

## Department of Computer Applications

### Principal's Desk



### Newsletter

Welcome to M.S. Ramaiah College of Arts, Science, and Commerce, Bengaluru, an institution committed to academic excellence and holistic student development. At MSRCASC, we believe education extends beyond textbooks. Our campus is equipped with state-of-the-art infrastructure, including advanced laboratories and smart classrooms that enhance learning experiences. Our dedicated and highly qualified faculty provide invaluable support in all academic, co-curricular, and extra-curricular initiatives.

We understand the dynamic needs of the industry and have established strong partnerships with leading industries, research institutions, and corporations. This collaboration enables us to offer our students cutting-edge training, industry-relevant knowledge, and hands-on experiences through workshops, add-on courses, internships, and industrial visits.

Our carefully curated curriculum goes beyond the classroom, focusing on practical skills, soft skills development, and research-based learning to ensure that our students are not just prepared for their careers but are empowered to innovate, lead, and excel in their respective fields. At MSRCASC, we cultivate a culture of curiosity, creativity, and lifelong learning, preparing our students to thrive in a rapidly changing world. Join us and be part of a community that shapes the future!

## About The Department

The Computer Science department offers MCA program autonomous from the academic year 2024-25 with an intake of 60, affiliated to Bengaluru City University approved by AICTE. The department is equipped with state-of-the-art infrastructure and well-equipped computer labs with good internet, servers, hardware and software support. The MCA curriculum provides a highly-varied learning orientation for students by balancing core courses, advanced elective courses and dissertation or project with constant revisions to the programme structure to match advancements in the field to keep them in sync with advances in technology and prepare them for lifelong learning.



## Message from HOD

Welcome to the Department of Master of Computer Applications (MCA). Our mission is to provide quality education, foster innovation, and nurture talented individuals to become future tech leaders. We strive for excellence in teaching, research, and industry collaboration, ensuring our students are well-equipped to tackle real-world challenges.



Our dedicated faculty and state-of-the-art infrastructure provide a conducive learning environment. We encourage students to participate in extracurricular activities, hackathons, and industry events to enhance their skills and knowledge.

The MCA program is designed to cater to the growing demands of the IT industry, focusing on practical applications, research, and development. Our goal is to produce graduates who are not only technically proficient but also possess strong problem-solving skills.

I invite you to explore our department, engage with our faculty, and take advantage of the opportunities we offer.

### Guest Lecture

#### Innovation/ Prototype Validation and Converting Innovation into Start-Up

**Date: 19<sup>th</sup> June 2025**

Entrepreneurship is the process of designing, launching, and running a new business or enterprise. The seminar was conducted on 19<sup>th</sup> of June and lead by Naren Narayana. It involves taking calculated risks, innovating and adapting to changing market conditions. Entrepreneurship plays a vital role in driving economic growth, creating jobs and fostering innovation.

#### Key Takeaways from Entrepreneurship

- Social Impact and Sustainable Development: Entrepreneurship can address social and environmental challenges, promoting sustainable development and inclusive growth.
- Risk-Taking and Resilience: Entrepreneurs must be willing to take calculated risks and adapt to changing circumstances.



India's entrepreneurial landscape is thriving, driven by government initiatives, a growing start up ecosystem, and increasing investment in emerging technologies. With the right support and resources, entrepreneurs can capitalize on the country's growing economy and create innovative solutions that drive growth and prosperity.

### Industrial Visit- ISRO

Date: 9<sup>th</sup> July 2025

During our recent visit to ISRO, we attended an engaging lecture on satellites, their components, and ISRO's plans. The interactive session was led by a knowledgeable speaker who explained satellite technology, including communication, navigation, Earth observation, and scientific satellites. We learned about satellite components like payloads, buses, solar panels, and propulsion systems.

- **Inspiration:** To motivate students towards careers in science, technology, engineering, and space research
- **Understanding ISRO's Role:** To gain insight into ISRO's contributions to national development and global space exploration.
- **Educational Exposure:** To learn about India's space missions and satellite technology.

India's space journey began with Aryabhata in 1975, followed by SLV-3 placing Rohini in orbit in 1980. Chandrayaan-1 (2008) found water on the Moon, and Mangalyaan (2013) reached Mars on its first attempt. Chandrayaan-2 (2019) had a successful orbiter, while Chandrayaan-3 (2023) achieved a historic landing on the Moon's south pole. Aditya-L1 (2023) was India's first solar mission, and XPoSat (2024) its first X-ray polarimetry satellite. The upcoming Gaganyaan mission will be India's first human spaceflight.

