



MASTER OF  
COMPUTER APPLICATIONS

# MCA

[svyasa.edu.in](http://svyasa.edu.in)



**S-VYASA**  
*Deemed-to-be University*  
SCHOOL of ADVANCED STUDIES

**NAAC**  
**GRADE A+**  
ACCREDITED UNIVERSITY

# MILESTONE JOURNEY



1975  
Establishment  
of S-VYASA



1985  
First Research  
publication in  
British Medical  
Journal



1988  
SIRO (Scientific &  
Industrial Research  
Organisation)  
Recognition



2011  
Center for  
Excellence by  
Ministry of  
AYUSH



2007 - 2012  
ICMR Research  
Center Approval  
For Advanced  
Research in Y & N



2002  
Deemed-to-be  
University Status by  
Ministry of  
Education, GOI



2013  
Listed in Category  
'A' by Ministry of  
Education, GOI



2014  
Awarded UGC  
12B Status for  
High Standards of  
Education & Research



2017  
A+ Grade - Cycle II,  
NAAC  
Accreditation



2023  
A+ Grade - Cycle III,  
NAAC  
Accreditation



2019  
Awarded KSURF  
4 Star Specialist  
University Status



2018  
Awarded Category-1  
University Status  
by UGC



2024  
Opened World Class  
(2nd Campus) at  
Global Tech Park

# | SHAPING FUTURE INNOVATORS



**PADMA SHRI**  
**Dr. H R Nagendra**  
President, S-VYASA

Welcome to **S-VYASA School of Advanced Studies**, where the engineers and innovators of tomorrow are nurtured. In a world demanding more than just technical skill, our **MCA** programme blends advanced computer applications with holistic development. At **S-VYASA**, computing transcends codes and protocols – it's about driving sustainable innovation with creativity and ethical responsibility.

Join us on a transformative journey where your skills are sharpened, your potential is empowered, and your future is built on a foundation of excellence.

A VISIONARY LEADER, Dr. H R NAGENDRA PIONEERED THE INTERNATIONAL DAY OF YOGA AND BRIDGED THE **WORLDS OF SCIENCE AND HOLISTIC WELL-BEING.**

## ABOUT S-VYASA

A LEGACY FORGED AT NASA, FLOURISHING AT S-VYASA

S-VYASA stands on the visionary foundation of **Padma Shri Dr. H R Nagendra** — the 'Yoga Scientist.' From NASA's cutting-edge research to championing the International Day of Yoga, his journey shapes our distinctive approach to education.

S-VYASA Deemed-to-be University, School of Advanced Studies (SAS) is India's leading university, accredited with **NAAC A+** and approved by **AICTE**. At S-VYASA, students discover the transformative power of education through a variety of Programmes ranging from undergraduate to PhD, all within a supportive, creative, and professional environment. The university blends traditional approaches with modern advancements, preparing students for successful careers by teaching practical skills, fostering industry connections, and providing real-world experiences.

S-VYASA School of Advanced Studies is India's leading university, accredited with NAAC A+ and approved by AICTE. The university blends traditional approaches with modern advancements, preparing students for successful careers through practical skills, research excellence, and industry collaboration.



From NASA to S-VYASA



## PROGRAMME OVERVIEW

The Master of Computer Applications (**MCA**) programme is a two-year postgraduate course designed to cultivate a comprehensive understanding of computer software development's theoretical foundations and practical applications within the IT industry. Structured across four semesters, the programme equips graduates with strong knowledge and skills relevant to the ever-evolving technological landscape.

Career opportunities include Software Developer, System Analyst, Database Administrator, Web Application Developer, and more. This makes the MCA programme highly valuable in fields requiring a profound understanding of computing and its applications.

## ADMISSION ELIGIBILITY

**Educational Qualification:** Candidates who have completed a **three-year Bachelor's Degree in BCA or B.Sc. Computer Science** from a recognized university under the UGC, or an equivalent qualification from any foreign university, are eligible for admission. In addition, candidates who have pursued a **Bachelor's Degree in any discipline with Mathematics as a subject** are also eligible to apply.

# PROGRAMME HIGHLIGHTS



## SPECIALISATION CURRICULUM :

The MCA curriculum covers essential areas like programming, data structures, databases, networks, and software engineering, with options to specialize in AI & ML, Cyber Security, Cloud Technology, Data Analytics, and IoT.

