



AMITY  
UNIVERSITY  
ONLINE

# MCA WITH SPECIALISATION IN MACHINE LEARNING & AI



A unique program fostering innovation with outstanding expertise of Machine Learning and Deep Learning Techniques in the next generation leaders



24 months

Global Accreditation

Global Faculty

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## ABOUT AMITY UNIVERSITY ONLINE

Amity University Online is a value-based institution with an innovative bent towards education that impacts lives across boundaries. Through immersive technology, ground-breaking methodology and a worldwide community, we constantly endeavour to expand the horizons of minds in a virtual space around the globe. We are also home to a range of University Grants Commission (UGC) recognized programmes at Masters, Bachelors, Post Graduate Diploma level for nurturing young professionals. With 225000 students spread across countries with diverse backgrounds and a strong force of highly accomplished faculty, we create an ecosystem buzzing with new ideas and innovations.

With our eyes on the future, we keep on pushing the limits, breaking barriers, overcoming obstacles, and forging new connections. Our vision fuels our success and our consistent progress in global rankings assures us that more is yet to come.

### PRESTIGIOUS RANKING AND ACCREDITATIONS





# PROGRAM OVERVIEW

- Master the techniques of Machine Learning, Reinforcement Learning and Deep Learning with a specialized MCA degree.
- The growing implementation of the technologies creates a massive demand for the critical job roles in each domain and industry type. The program will engage, enhance and empower the learners to withstand the emerging trends and establish a strong foundation for their professional growth.
- Estimated more than 10 lakh jobs in ML&AI in India alone.
- This is a super-specialized program for ambitious professionals looking forward to making a career in ML & AI. Business growth is determined by the proliferation of ML technologies, and thus the requirements and expectations from traditional degrees have now changed. The program structure provides candidates with the flexibility to learn at their own pace. The course is practice-oriented and intended to give exposure to real-world problems. The course's objective is to familiarize learners with the scope of prediction or forecasting of parameters with the help of ML&AI techniques and their applications in various domain-specific industries. The two-year programs, along with a specialization in Machine Learning and Artificial Intelligence.

# INDUSTRY INSIGHTS

**THE DEMAND FOR MACHINE LEARNING & AI PROFESSIONALS HAS DOUBLED IN THE LAST YEAR.**

**An approximate growth of 54% is expected every year in implementing ML&AI in the industry despite the variety of sectors and domains.**

**In 2020, the ML&AI software market is reaching the forecast of 22.6 billion US dollars, whereas it is forecasted to reach 126 billion US dollars by 2025.**

## WHY PURSUE AN MCA IN MACHINE LEARNING & AI FROM **AMITY UNIVERSITY ONLINE**?

Amity University Online India's leading professional learning and higher education platform. When you choose this program, you also get access to our extensive pool of industry experts and dedicated career assistance.

- Become a globe-trotting professional in a Machine Learning & AI
- Gain the recognition of an MCA in Machine Learning & AI from a reputed institute
- Daily live classes by global faculty
- Gain practical skills through case study-based learning
- Become industry-ready with mentorship from experts
- Get dedicated career support from mentors
- Build your skills with a curriculum designed by leading academicians & industry experts

# PROGRAM HIGHLIGHTS

## Pedagogy for Course Delivery

The class will be taught using recorded video lectures, live online sessions, and case-based methods. In addition to assigning the case studies, the course instructor will spend considerable time understanding the concept of innovation through the student's eyes. The instructor will cover the ways to think innovatively liberally using thinking techniques.

