UPES ONLINE
UNIVERSITY OF TOMORROW

upesonline.ac.in



MCA with Specialisation in

Data Science

A BETTER TOMORROW BEGINS TODAY

ADMISSIONS OPEN



ABOUT UPES ONLINE

UPES Online, the digital learning vertical of UPES, is aimed at empowering professionals looking to advance in their careers, students aspiring to upskill, and individuals striving to achieve personal goals. It offers a range of flexible, industry-relevant programs designed to equip learners with the skills needed to thrive in today's dynamic job market. UPES Online offers MBA, MCA, BBA, and BCA degrees, all enhanced with industry masterclasses and immersive experiences, maintaining the same level of academic rigour as traditional in-person programs. Additionally, the platform provides intensive 10-month Postgraduate Certification Programs (PGCP) in fields such as Oil and Gas, Renewable Energy, and Industrial Safety, with the integration of advanced technologies like AI, Data Science, and Cloud Computing into the curriculum.

UPES Online is an extension of UPES, a UGC-entitled, multidisciplinary, not-for-profit, research-driven university, committed to academic excellence, exemplary student outcomes, and social impact. As the 'University of Tomorrow', it pioneers transformative education, shaping learners into changemakers. With seven schools, including Computer Science, Engineering, Health Sciences and Technology, Design, Business, Law, Liberal Studies and Media, UPES provides industry-ready education to over 16,000+ students at its campuses in Dehradun.

As per the National Institutional Ranking Framework (NIRF) 2024, UPES has been ranked 46, with a rank of 42 in engineering and a rank of 41 in management. In addition to this, the university has been ranked the No.1 private university in academic reputation in India by the QS World University Rankings 2025 and is among the top 2% of universities in the world. UPES has also been accredited by NAAC with a grade 'A' and has received 5 stars on Employability (placements), by globally acclaimed QS Rating. The university has had 100% placements over the last five years. Forty-Six (46) faculty members of UPES are among the world's top 2% researchers as per Stanford University.



WHY UPES ONLINE?

RANKED 46
IN INDIA
nirf
#University Category

NO.1 PRIVATE UNIVERSITY IN ACADEMIC REPUTATION
QS WORLD UNIVERSITY RANKINGS
*QS World University Rankings 2025

NAAC A
ACCREDITED
A NAAC

UGC Entitled

45% Average Salary Hike*
(As per Alumni survey)

750+
Recruiters

12,000+ Career
Transitions

Esteemed Faculty from **IITs, IIMs and Ivy League**

Exclusive
Leadership Courses

Access to 22,000+
Alumni Community

ABOUT THE PROGRAM

The Master of Computer Applications (MCA) with a Specialization in Data Science is a postgraduate program that provides in-depth knowledge and advanced skills in computer science and data analytics, covering key areas such as software development, programming languages, algorithms, data structures, computer networks, databases, and software engineering. The program equips students to analyze complex data, design robust software systems, and manage applications across diverse domains like finance, healthcare, e-commerce, and education, preparing them to address the challenges of the digital age through technical expertise and data-driven decision-making.

KEY HIGHLIGHTS OF THE PROGRAM



Over 100 hours of self-paced tutorial videos featuring industry-oriented examples and case-study-based learning to enhance practical understanding.



Weekend live sessions conducted by seasoned academicians for in-depth learning.



Masterclasses and webinars by industry practitioners to bridge the gap between theory and practice.



A dedicated student support manager is assigned to guide and assist you throughout your academic journey.



Networking opportunities with peers to expand your professional connections and industry outreach.

in Learning

Complimentary access to LinkedIn career essential programs to enhance your job readiness and career prospects.

ELIGIBILITY

- Passed any graduation degree (e.g.: B.E. / B.Tech./ B.Sc / B.Com. / B.A./ B. Voc./ BCA etc.,) preferably with Mathematics at 10+2 level or at Graduation level. Obtained at least 50% marks in the qualifying examination.
- For candidates with Non-Mathematics /IT/Computer Science background Candidates who have not studied Mathematics /IT/Computer Science in XII std. / Graduation, will be required to complete a Basic Mathematics/Basic Computer Information Systems course, respectively. Final admission will be subject to qualifying the aforesaid course within 6 weeks of provisional admission.
- Relaxation in Eligibility Criteria for Candidates with Work Experience
  Candidates with minimum 2 years of work experience must have Bachelor's degree or equivalent in any discipline from a recognized university/institution with minimum 45 percent aggregate marks.



LEARNING **OUTCOMES**

- Demonstrate proficiency in programming languages like Python, Java, and C++ to design and implement efficient algorithms, data structures, and advanced applications that address real-world data science challenges.
- Utilise foundational and advanced machine learning models, deep learning algorithms, and statistical techniques to analyse, interpret, and derive insights from complex datasets.
- Employ cloud platforms and big data tools for processing, storing, and analysing large datasets, ensuring efficient and scalable data solutions in various domains.
- Create interactive and insightful visualisations using data visualisation tools and frameworks to effectively communicate data insights and facilitate informed decision-making.
- Showcase a strong understanding of ethical considerations, data privacy, and security in the context of data science, ensuring responsible use of data technologies to address industry-specific problems.