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## HANDS-ON LEARNING :

The MCA programme emphasizes practical experience through labs, workshops, and training, enabling students to apply theory to real-world challenges while designing, building, and testing technology solutions.

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## INNOVATIVE PEDAGOGICAL PRACTICES :

The MCA programme adopts modern teaching methods, combining experiential learning, technology, management, and wellness practices like yoga to create a holistic, student-centered learning experience.

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## INDUSTRY-RELEVANT SKILLS & COLLABORATIONS :

The MCA programme equips students with cutting-edge tools, certifications, and methodologies while fostering strong industry-academia collaborations with institutions like IITs, IIMs, NITs, and global universities. Guided by leaders from top organizations such as Google, Amazon, World Bank, Honeywell, Accenture, and Capgemini, students graduate ready to thrive in the fast-paced tech industry.

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## HOLISTIC DEVELOPMENT :

This programme goes beyond technical expertise, fostering essential soft skills like teamwork, communication and ethical conduct for your future career. By incorporating yoga and wellness practices, it promotes overall well-being, equipping you to manage stress and excel personally and professionally.

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## PROJECTS AND INTERNSHIPS :

The MCA programme offers projects and internships where students apply classroom learning to real-world challenges, guided by faculty and industry mentors. This experience sharpens problem-solving skills and provides valuable professional exposure.

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## PROFESSIONAL DEVELOPMENT :

Workshops, seminars, and training in communication, leadership, ethics, and entrepreneurship enhance students' soft skills, professionalism, and career readiness.

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## GLOBAL PERSPECTIVE :

Through exchange programmes, study-abroad options, and international collaborations, students gain cross-cultural exposure and a global outlook, preparing them for success in a multicultural workforce.

# PROGRAMME OUTCOMES

The Master of Computer Applications (MCA) Programme focuses on Knowledge, Skills and Abilities that students are expected to attain by the time they complete the Programme. The Programme Outcomes are designed to reflect the Programme's goals and ensure that learners are well-prepared for the demands of the industry. Students can expect to gain the following relevant skills.

## Engineering Knowledge

Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

## Problem Analysis

Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

## Design / Development of Solutions

Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

## Conduct Investigations of Complex 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.

## Modern Tool Usage

Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

## The Engineer & Society

Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

## Environment & Sustainability

Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

## Ethics

Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

# PROGRAMME SPECIALISATIONS

The Master of Computer Application (MCA) Programme at the School of Advanced Studies, S-VYASA (Deemed-to-be University) offers various specialisations from which aspiring students can choose. Following Programme Specialisations are available :

- **Cybersecurity, Ethical Hacking & Cyber Forensics**
- **Artificial Intelligence, Machine Learning & Data Science**
- **Data Science & Internet of Things**
- **Cloud Computing & DevOps**
- **Data Science & Big Data Analytics**

## SHAPING INNOVATORS THROUGH SPECIALIZED TRACKS

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#### Objective

Equip students with advanced knowledge and tools to secure digital environments, detect vulnerabilities, and investigate cybercrimes.

#### KEY SKILLS

- Penetration Testing & Ethical Hacking
- Network & Application Security
- Incident Response & Digital Forensics
- Risk Assessment & Compliance

#### HIGHLIGHTS

- Hands-on training with real-world cyber-attack simulations
- Guidance from cybersecurity experts and ethical hackers
- Exposure to global security standards (ISO, GDPR, HIPAA)
- Career pathways in Cybersecurity Analyst, Forensics Expert, and Security Consultant

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#### Objective

Develop expertise in building intelligent systems that leverage data-driven algorithms to solve complex problems.

#### KEY SKILLS

- Machine Learning Algorithms & Deep Learning
- Natural Language Processing (NLP)
- Predictive Analytics & Data Modeling
- Python, R, and AI Frameworks (TensorFlow, PyTorch)

#### HIGHLIGHTS

- Industry projects on AI-driven solutions
- Access to advanced labs and AI/ML platforms
- Opportunities to work on real-time datasets
- Roles in AI Engineering, Data Science, and Research

## MCA IN DATA SCIENCE & INTERNET OF THINGS (IOT)

### Objective

Integrate data analytics with IoT systems to enable smart, data-driven decision-making across industries.

