCAD
Mech	AutoCAD, SolidWorks, CATIA, ANSYS, MATLAB, NX Siemens, Pro/ENGINEER, Abaqus, Fusion 360, Mastercam
Civil	AutoCAD Civil 3D, STAAD.Pro, Revit, ETABS, SAP2000, SAFE, Primavera, ArcGIS, SketchUp

Centralizing these software tools on a private cloud ensures consistent availability, simplifies updates, and reduces duplication of effort.

Open-Source Private Cloud Solutions

Several open-source platforms enable economical and flexible private cloud implementations:

- OpenStack: Popular cloud computing platform for managing compute, storage, and networking resources.
- Nextcloud: Secure file sharing and collaboration within the private cloud.
- Proxmox VE: Virtualization management solution for virtual machines and containers.
- OwnCloud: File sync and share server suitable for private cloud storage.

Commercial Private Cloud Software in the Market

- VMware vSphere: Leading virtualization and private cloud infrastructure platform.
- Microsoft Azure Stack: Brings Azure services into an organization's own data center.
- Red Hat OpenShift: Kubernetes-based container platform used in private clouds.
- Nutanix: Enterprise cloud platform supporting private cloud deployments.

Conclusion

Shifting to a private cloud infrastructure empowers engineering colleges to streamline software management, enhance security, and enable modern teaching methods. This transition not only reduces administrative overhead but also provides students with real-world exposure to cloud technologies, preparing them for the demands of the modern workforce. By adopting private cloud solutions—leveraging both open source and commercial software—engineering institutions secure a robust foundation for future-ready education.

-Prepared By

Dr. Rajankrupa C AP III

Department of Computer Applications

The MEAN Stack: A Unified Approach to Modern Web Development

Introduction

Web development has evolved rapidly from static websites to dynamic, data-driven applications. Traditional development often required multiple programming languages across different layers of an application, leading to increased complexity and overhead. The **MEAN stack** addresses this challenge by providing an **end-to-end JavaScript-based solution**, enabling developers to streamline the entire development process with a single language.

Components of the MEAN Stack

1. **MongoDB (Database Layer)**
   - A NoSQL database that stores data in flexible, JSON-like documents.
   - Ensures scalability, high availability, and seamless integration with JavaScript applications.

2. **Express.js (Application Layer)**
   - A minimalistic and flexible web framework for Node.js.
   - Provides robust features for building APIs and handling HTTP requests and responses.

3. **Angular (Front-End Layer)**
   - A client-side framework maintained by Google.
   - Supports the development of dynamic, single-page applications (SPAs) with a modular architecture and two-way data binding.

4. **Node.js (Runtime Environment)**
   - A server-side JavaScript runtime built on Chrome's V8 engine.
   - Enables non-blocking, event-driven programming for building scalable and high-performance applications.

Advantages of the MEAN Stack

- **Unified Language (JavaScript):** Streamlines development by using a single language across all layers.
- **JSON Data Exchange:** Ensures seamless data transfer between client, server, and database.
- **High Scalability:** Node.js and MongoDB allow applications to scale efficiently.
- **Open Source Ecosystem:** Strong community support, regular updates, and cost-effective adoption.
- **Rapid Development:** Angular and Express.js accelerate application prototyping and deployment.

Workflow of a MEAN Application

1. A user interacts with the **Angular front-end** interface.
2. The request is sent to the server via **Express.js** on **Node.js**.
3. **MongoDB** processes and returns the required data in JSON format.
4. The **Angular framework** updates the UI dynamically based on the server response.

This workflow creates a responsive, efficient, and interactive user experience.

Applications of the MEAN Stack

The MEAN stack is applied across diverse industries and use cases, including:

- **E-Commerce Platforms** – Online stores with real-time inventory management.
- **Healthcare Solutions** – Patient management systems and telemedicine platforms.
- **Social Media Networks** – Applications with live feeds, chat, and notifications.
- **Educational Portals** – E-learning systems, student dashboards, and virtual classrooms.
- **Enterprise Applications** – Scalable project management and collaboration tools.

Future Scope

As the demand for real-time, cloud-native, and mobile-ready applications increases, the MEAN stack will remain a critical player in full-stack development. The integration of **microservices, serverless computing, and cloud platforms** further enhances its potential for enterprise-grade solutions.

Conclusion

The MEAN stack represents a **comprehensive and unified solution** for full-stack web development. By leveraging JavaScript across all tiers of application architecture, it reduces complexity, accelerates development, and ensures scalability. With its growing adoption in diverse industries, MEAN continues to be a preferred choice for developers and organizations aiming to build robust and future-ready digital solutions.

-Prepared By

 22MCA022 KIRUPPA SRI S

Department of Computer Applications

MASTER OF COMPUTER APPLICATIONS

VISION

The Department,

• Seeks to create academic programs and a campus culture that imbibes a socially committed professionalism which would in turn feed into the overall development of the society and make global citizens and leaders out of the students.

• Aims to become a highly recognized, research driven department with good infrastructure, developing industry ready products.

MISSION

• The Department is committed to set standards of excellence in its academic programmes by enabling its students to achieve a blending of knowledge acquisition and applications of such knowledge in real life situations.

• It is also aimed to equip them to adapt themselves to changing global and local needs upholding professional ethics and contribute their might in transforming India into a world leader in technological advancement and prosperity.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs):

PEOs for MCA programme are designed based on the department mission.

• To prepare students to transact in the field of computer applications by providing technical foundations in the field of computer applications.

• To prepare students to intellect in computing skills and innovation of software products to meet the industry needs.

• To provide exposure to cutting edge technologies and training to work on multidisciplinary. projects in a team.

• To prepare students to life-long learning through professional activities; adapt themselves with ease to new technologies, while exhibiting ethical and professional standards.

PROGRAM OUTCOMES (PO'S):

On successful completion of the program:

1. Computational 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.

2. 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.

3. Design /Development of Solutions: 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.

4. Conduct Investigations of Complex Computing Problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

5. Modern Tool Usage: Create, select, adapt and apply appropriate techniques, resources, and modern computing tools to complex computing activities, with an understanding of the limitations.

6. Professional Ethics: Understand and commit to professional ethics and cyber regulations, responsibilities, and norms of professional computing practice

7. Life-long Learning: Recognize the need, and have the ability, to engage in independent learning for continual development as a computing professional.

8. Project management and finance: Demonstrate knowledge and understanding of the 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.

9. Communication Efficacy: 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.

10. Societal and Environmental Concern: 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.

11. Individual and Team Work: Function effectively as an individual and as a member or leader in diverse teams and in multidisciplinary environments.

12. Innovation and Entrepreneurship: 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.

Editorial Desk
Staff Name: Dr.Rajankrupa C AP III / MCA
Student Names:

1. 22MCA004   BHUVANYASHRI P.   .
2. 22MCA015   JOLENE IASBELLA MENEZES