- One-on-One Mentoring
- Industry-driven comprehensive curriculum
- 24/7 access to study material & video lectures
- Live interactions with Data Personnel and Corporate leaders
- Real-world Projects & Case Studies
- Face-to-face meetup's with top experts & your peers
- Career Guidance and support
- Get Alumni Status from Amity Future Academy



“ I joined ML & AI program of Amity University to make my career transition to Machine Learning professional. I am very happy that my decision to join Amity is 100% correct. Faculty are very knowledgeable. Most of them have PhD. Students can learn a lot if they spend a lot of time. ML project that I work on really help me to implement project in my company ”

**-Sunil Kumar Dubey**

Senior Manager - Technology, Reliance Industries Ltd

## Advantages of the MCA in ML&A (Program: Subject Specific Skills:

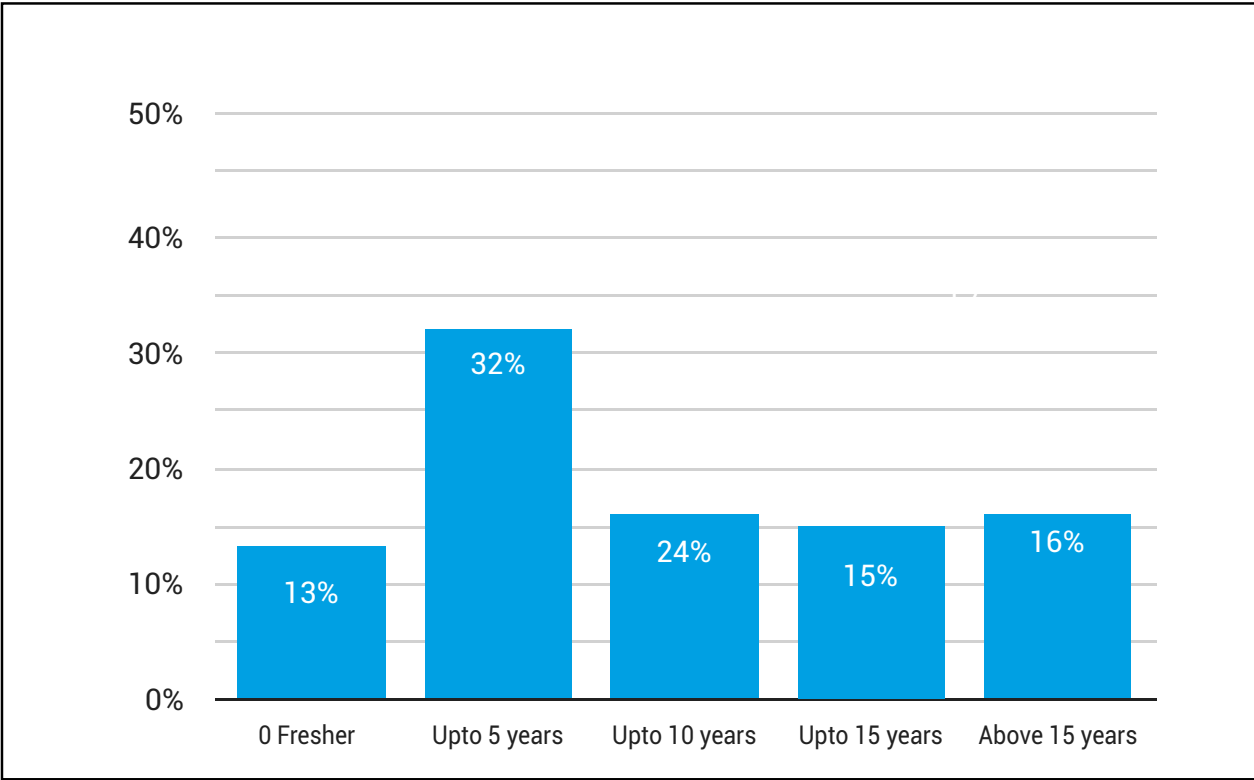
- Understand the type and structure of the given dataset and be able to derive the appropriate insights from the dataset
- Perform Data Pre-processing techniques on various types of data and build algorithms to maximum efficiency, thereby avoiding overfitting and underfitting of the models
- Visualize the multiple features of the data by using Matplotlib and Seaborn libraries in python
- Get hands-on experience of training, testing and validation of the diverse Machine Learning Algorithms
- Understand the concepts involved in the creation of the neural networks using python
- Analyze the extensive data and build the different Supervised, Unsupervised and Deep Learning models