#### KEY SKILLS

- IoT Architecture & Protocols
- Data Collection & Sensor Integration
- Real-Time Analytics & Visualization
- Cloud & Edge Computing for IoT

#### HIGHLIGHTS

- IoT labs with connected devices and sensor networks
- Projects in smart cities, healthcare, and automation
- Collaboration with industry for IoT case studies
- Careers as IoT Data Analyst, IoT Developer, or Solution Architect

## MCA IN CLOUD COMPUTING & DEVOPS

### Objective

Prepare students to design, deploy, and manage scalable cloud infrastructures while mastering DevOps practices for efficient software delivery.

#### KEY SKILLS

- Cloud Platforms (AWS, Azure, GCP)
- Containerization (Docker, Kubernetes)
- CI/CD Pipelines & Automation Tools
- Infrastructure as Code (Terraform, Ansible)

#### HIGHLIGHTS

- Training with leading cloud platforms and tools
- DevOps workshops with hands-on labs
- Industry mentorship on real-time cloud projects
- Careers as Cloud Engineer, DevOps Engineer, or Cloud Architect

## MCA IN DATA SCIENCE & BIG DATA ANALYTICS

### Objective

Empower students to handle massive datasets, extract insights, and drive strategic decisions using big data technologies.

#### KEY SKILLS

- Big Data Tools (Hadoop, Spark, Hive)
- Data Mining & Statistical Analysis
- Data Visualization (Tableau, Power BI)
- Predictive Modeling & Business Intelligence

#### HIGHLIGHTS

- Training on real-world big data platforms
- Case studies from finance, healthcare, and retail
- Opportunities for research in big data innovation
- Careers as Data Analyst, Big Data Engineer, or BI Specialist

# EMPOWERING STUDENTS THROUGH ROBOTICS INNOVATION

The Department of Computer Science and Applications at S-VYASA Deemed to be University, in collaboration with Acutro Technologies, has established a Robotics Innovation Lab to provide MCA and M.Sc. students with hands-on opportunities for research, project development, and skill-building in robotics, automation, and AI. This initiative enables students to work on real-world industry projects, create innovative solutions, and enhance their career readiness through practical learning, workshops, and internships, thereby preparing them for jobs and leadership roles in technology-driven industries.



# FACULTY EXCELLENCE

Led by **Dr. Sachin Sharma, Dean-CSA**, the faculty comprises a team of experienced academicians, industry professionals, and research experts who bring a blend of teaching excellence, practical insight, and industry orientation. Committed to technological innovation, digital transformation, and hands-on learning, they prepare future-ready professionals grounded in ethics and sustainability for the evolving tech landscape.

## INTEGRATED INDUSTRY AND SKILL CERTIFICATIONS

Our unique blend and scientifically designed certification construct offer students a pathway to acquiring specialised skills, enhancing their employability and advancing their careers in today's competitive job market. Some of the benefits of our industry certification integration offers are :

### KEY BENEFITS:

#### ENHANCED EMPLOYABILITY & CAREER ADVANCEMENT

Industry-recognized certifications validate students' expertise, enhance employability, and give them a competitive edge for career growth and advancement.

#### SPECIALISED SKILLS & CREDIBILITY

Specialized training in industry-relevant strategies, backed by certifications from reputed organizations, enhances credibility and career opportunities.

#### VALIDATION OF LEARNING

A certification formally acknowledges students' proficiency and can boost their confidence in their abilities.

#### FUTURE READY SKILLS

Our industry certifications keep students updated with the latest practices, ensuring they graduate with current knowledge and in-demand skills.

