



**MANIPAL**  
ACADEMY of HIGHER EDUCATION  
*(Institution of Eminence Deemed to be University)*

You Can Be  
The Next **Game  
Changer**

PROSPECTUS 2024-25

MSc - Data Science



**INSTITUTION  
OF EMINENCE**  
by Government of India



NAAC A++  
Accredited



**online**  
**MANIPAL**



**100%  
Online**

★ RANKED 6



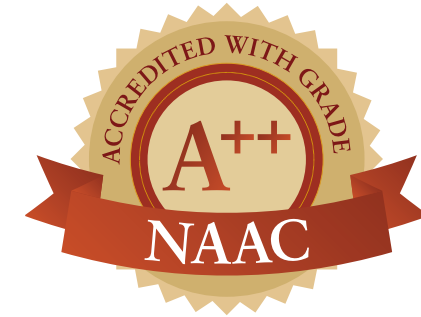
Amongst India's Top 10 Universities in 2023

★ RANKED 25



Amongst World's Top Universities for Quality Education in 2023

⚙️ ACCREDITATION



Achieved Highest Accreditation Grade by NAAC

★ RANKED 600-800



#601-800 in World University Rankings 2024

## Manipal Academy of Higher Education (MAHE) Rankings

These rankings validate our academic model, pedagogy, and educational quality while establishing academic credibility and certifying a graduate's credentials to employers.

⚙️ ACCREDITATION



Among India's Few Universities Granted IOE Status

★ RANKED 1



India's Top Deemed Universities by ICARE - 2022

★ RANKED 215



Amongst Asia's Top Universities in 2023

★ RANKED 2



India's Top Private Universities in 2022-23

★ RANKED 251-300



#251-300 in Asia University Rankings 2023

# Give an individual a professional education and you have given him a lifestyle.

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Padma Shri awardee  
Dr. T M A Pai  
Founder  
Manipal Education & Medical Group

VISIONARY

PHILANTHROPIST

PHYSICIAN

EDUCATIONIST

BANKER



# About Manipal Academy of Higher Education

Started in 1953 with Kasturba Medical College, **Manipal Academy of Higher Education (MAHE)** is one of India's leading academic and research institutions. It is a **globally engaged institution** with active partnership with more than **250 leading universities** around the globe. And it enjoys the status of '**Institution of Eminence**' granted by the **Ministry of Education, Government of India**. It is amongst the handful of private institutions in India to have received this prestigious recognition, further accentuating its status as a world-class institution for higher education.

MAHE now offers online higher education programs to students. MAHE's online degrees and certificates are **UGC-entitled and NAAC A++ accredited** and on par with on-campus programs. Government agencies, corporate organisations, and educational institutions widely recognise **MAHE's online degrees and certificates for jobs and higher education.**

## Flagship institutions of MAHE:

Kasturba Medical College (KMC) | Manipal Institute of Technology (MIT)  
Welcomgroup Graduate School of Hotel Administration | T.A. Pai Management Institute



Change is constant! The unprecedented Covid-19 pandemic has changed the way we did curriculum transaction. Today, online education has become an integral part of the mainstream education.

MAHE takes pride in offering quality online programs to aspirants of higher education and join hands with Government's vision to increase Gross Enrollment Ratio (GER) in higher education.

**Dr. H.S. Ballal**  
Pro-chancellor  
Manipal Academy of Higher Education (MAHE)



In line with the Sustainable Development Goals, MAHE is committed to providing inclusive and equitable quality online education and promoting lifelong learning opportunities for all.

**Lt. Gen. (Dr.) M.D. Venkatesh**  
Vice-chancellor  
Manipal Academy of Higher Education (MAHE)



MAHE's online program are industry-oriented and provide continuous learning opportunity for professionals to upgrade their skills & qualification.

**Dr. Narayana Sabhahit**  
Registrar  
Manipal Academy of Higher Education (MAHE)



MAHE online program are designed using Learning Experience Design principles to ensure the desired learning outcomes. Industry oriented curriculum provides an opportunity for learners to learn the required skills.

**Dr. Manojkumar Nagasampige**  
Director  
Directorate of Online Education (DOE)  
Manipal Academy of Higher Education (MAHE)

**Learning is creation,  
not consumption.  
Knowledge is not  
something a learner  
absorbs, but something  
a learner creates.**

**Source: George Couros**



# A university of your choice



## World class education

- Access UGC-entitled online postgraduate degrees from a NAAC A++ accredited university with 70+ years of educational excellence. Learn from expert faculty who share real-world experiences.