## By the end of the MCA-ML&AI program, you will be able to:

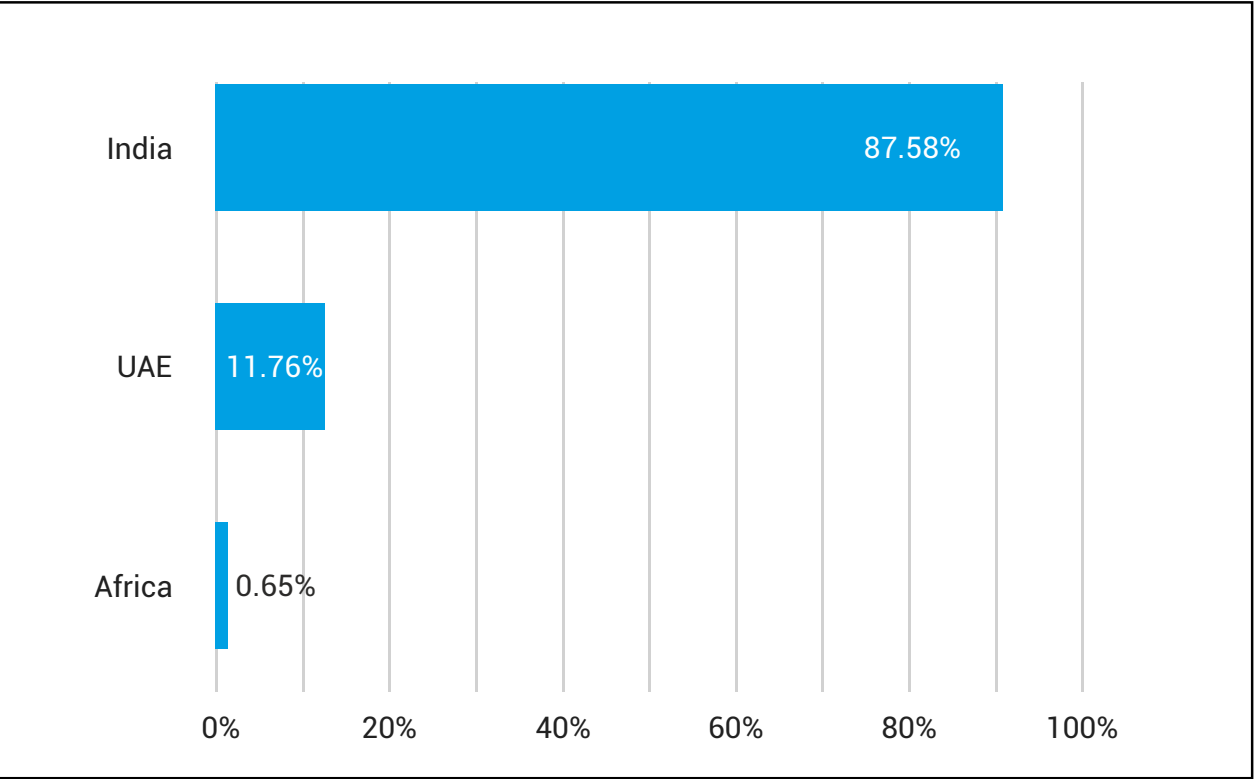
- Spearhead Machine Learning models and uncover hidden insights to problems that were once thought impossible
- Become a leader in the booming market of ML & AI by learning about its breakthroughs achieved and the future that it holds
- Gain solid awareness of the critical concepts of AI, ML, Deep Learning, Data Mining & Data Science
- Make strategically essential decisions in your professional domain with ML techniques, models and various algorithms.
- Leverage your innovative ability to develop intelligent ML & AI-based solutions using the required platforms and languages