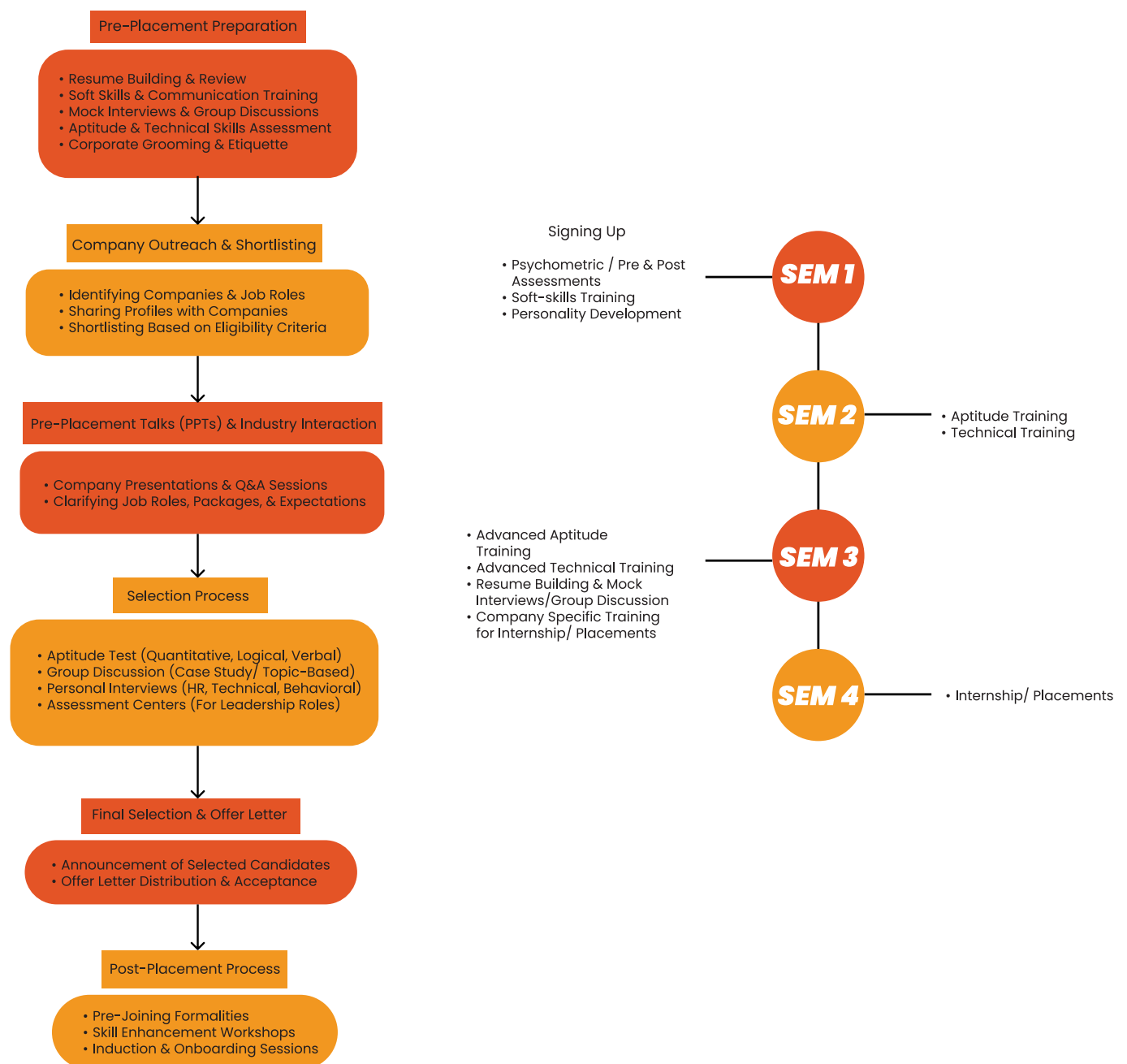
#### GLOBAL RECOGNITION

Our globally recognized certifications showcase student's skills to employers worldwide, opening doors to international careers and opportunities in multinational corporations.

# CHCA- CENTRE FOR HOLISTIC CAREER ADVANCEMENT

**Usha Rani Ramanathan, Senior Director – Placements, Training & Alumni at S-VYASA School for Advanced Studies**, brings over 27+ years of expertise in placements and career development. She has guided thousands of students by implementing skill-building workshops, mock interviews, and industry-focused training. Through strong corporate ties and personalized mentorship, she ensures students are career-ready and positioned for long-term success.

