



# MASTER OF SCIENCE

(Information Technology)

**MODE:** ODL

**USA, UK & CANADA ACCREDITATIONS**



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## MESSAGE FROM **DIRECTOR**

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### **Prof. Abhinash Kumar**

Director, Amity Directorate of Distance and Online Education

Amity Directorate of Distance and Online Education provides 'Anytime, Anywhere' education experience, intensive corporate interaction, industry-oriented teaching delivered by eminent corporate experts and world-class faculty.

Designed to suit both graduate students and working professionals, our programs adhere to UGC's stringent criteria and we are at par with the campus programs.

ABOUT

# AMITY EDUCATION GROUP

Bringing together pedagogy, content and technology, Amity Directorate of Distance and Online Education is home to a range of University Grants Commission (UGC) entitled programs meant for anytime, anywhere learning. Amity Directorate of Distance and Online Education serves the educational aspirations of students across the globe with Master's, Bachelor's, Post Graduate Certificates and Certificate programs through its well-researched curriculum, renowned faculty, cutting-edge technology and close industry-academic partnerships.

Amity Directorate of Distance and Online Education is devoted to creating a transformative learning environment. In today's environment, when content is mobile and available anytime, anywhere, learning is truly a click away.



# A LEADING GLOBAL EDUCATION GROUP

Amity Education Group is one of the largest education groups, established over twenty years ago, offering globally benchmarked education right from pre-school to Ph.D. level with over 400 UG & PG programs across various disciplines in education.



**3,35,000**

Alumni Network



**6,000+**

Faculty



**120,000**

Alumni Worldwide



**1,200**

Acres of Campuses

## UNIVERSITIES IN

- NOIDA
- GURUGRAM
- GREATER NOIDA
- JAIPUR
- MOHALI
- LUCKNOW
- MUMBAI
- GWALIOR
- RAIPUR
- KOLKATA
- RANCHI
- PATNA

## INTERNATIONAL CAMPUSES IN

- LONDON
- DUBAI
- SINGAPORE
- NEW YORK
- SAN FRANCISCO
- ABU DHABI
- MAURITIUS
- SHARJAH
- SOUTH AFRICA
- AMSTERDAM
- NAIROBI
- TASHKENT



## ABOUT PROGRAM

# MASTER OF SCIENCE (Information Technology)

**LEARNING EFFORTS:** 12/15 HRS A WEEK

**DURATION:** 2 YEARS | **CREDITS:** 102

**MODE:** ODL with fortnightly in-campus classes

Master of Science in Information Technology (M.Sc.-IT) is a postgraduate programme of 2 years duration. This master's program responds to the need for business-minded computer scientists capable of developing disruptive technology with an eye for the future and will help to master the foundations needed for any successful career in computer science, from programming and data structures to digital math and business.

IN CAMPUS CLASSES	CASE STUDY DISCUSSION	HANDS-ON TRAINING/ WORKSHOP	WEBINARS & SEMINARS	INDUSTRY EXPOSURE	MENTOR- MENTEE MEET
2 days on weekends every fortnight	Embedded with the Program's Timeline	In accordance with the program curriculum	Regular Industry Interaction	Embedded with the Program's Timeline	Periodic interaction with the course faculty



# WHAT MAKES M.SC. IT PROGRAM AT AMITY STAND OUT?

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- Allows students to study at their own pace, making it easier for working professionals or those with busy schedules to pursue their degree
- Self-learning activities spread across discussions, quizzes, assignments, poll study, reading the study material and understanding through recorded lectures.
- Incorporates interactive tools on Learning Management system for convenient study.
- In-Campus Programming Labs for programming languages like C, SQL, Java, and Python, Android Programming etc.
- Internships and Projects to students during the course.
- Webinars, workshops and industry-collaborated hands-on training sessions on emerging technologies and trending topics.
- Access to discussion forums, and support services at any time, providing flexibility for when and how they engage with course materials.
- Evaluation methods include a combination of assignments, projects, and practical assessments, allowing students to showcase both theoretical knowledge and practical skills.
- Computer-based Online examination on the premises of Amity University, Noida Campus.
- Career counseling to help students transition smoothly from academia to the professional IT field.
- Skill Enhancing Curriculum crafted in consultation with the relevant industry experts and recruiters to enhance the skills for meeting the industry needs.