# BATCH PROFILE

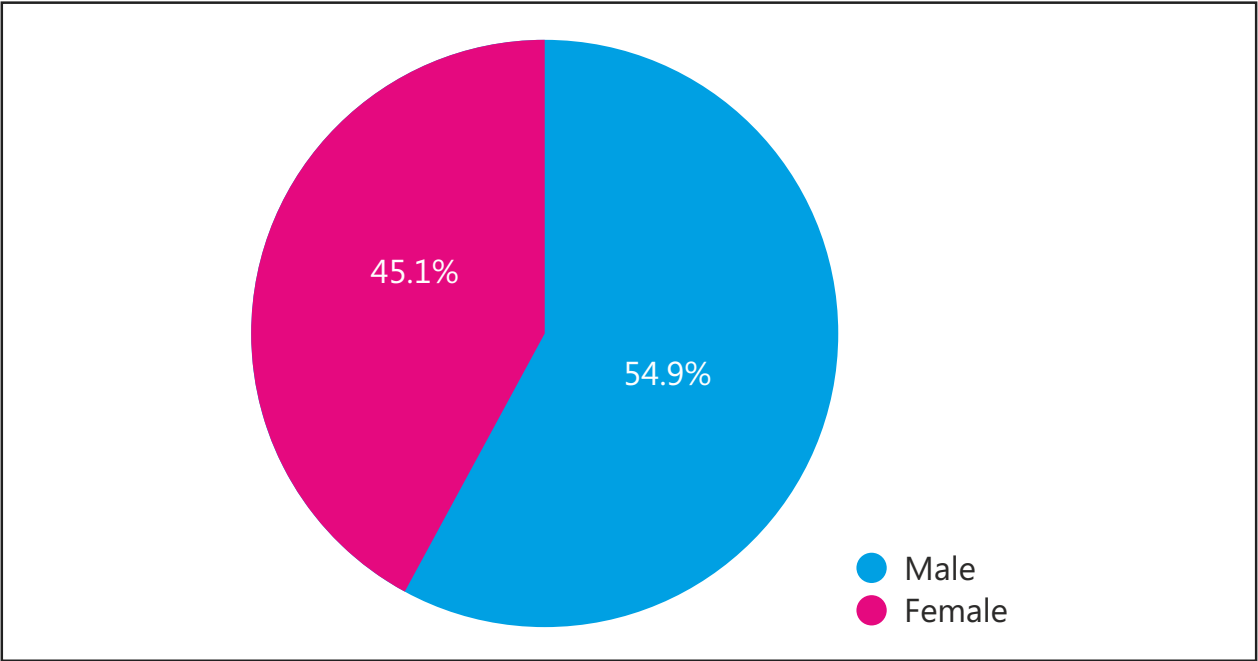
Experience wise batch profile



Country wise profile



Gender wise profile



Industrial Wise Data

Sector	%
Software	17
Banking/Finance	11%
Consulting & Professional Services	9%
Healthcare	12%
Computer Electronics & Hardware	12%
Government	5.5
Higher Education	5
Manufacturing	5
Telecommunication	4
Retail/E-Commerce	4
Energy and Utilities	3
Media/Entertainment	3
Logistics and Transportation	3
Oil and Gas	6
Aerospace and Defense1	12



# COURSE CURRICULUM

	Subject	Credits
<b>Semester 1</b>		
Course I	Graph Theory and Combinatorics	6
Course II	Advanced Database Management Systems	6
Course III	Core Java	6
Course IV	Advanced Software Engineering Principles	6
Course V	Professional Communication	4
<b>Semester 2</b>		
Course I	Research Methodology	5
Course II	Data Structures and Algorithm Design	5
Course III	Network Security and Cryptography	5
Course IV	Cognitive Analytics & Social Skills for Professionals	4
Course V	Specialization I *	5
Course VI	Specialization II *	5
<b>Semester 3</b>		
Course I	Cloud Infrastructure and Services	5
Course II	UNIX / Linux Programmingt	5
Course III	Professional Ethics	2
Course IV	Quantitative Aptitude	2
Course V	Seminar (Evaluation)	4
Course VI	Specialization III *	5
Course VII	Specialization IV *	5
<b>Semester 4</b>		
Course I	Major Project	19
<b>Duration: 2 Years • Semesters: 4 • Credits: 103</b>		

# CORE SPECIALIZATIONS



## Specialization I

Introduction to Machine Learning  
Credits: 5



## Specialization II

Foundations of Machine Learning  
Credits: 5



## Specialization III

Reinforcement Learning  
Credits: 5



## Specialization IV

Deep Learning  
Credits: 5



# FACULTY



## Mr. VIVEK CHARDE

He has 11+ years of experience in Marketing, Communications and Digital Marketing.