## PLACEMENT PROCESS FLOW



# CAREER OPPORTUNITIES AND PLACEMENTS

Students graduating with a MCA programme have a wide range of career opportunities in both the public and private sectors. Some of the roles they can pursue include :

Software Developer/ Engineer	Data Scientist/ Data Analyst	Database Administrator/ Database Architect	System Analyst
Network Administrator / Network Engineer	Cybersecurity Analyst	Technical Support Engineer	Quality Assurance Analyst
Project Manager	Entrepreneur	Web Developer	Mobile Application Developer
Cloud Engineer / DevOps Engineer	AI / Machine Learning Engineer	Penetration Tester	Game Developer

## INDUSTRY CERTIFICATIONS

Students earn **globally recognized credentials** from:



These validate their technical skills and enhance their job readiness across industries.

## REAL-WORLD LEARNING

- Integrated practical sessions
- Hackathons, case studies, mini & capstone projects
- Tools: Git, Salesforce, MongoDB, Zoho, Azure
- Internship-based projects with deliverables

## CAREER PREPARATION & SUPPORT

- Structured mentorship
- Resume and portfolio building
- Industry-specific training
- Mock interviews and DevOps-based deployment training



# WHY CHOOSE S-VYASA FOR MCA?

- **Industry-Aligned Curriculum** – Specializations in AI, Cybersecurity, Cloud, Data Analytics, and IoT.
- **Hands-on Learning** – Labs, projects, internships, and real-world case studies.
- **Expert Faculty** – Blend of experienced academicians, researchers, and industry professionals.
- **Global Exposure** – International collaborations, exchange programmes, and global certification pathways.
- **Holistic Development** – Focus on technical expertise, soft skills, ethics, and wellness.

## ELEVATE YOUR CAREER TODAY

READY TO TAKE THE NEXT STEP IN YOUR PROFESSIONAL JOURNEY?

APPLY NOW TO THE

## S-VYASA MCA PROGRAMME

- 1 Visit Our Website:**  
<https://svyasa.edu.in/>
- 2 Submit Your Application:**  
*Complete the online application form.*
- 3 Prepare Your Documents:**  
*Gather required documents.*
- 4 Attend an Information Session:**  
*Learn more about our Programmes and meet our faculty.*



# EDUCATION meets **INDUSTRY**

## OUR CENTRES OF EXCELLENCE



The Programme, co-developed with IBM's ICE, offers a curriculum aligned with industry standards. Students gain practical experience through projects, case studies, and mentorship from IBM professionals. With their degree, they earn industry-recognised certifications in AI, Data Science, Cloud Computing, and more.



- Courses delivered by IBM Subject Matter Experts.
- Project and internship-based learning with IBM mentorship.
- IBM ICE merchandise and learning kits for students.
- Globally recognised IBM Digital Badges.
- Internship and placement opportunities facilitated by IBM

Students receive comprehensive support to pursue international education through our collaboration with Santamonica Study Abroad Pvt. Ltd.. With over 20 years of experience and partnerships with 800+ institutions across 30+ countries, Santamonica offers:



- Guidance on university/college and course selection
- Assistance with applications, admissions, scholarships, and funding
- Visa processing and interview preparation
- Pre-departure and post-arrival support
- Opportunities for dual degrees, internships abroad, summer schools, student exchange and credit transfers

As a Cambridge Learning Partner, we offer an internationally recognised CEFR-aligned English language learning Programme. This Programme enhances students' language proficiency, providing them with a competitive edge in academic and professional settings.



- Structured learning and testing through CEFR-based assessments
- Improved academic and career outcomes
- Enhanced global mobility and employability
- Recognition by universities and employers worldwide

Our industry and edtech partners actively train and mentor students, equipping them with the skills needed for successful placements.

## INTERNATIONAL MoUs



and more than 30+ International Institutions

## NATIONAL AFFILIATIONS & MoUs



and more than 70+ National Institutions

## OUR ASSOCIATES



## INDUSTRIAL PARTNERS



ARE YOU READY TO BUILD THE FUTURE WITH US?

YOUR JOURNEY STARTS HERE

**LET'S MEET !**



SCAN TO CONNECT



**S-VYASA**  
*Deemed-to-be University*  
SCHOOL of ADVANCED STUDIES

S-VYASA Deemed-to-be University is a hub for pioneering computer education – where technical mastery meets real-world application. Our BCA program, driven by strong industry collaborations and a future-focused curriculum, empowers you to lead in digital innovation and engineer tomorrow's tech solutions.



LOCATION

**S-VYASA SCHOOL OF ADVANCED STUDIES**

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