



**Jamia Hamdard**  
Deemed to be University  
Accredited in 'A+' Grade by NAAC



2 Years | Online

# Master of Computer Application

**Course brochure**



## About the university:

Accredited A+ Grade by National Assessment and Accreditation Council (NAAC), Jamia Hamdard established as an institution of higher learning in Unani medicine, Islamic Studies, Biosciences, Pharmacy and Nursing. Our history dates back to 1989. Over a period of ten years, we have emerged as an outstanding institution of higher learning with distinct and focused online academic programs, and we believe that the tradition will be carried on.



## Vision:

To provide international quality higher education and undertake cutting-edge research in the fields of social, natural science and technology and particularly to promote the study of modern and traditional medicine systems, especially Unani-tibb, encompassing a holistic and integrative approach to healthcare and to meet societal education needs of underprivileged Indian communities.

## Mission:

- To promote and advance the cause of higher education through modern methods of teaching and advanced research in such branches of knowledge as Jamia Hamdard may continue to develop core-competence for and as may be in consonance with the emerging needs of India in general and underprivileged communities in particular.
- To co-operate, collaborate and associate with national and international organizations and institutions in any part of the world, having mission wholly or partly similar to those of Jamia Hamdard and as per the provision of the UGC regulations from time to time.
- To provide avenues for higher education leading to excellence and innovations in such branches of knowledge as may be deemed fit primarily at under-graduate, post-graduate and doctoral levels, fully conforming to the concept and idea of Jamia Hamdard.

# Online Programs

Jamia Hamdard University offers a diverse range of 100% online undergraduate and postgraduate programs designed to provide high-quality education and flexibility to students worldwide. Catering to various fields of study, including health sciences, information technology, management, and more, these programs allow students to study from anywhere and appear for examinations from their preferred location through a proctored examination platform. With an emphasis on academic excellence and practical skills, Jamia Hamdard's online courses are delivered through a robust digital platform, ensuring students receive comprehensive support and an enriching learning experience from the comfort of their homes.

## Benefits of Online Learning



**Flexibility & Convenience,  
Anytime Anywhere**



**Quality Education at your fingertips**



**Course Content Access &  
Self Paced Learning**



# **Master of Computer Application (Online Degree Program)**

Our MCA online degree program offers flexible and comprehensive learning for aspiring IT professionals. Designed for busy individuals, it allows you to pursue your academic goals without compromising existing commitments. Whether you're a working professional looking to upskill or a recent graduate aiming to specialize, our program suits diverse backgrounds and experiences. The program's flexible structure lets you study at your own pace, accessing materials and lectures online when it suits you. This is ideal for those balancing work, family, or other responsibilities.

Our curriculum covers essential subjects like software development, database management, networking, and cybersecurity, aligning with industry standards. These courses provide the practical skills and theoretical knowledge needed in today's IT landscape. You'll learn from experienced professors and industry experts who bring real-world insights into the virtual classroom. Their guidance will enhance your academic understanding and provide valuable perspectives on industry practices and emerging technologies.

## **Course Duration**

The program has a minimum duration of 2 years (IV Semesters) and learning can extend up to 4 years.

## **Course Eligibility**

- Passed B. Tech. / B.E. / B.Sc. (Engg) / BCA / B.Sc. (with Mathematics / IT / CS / Electronics / Physics as one subject passed) examination from a recognized institution/university securing at least 50%marks (or equivalent CGPA) in aggregate.
- Passed at least one paper of Mathematics at Senior Secondary (12th level) or Bachelor's level.

## **Who Can Apply**

The MCA online degree program at our institution is tailored for individuals looking to advance their IT skills and career prospects. Suitable applicants typically fall into the following profiles:

- Fresh Graduates
- Working IT Professionals or Career Changers
- Small Business Owners or Aspiring Tech Entrepreneurs



## **Course Specific Information**

**Credits for course: 94**

**Medium of Instruction and Examinations: English**

**Commencement of the Program: July and January - Every year**

# MCA Course Learning & Objectives

## Comprehensive Curriculum and Skill Development

Gain advanced proficiency in programming languages, software development methodologies, and database management systems. Develop practical skills through hands-on projects, internships, and industry-relevant assignments.

## Flexible Learning Options

Access a comprehensive curriculum covering advanced topics in computer science, algorithms, data structures, and software engineering. Benefit from flexible learning options designed to accommodate the diverse needs of working professionals and students from varied backgrounds.

## Collaborative and Interactive Learning Environment

Foster collaboration through virtual classrooms, discussion forums, and group projects. Engage with industry experts and guest speakers to enhance real-world understanding and career readiness.

## Practical Application and Real-World Experience

Design and implement scalable and secure network infrastructure solutions, mitigate cybersecurity threats, and utilize cloud computing technologies. Apply principles of artificial intelligence and machine learning to solve complex problems, and develop web and mobile applications using modern frameworks.

## Ethical Conduct and Professional Growth

Conduct research, analyze data, and present findings effectively. Collaborate in multidisciplinary teams to execute IT projects with strategic objectives, demonstrating ethical and professional conduct in accordance with industry standards and practices. Continuous evaluation and feedback mechanisms ensure high academic standards and monitor student progress.



# Course Structure

## First Semester

Object oriented programming	Data Communication and Computer Networks
Computer Organization and Architecture	Communication Skills
Database Management Systems	'OO Programming Lab
Software Engineering	Database Management Systems Lab

## Second Semester

Mathematical Foundations for Computer Applications		
Data Structures	Java Programming	
<b>Operating Systems</b>	PE - 1	PE - 2
Data Structures Lab	Java Programming Lab	

## Third Semester

Design and Analysis of Algorithms		
<b>Artificial Intelligence</b>		
PE - 3	SEE	OE
AI Lab		Lab based on SEE



## Fourth Semester

Dissertation/Industrial Project

### PROGRAM ELECTIVES (PE)

#### PE - 1

Formal Languages and Automata Theory

Compiler Design

Distributed systems

#### PE - 2

Data science

Data Mining

Knowledge discovery

#### PE - 3

Soft Computing

Machine Learning

Cryptography and Network Security

### Skill Enhancement Electives (SEE)

Android Programming

Linux and Unix Programming

ASP.net Programming

Cryptography and Network Security

### OPEN ELECTIVES (OE)

E-Governance and Smart City

Cyber physical system and IoT

Sustainable Development and Green Computing



# Course Structure



# Fee Structure

	Semester I	Semester II	Semester III	Semester IV
Registration/Application Fee (One Time)	₹500/-			
Program Fee	₹21,750/-	₹21,750/-	₹21,750/-	₹21,750/-
Total Semester Fee	₹22,250/-	₹22,250/-	₹21,750/-	₹21,750/-
Total Fee	₹ 87,500/-			
Pay Annually Fee	₹ 43,000/-		₹ 43,000/-	
Discounted Total Fee (Fees paid annually)	₹ 86,000/-			



**For More Information** ☎ 01140845859 Ⓛ [www.jamiahAMDardonline.in](http://www.jamiahAMDardonline.in)