## Industry-aligned curriculum

- Expand your domain knowledge through our modern curriculum that is aligned with industry trends. Attend live classes and access recorded lectures anytime, anywhere.



## Placement assistance

- Become a job-ready professional through placement assistance which includes resume building, mock interviews, skill assessments, and more.



## Exhaustive content & resources

- Access an exhaustive e-library with e-books, e-databases, journals, and more. Get free access to paid content on Coursera.





# A university of your choice



## Global networking opportunities

- Expand your professional networking and gain industry insights by interacting with a diverse peer group, faculty, and other industry experts.



## Attractive scholarships

- Gain access to exclusive scholarships designed for defense personnel, government employees, differently abled people & meritorious students.



## Prestigious Manipal alumni status

- Benefit from 70+ years of Manipal legacy and become a member of the reputed alumni network.

# Program delivery

Our online programs are delivered through a state-of-the-art technology platform.

- Live, interactive lectures
- 1M + alumni network
- Industry expert sessions, webinars and projects
- Flexibility to learn anytime, anywhere
- High-quality education at an affordable price
- 24x7 student support centre
- Recorded online classes for flexible learning
- Collaborative learning with a diverse peer group
- Case studies, simulations & projects

parking

**Your ability to succeed is going to depend on you filling a niche that's valuable.**

Source: Scott Page



## Online degree program

# MSc Data Science

### Eligibility

- 10+2+3 year graduate degree in Statistics / Mathematics / Computer Science / Engineering / Technology or any other discipline with a minimum of two years of earning Mathematics or statistics from a recognized university / institution with an equivalent qualification recognized by the Association of Indian Universities (AIU).
- Work experience is desirable.
- Candidates who have completed 10+2 education or graduate level education outside India must produce a certificate of equivalence issued by the Association of Indian Universities.

### Fee structure

- \$ 3250 (all inclusive)
- \$ 810 (each semester)
- \$50 (non-refundable application fee)

### Duration

- 2 Years/24 Months (4 Semesters)

### Career Prospects (Upon Completion of Program)

- Data Scientist
- Predictive Modeler
- Ai Engineer
- Machine Learning Expert
- Business Intelligence Analyst
- Big Data Engineer
- Data Engineer
- Data Analyst
- Data Visualization Specialist
- Database Administrator

With a perfect blend of machine learning, big data analytics, and statistics, this master's program will equip you with technical, analytical and leadership skills you need to build a distinctive career in Data Science.

# MSc Data Science | Program structure

## First semester

Computational Mathematics

Probability and Probability Distribution

Programming with R and Python

Statistical Inference

Database Management

## Second semester

Linear Regression Models

Categorical Data Analysis and  
Generalized Linear Models

Distributed Algorithms and Optimisation with  
Hadoop and Spark

Stochastic Processes

Design and Analysis of Experiments

Mini Project

## Third semester

Longitudinal Data Analysis

Machine Learning methods

Deep Learning and Text Mining

Bayesian Statistical Modelling

Elective 1 (Choose one) -  
Health Technology Assessment  
Image Processing and Analytics

Elective 2 (Choose one) -  
Nonparametric and Nonlinear  
Regression Models  
Time Series Analysis