PROGRAM **FEES**

Indian Students

₹1,70,000

Duration

24 Months

For FAQs - Visit upesonline.ac.in

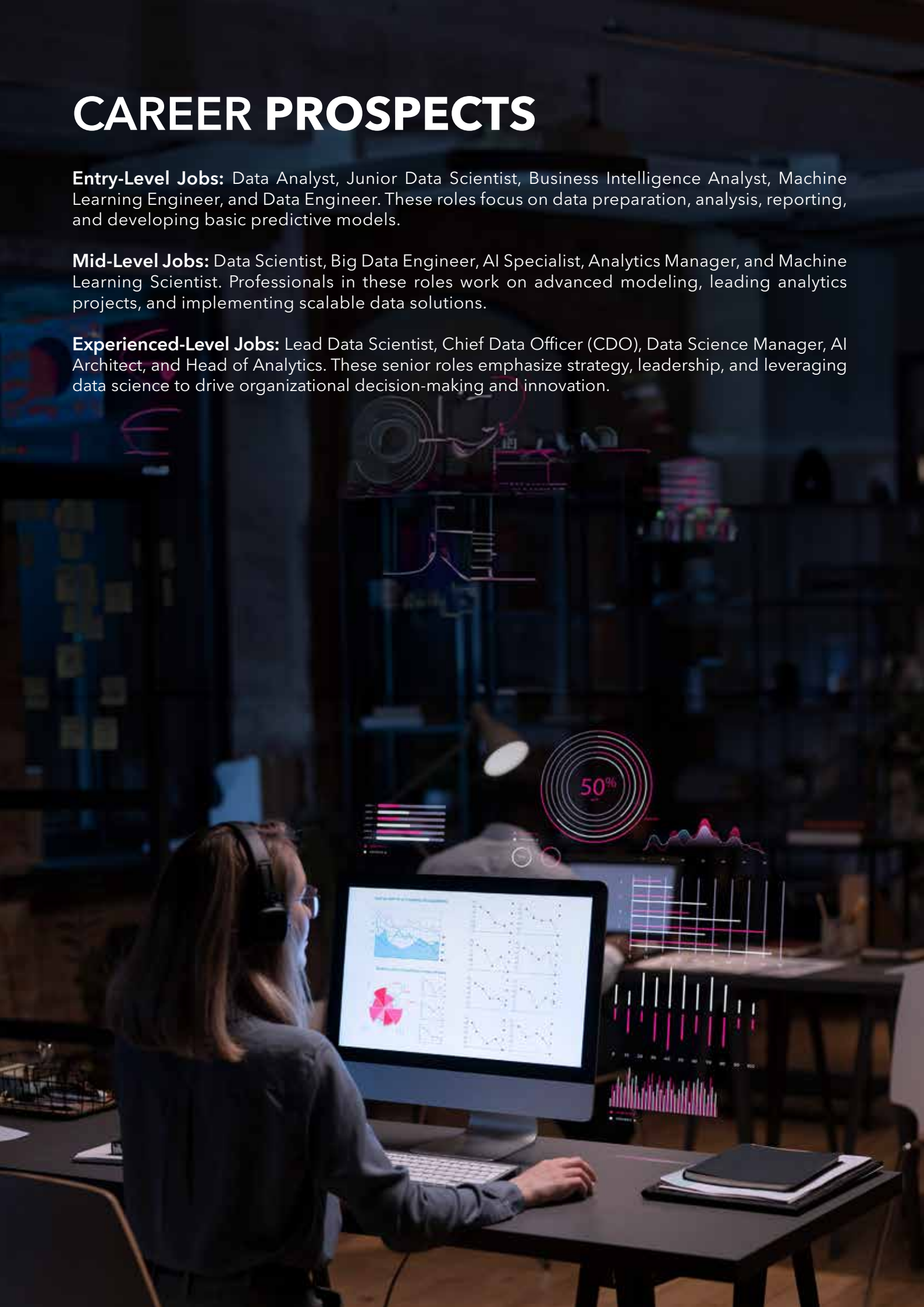


CAREER **PROSPECTS**

Entry-Level Jobs: Data Analyst, Junior Data Scientist, Business Intelligence Analyst, Machine Learning Engineer, and Data Engineer. These roles focus on data preparation, analysis, reporting, and developing basic predictive models.

Mid-Level Jobs: Data Scientist, Big Data Engineer, AI Specialist, Analytics Manager, and Machine Learning Scientist. Professionals in these roles work on advanced modeling, leading analytics projects, and implementing scalable data solutions.

Experienced-Level Jobs: Lead Data Scientist, Chief Data Officer (CDO), Data Science Manager, AI Architect, and Head of Analytics. These senior roles emphasize strategy, leadership, and leveraging data science to drive organizational decision-making and innovation.



CURRICULUM

Semester 1

- Advance Python Programming
- Data Base Management Systems
- Discrete Mathematics
- Object Oriented Programming using C++
- Advance Data Structures
- Fundamentals of Data Science

Semester 2

- Web Technologies
- Operating Systems
- Design and Analysis of Algorithm
- Java Programming
- Data Visualization and Interpretation
- Computer Graphics

Semester 3

- Object-Oriented Analysis and Design Using UML
- Computer Networks
- Advanced Java Programming
- Software Engineering and Project Management
- AR/VR Development
- Machine Learning and Deep Learning

Semester 4

- Project Dissertation
- Android Application Development
- Cloud Computing for Data Science
- Use of cloud platforms for data processing analysis and storage
- Generative Artificial Intelligence



CAREER SERVICES

Our comprehensive career services guarantee your career preparedness and employability for the professional world.

- Career Orientation
- LinkedIn/Resume building guidance
- Mentorship by industry experts
- Interview preparation

RECRUITERS

amazon
Coca-Cola
mahindra
KPMG
TATA
TATA POWER
LARSEN & TOUBRO
Adecco
monolith
Amul
kinnect



UPES ONLINE

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SCAN TO FOLLOW US ON in

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