The industrial visit to ISRO was a highly enriching experience for us as MCA students. It provided valuable insights into real-time applications of technology in space research and satellite communication. The exposure to advanced systems and India's achievements in space science was both inspiring and informative. Overall, the visit broadened our understanding of how theoretical knowledge is applied in cutting-edge industries

# MCA INSIGHTS

## EVENTS



# MCA INSIGHTS

## EVENTS

### Workshop

#### “Cloud Computing Concepts, Applications and Future Ready Skills”

Date: 14 to 16 July, 2025

The workshop was inaugurated by Mr. Abhishek Madeshia, CTO & Trainer, and Mr. Seshu Kumar G, Founder & CEO. HOD Dr Prathiba V Kalburgi, Faculty and students warmly greeted the guests, and their insightful introduction marked the start of the technical sessions.

A cloud computing workshop explored the latest trends and innovations in cloud technology. Industry experts shared insights and experiences, providing hands-on training and practical knowledge. The workshop covered cloud infrastructure, migration strategies, security, and scalability. Participants gained a deeper understanding of cloud computing's potential through interactive sessions and discussions. The workshop fostered networking opportunities among professionals and academics in the field.



The three-day Cloud Computing workshop was highly informative and engaging. Students gained hands-on experience on both AWS and Google Cloud platforms. Practical sessions enhanced our understanding of cloud services and deployment. Motivational sessions inspired us to explore career opportunities in cloud technologies. The workshop bridged the gap between theoretical concepts and real-world applications.

# MCA INSIGHTS

## EVENTS

### Career Guidance

#### Event Title: Building Tech Skills & Stage Presence

Date: 17th July 2025

The workshop on “**Building Tech Skills & Stage Presence**” commenced with a warm welcome to the esteemed guest, **Mr. Seshu Kumar G, Founder & CEO of LYFAUX Technology Private Limited. Dr. Prathiba V Kalburgi**, Head of the Department, along with the faculty and students, extended heartfelt greetings to the dignitary.

The Department of MCA organized this Career Guidance Program to help students of the **2nd semester** enhance both their technical skills and stage presence, with the goal of making them industry-ready through stronger technical foundations and improved presentation skills.

The session proved to be highly interactive and insightful. Students gained valuable guidance on career planning, technical skill development, and effective self-presentation, equipping them with the confidence and clarity needed to excel in the corporate environment.



# MCA INSIGHTS

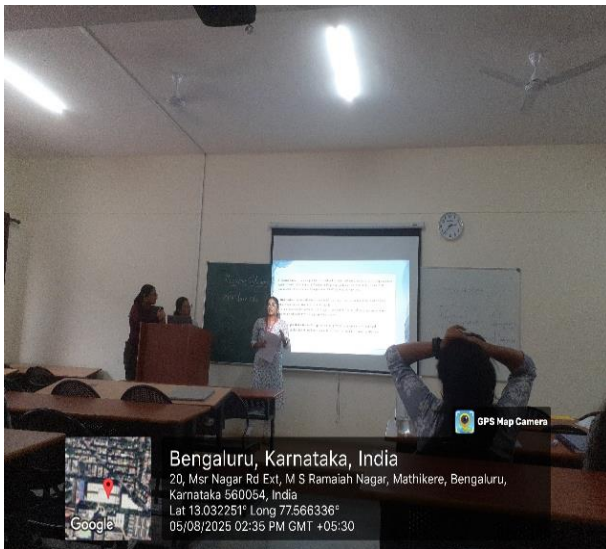
## EVENTS

### Seminar

#### Advanced Algorithmic Techniques: From Backtracking to NP-Completeness

Date: 5th July 2025

The Department of Master of Computer Applications organized a seminar on “**Advanced Algorithmic Techniques: From Backtracking to NP-Completeness**” on **5th August 2025** at the **MCA Classroom**, under the guidance of **Lt. Lakshitha H S Murthy**. The session focused on advanced algorithmic strategies such as **backtracking, branch and bound, graph algorithms, and NP-completeness**, highlighting their significance in solving complex computational problems and strengthening the theoretical foundations essential for both academic research and industry applications.



# MCA INSIGHTS

## EVENTS

### Seminar

#### DBMS Essentials: Transaction Management, Recovery, and NoSQL Databases

Date: 6th July 2025

The Department of Master of Computer Applications organized a seminar **“DBMS Essentials: Transaction Management, Recovery, and NoSQL Databases”** on 5th August 2025 at the MCA Classroom, under the guidance of **Dr. Prathiba V Kalburgi (HOD)**. The session focused on advanced database concepts such as transaction management, concurrency control, and database recovery, emphasizing their importance in maintaining data integrity, reliability, and consistency in real-world database systems.