## Fourth semester

Programming in SAS for Analytics

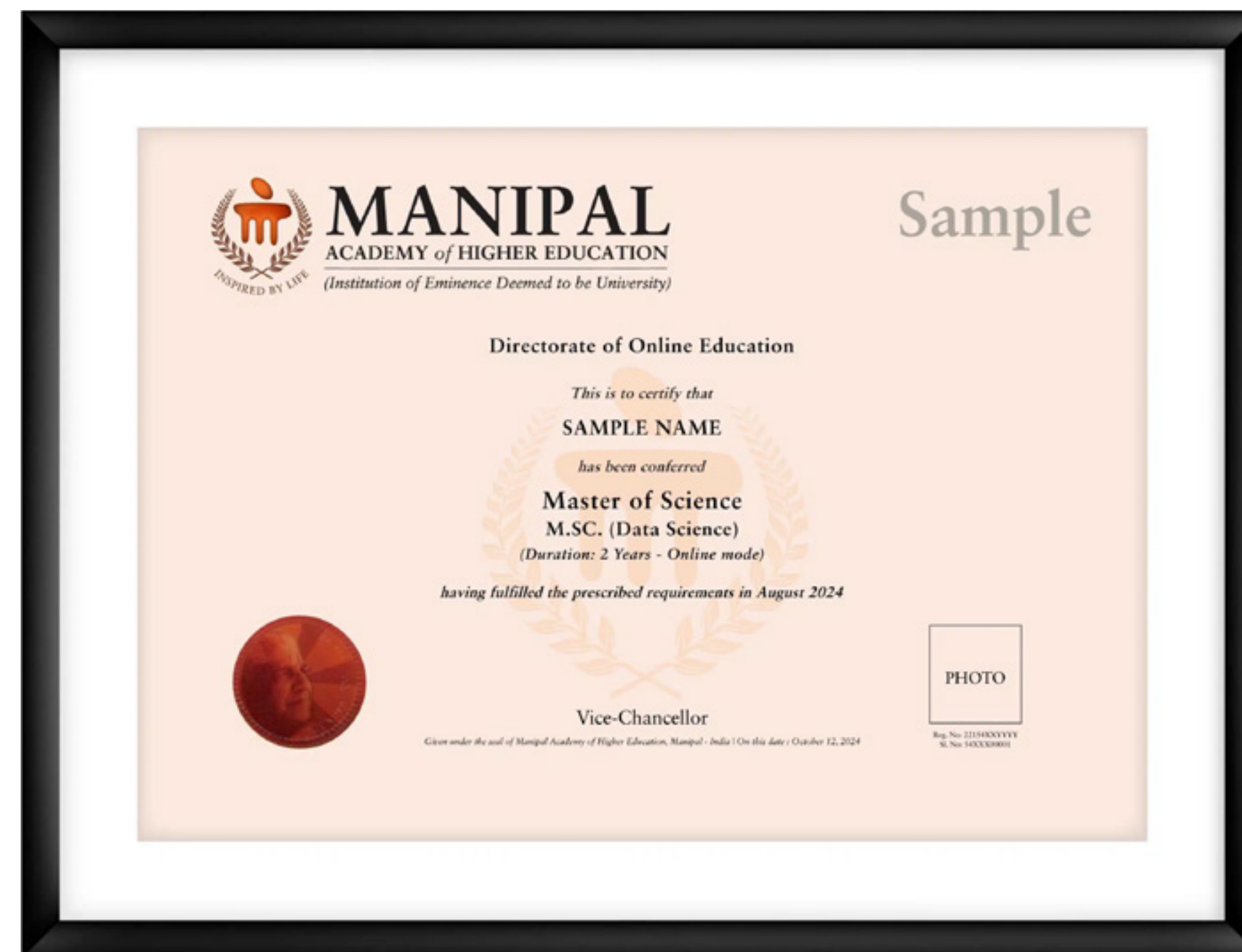
Applied Data Analytics

Research Methodology

Capstone Project

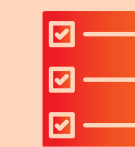
- All courses including the elective carry 3 and 4 credits each.
- The major project during the final semester carries 12 credits.

# Sample certificate



Globally recognized and widely accepted by governments and organizations, the online degrees offered by Manipal Academy of Higher Education are at par with on-campus degrees and open doors to better professional opportunities.

# Get onboard



## Choose a program & register

Choose the program you want to pursue & register by filling in your basic details and paying the application fee.



## Provide educational & work details

Fill in your educational & work experience-related details.



## Pay program fee

Pay the admission fee for the first semester /year or full program.



## Upload documents & submit application

Upload supporting documents & submit your application to complete the process.

# Meet the Manipal Group alumni who have emerged as world leaders!



**Satya Nadella**  
CEO  
Microsoft Corporation



**Banmali Agrawala**  
President  
Infrastructure, Defence  
and Aerospace,  
Tata Sons



**Rajeev Suri**  
CEO  
Inmarsat



**Vikas Khanna**  
Michelin Star Chef



**Dato Dr. Sheikh  
Muszaphar**  
Malaysia's First  
Astronaut



**George Muthoot**  
Chairman Muthoot  
Group



# Testimonials



**Mayank**

I have over 10 years of work experience in IT working with Google. I wanted to upskill myself and expand my knowledge in data science. MAHE's online MSc in data science program has helped me improve my knowledge.



**Thomas**

My innate passion and love for learning pushed me to pursue an online degree at the age of 62. I thank Online Manipal for this wonderful opportunity and for constantly supporting me. Learning has no end.



**Abhishek Godiyal**

The course curriculum of this program is perfect for me to upgrade my skills & knowledge. The free access to paid Coursera content is extremely helpful. The learning management system is also easy to use.





**online**  
**MANIPAL**

**Manipal Academy of Higher Education**  
**Directorate of Online Education (DOE)**  
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