## Mrs. SUMEDHA CHATTERJEE

She has 10+ Years of experience in handling marketing portfolio for a diverse set of online products.



## MR. ASHISH GILOTRA

He has completed his ME from BITS Pilani and has 20+ Years of Experience in Machine Learning



## Mr. DIPTARUP CHAKRABORTI

He has 18+ years of experience in the technology industry with IT majors like IBM, Gartner, Capgemini & Mastek.



## Dr. ANJU GULLA

She has 7+ Years of experience in teaching, training and industry experience in Marketing & Digital Marketing.



## MR. NAVEEN BHANSALI

Advisory Consultant - Data Science/Machine Learning/Artificial Intelligence, He is Data Analyst at Dell EMC and an alumnus of IIM-Bangalore.



## Mr. KARAN BHATIA

He has 13+ years of hands-on experience in Multi-channel ROI driven digital campaigns, and specializes in Content and SEO strategy and product road-map and conversion optimization.



## Mr. ANKIT GARG

He has expertise in scaling content driven consumer web products for India and Global audiences and has hands-on experience of managing web-product lifecycle.



## DR. SAKSHI BABBAR

She has 14 years of experience in Education and has worked on projects like Predicting Water Quality Index of Yamuna River.



## Mr. SIDDHARTH SAXENA

He has 9+ years of experience in product development & technical management of web teams.



## Mr. SACHIN JAIN

He has 11 years of online marketing and advertising, ecommerce, social media marketing, client servicing, and account management experience of working with Google.



## DR. MOHIT KUMAR GOEL

He has completed his PhD from École polytechnique fédérale de Lausanne and B.Tech from Indian Institute of Technology, Kharagpur.

# CAREER PATHWAYS



- Enhance your career aspirations with assistance from our Virtual Job Fair, existing Corporate and Alumni network
- Get connected with our Career Counsellor towards the end of the program to be interview-ready as per the current industry requirements.

## MACHINE LEARNING & AI ROLES

### Entry Level

- Data Visualizer
- Junior Data Analyst
- Statistical Analyst
- Machine Learning Practitioner
- Modelling Data Analyst

### Mid Level

- ML Consultant
- Sr. Data Analyst
- Machine Learning Engineer
- ML Architect
- Analytics Manager
- ML Consultant
- Research Associate

### Senior Level

- Data Scientist
- Deep Learning Expert
- Sr. Data Scientist
- Deep Learning Architect
- Principal Data Scientist
- NLP Engineer
- Research Scientist

## WHAT OUR STUDENTS SAY?

“ He is Working Koi Readers as Data Annotation Internship ”  
**Karthik Itharajula**  
ML & AI Oct 2019 Batch

“ He was working Genpact as Tech lead AIML and now working AIML at Sopra Steria ”  
**Aakash Yadav**  
ML & AI Oct 2018 Batch

“ He was working with Jindal SAW Limited as Associate Vice President -Operation and now working as product Consultant at Zotalabs India Pvt. Limited ”  
**Hardik Shah**  
ML & AI Jan 2019 Batch

## APPLICATION PROCESS AND ELIGIBILITY

### READY TO ADVANCE YOUR CAREER?

APPLICATION PROCESS: Apply Now  
Call: 18001023434  
to book free counselling session.

### Eligibility

- Candidates must have completed Graduation Degree
- Applicant must possess sufficient knowledge and understanding of English Language.