# PROGRAM CURRICULUM

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## SEMESTER 1

- Computer Fundamentals and C Programming [Core Courses]
  - Computer Organization Architecture and Assembly Language [Core Courses]
  - Data Communication and Network Fundamentals [Core Courses]
  - Research Methodologies [Core Courses]
  - Wireless Communication [Allied Courses]
  - Professional Communication
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## SEMESTER 2

- Core Java [Core Courses]
  - Data Structures Using C Language [Core Courses]
  - Operating Systems-theory and Practices [Core Courses]
  - Relational Data Base Management System [Core Courses]
  - R -Programming and Hadoop [Specialisation Elective Courses]
  - Cognitive Analytics & Social Skills for Professional Development
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## SEMESTER 3

- Machine Learning using Python [Core Courses]
  - Principles and Practices of Software Engineering [Core Courses]
  - Routing and Switching Essentials [Specialisation Elective Courses-Select any 2]
  - Data Warehousing and Data Mining [Specialisation Elective Courses-Select any 2]
  - Advance Web Technology [Specialisation Elective Courses - Select any 2]
  - Statistics using R Programming [Specialisation Elective Courses - Select any 2]
  - Scaling Networks IVE [Specialisation Elective Courses - Select any 2]
  - Professional Ethics
  - NTCC
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## SEMESTER 4

- Major Project



## PROGRAM

# FACULTY



### **Dr. Sakshi Babbar**

Machine Learning & AI Faculty

She is a seasoned professional in Machine Learning, Data Science, and Generative AI with 10+ years of experience. She excels in developing advanced models and leveraging AWS technologies for deep learning. Dr. Babbar's expertise extends to a diverse array of generative AI models, including ChatGPT, and leveraging open-source alternatives for creative endeavours. A skilled communicator and leader, she is committed to translating complex technical concepts into actionable insight.



### **Dr. Tanupreet Sabharwal**

Associate Professor,  
Information Technology Department, Amity University Online

She has a total teaching & research experience of 11 years. She has published various SCI, SCIE and Scopus indexed research papers in diverse high impact factor national and international journals. Her research and teaching interests include Artificial Intelligence, Machine Learning, Deep Learning, Neuro Fuzzy Systems, Natural Language Processing, Computer Vision, Data Science, Digital Image Processing, IOT and various other emerging areas in the field of Computer Science Engineering and Information Technology.



### **Dr. Ranjit Varma**

Dy. Director  
Amity University Online

He has 28+ years of experience. He has worked as Director in AKTU affiliated college, IIMT Colleges, GGSIPU affiliated Delhi Technical Campus colleges and K R Mangalam University, Gurugram in different capacities. His research interests are in Metamaterials, Microstrip Patch Antennas, Reconfigurable antennas. He has various International and National publications in renowned journals, conferences and workshops. Dr Ranjit Varma has done his Ph. D in Analysis and Design of Metamaterial inspired Microstrip Patch Antenna.



### **Dr. Monica Rose**

Assistant Professor  
Amity University Online

She is a seasoned academician with 17+ years of experience. With flair of professional trainer, she has conducted faculty development programme and workshops in Research methodology and Analytics, Exploratory factor analysis and SPSS for business managers. She has earned degree in MBA, M.C.A, M Sc.(Comp Science) and Ph.D. She has published papers in journals and presented papers in conferences at both national and national level including IIT Delhi, IIM Shillong, IIM Indore, IIM Bodhgaya.

# ELIGIBILITY CRITERIA

## Students with Indian Education:

- Bachelor of Computer Applications (BCA)  
**OR**
- Bachelor's degree in computer science / engineering  
**OR**
- Bachelor's degree in science / commerce / arts with Mathematics at 10+2 level\*

\*Students without Mathematics at 10+2 or graduation, can also apply after qualifying the Bridge course.

## ACCREDITED. RESPECTED. TRUSTED.



ज्ञान विज्ञान विमुक्तये

Programmes Recognised by Distance  
Education Bureau (DEB) UGC



Asia's only not-for-profit university  
to get US regional accreditation



Association of Indian  
Universities



WORLD EDUCATION SERVICES

Recognised by World  
Education Services





# ADVANTAGES

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Certificates at the end  
of every Semester



Strong alumni  
network



World-class curriculum  
designed by eminent faculty  
& industry professionals



Placement  
drive and  
career assistance



Regular seminars  
& webinars by  
industry leaders



Easy-to-use LMS  
accessible anytime,  
anywhere



Printed books  
delivered at your  
doorstep



Flexible payment plan  
along with easily  
available bank loan

ALUMNI

# WORKING AT





**AMITY**  
**UNIVERSITY**  

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**ODL**