



VIT®

Vellore Institute of Technology  
(Deemed to be University under section 3 of UGC Act, 1956)

UGC Entitled



# Master of Science in Data Science Programme

Two Years | Mixed-mode (*Live Online and Recorded Sessions*) | VIT Alumni Status

EMPOWER YOUR CAREER WITH VIT

RANKED

#8

2023 NIRF University Rankings—India

# Programme Summary

## Master of Science in Data Science Programme

 <b>Institute Name</b> Vellore Institute of Technology (VIT)	 <b>Programme Duration</b> 24 Months	 <b>Cost</b> INR 1,50,000
 <b>Learning Mode</b> Live Online + Recorded Sessions by VIT faculty	 <b>Weekly effort</b> 16-18 hours/week	 <b>Payment Options</b> Flexible payment options available
 <b>Programme/ Course Leaders</b> Subject Matter Experts/ Mid Industry Practitioners	 <b>Eligibility</b> Graduate with minimum 50% with minimum 2 years learning of mathematics or statistics; (45% in the case of candidates belonging to a reserved category)	 <b>Certificate</b> Upon successful completion of the programme, participants will be awarded with VIT MsDS degree

### Learning Experience

- **World-class faculty -**  
Learn from the globally renowned VIT faculty
- **Course Mentors -**  
Get insights and clear doubts with industry practitioners/subject matter experts
- **Course Structure -**  
Industry 4.0 curriculum with diverse electives
- **Application-based Learning -**  
Application-based learning with industry relevant tools
- **Live Sessions -**  
Live online sessions by VIT Faculty + Doubt clearing sessions

#### Are there any LIVE sessions with the institute faculty in this programme?

This programme includes live sessions with VIT faculty and/or course mentors. (Frequency: One hour/week/subject)

#### What is the role of the Course Mentor? Are they institute faculty?

Course mentors are Industry Practitioners/ Subject Matter Experts who help with doubt clearing, cover specific topics deeper and share real-world examples wherever needed.

#### Is there a qualifying mark/ grade to get the final certification in this course?

Participants will be evaluated through a combination of an internal assessment and an end-term examination, with a 30% weightage given to the internal assessment and 70% assigned to the end-term examination. Each participant must attain a score of at least 50% in each course/subject to successfully complete this programme. The final Assessment Test (End term examination) will be conducted in centres in offline mode.

#### What will be the mode of final assessment test(end term examination)?

Final Assessment Test (End term examination) will be conducted in centres in offline mode. Currently VIT has 20 centres across India.

#### Who will conduct doubt clearing sessions?

Doubt clearing sessions are carried out by the Course mentors (via the online learning management system), as they monitor individual student progress.

#### Do I get Alumni status of the University on completion of this course?

This programme offers you VIT alumni status access, which allows you to network with other VIT alumni and a host of other benefits. However, it is important to note that these benefits are not the same as benefits offered via VIT offline programmes.

#### Can I seek a refund of the programme fees?

We strongly encourage our learners to complete the course in its entirety to fully grasp the concepts and reap the full benefits of the programme. However, if circumstances necessitate a pause in your learning journey, you may initiate a refund as per below refund policy:

- If the notice of withdrawal of admission is received by Vellore Institute of Technology 15 days or more before the formally notified last date of admission – Refund on programme fees is \*100%
- If the notice of withdrawal of admission is received by Vellore Institute of Technology in less than 15 days before the formally notified last date of admission - A refund on programme fees is 90%
- If the notice of withdrawal of admission is received by Vellore Institute of Technology in 15 days or less after the formally notified last date of admission - Refund on programme fees is 80%
- If the notice of withdrawal of admission is received by Vellore Institute of Technology in 30 days or less, but more than 15 days, after formally notified of the last date of admission - A refund on programme fees is 50%
- If the notice of withdrawal of admission is received by Vellore Institute of Technology is more than 30 days after formally notified last date of admission - Refund on programme fees is 0%

The refund policy is indicative only and the University reserves the right to make changes as per the notifications received from the concerned statutory/regulatory authorities from time to time. Any changes made in the above will be updated on the website.

#### How long will I have access to the learning materials?

You will have access to the online learning platform, all the videos and programme materials till the end of the programme. Access to the learning platform is restricted to registered participants as per the terms of agreement.

# Why Choose a Career in Data Science?

As data is the new capital of the global economy, data science can help create renewed growth, a stronger performance and more meaningful engagement at work. Having data and analytics at the centre of your work will ensure that you manage core business operational costs effectively, make the best decisions and excel in your job.

**11.5M**

Job opportunities  
(global)

**16.5K**

Job opportunities  
(India)

**INR 14 LPA**

Average salary

Source: *ETHRWorld* 2023

Source: *NASSCOM* 2023

Source: *Glassdoor, payscale* 2023

## TOP COMPANIES HIRING FOR DATA SCIENCE ROLES



*Note: All product and company names are trademarks or registered trademarks of their respective holders. Use of them does not imply any affiliation with or endorsement by them.*

## CAREER OPPORTUNITIES AFTER THE MASTER OF SCIENCE IN DATA SCIENCE PROGRAMME

Business Analyst

Big Data Analyst

Decision Scientist

Data Journalist

Machine Learning Engineer

Financial Analyst

Database Admin

Data Engineer

Data Scientist

# Transform Your Professional Journey with VIT's Online Data Science Programme

Empower your journey to data mastery with our online M.Sc. in Data Science at Vellore Institute of Technology. This programme stands as the paramount choice for working professionals aspiring to fast-track their career in data science and analytics. As an esteemed and affordable offering from a top-tier institute, it marries excellence with accessibility. Transform your aspirations into achievements, and embark on a data-driven future filled with limitless possibilities.



# Overview

The non-IT sector has seen a high increase in data science and analytics jobs, with the BFSI sector recording a third of these job openings in India, according to the latest 'Analytics and Data Science Jobs Report 2023'.

This signals that demand for data scientists who can responsibly analyse data, deploy models and further business outcomes across industries is outpacing supply for the foreseeable future. To prepare you for success in this blossoming market, **Vellore Institute of Technology (VIT) has launched the Master of Science in Data Science (M.Sc. Data Science) programme.**

This comprehensive programme will teach you how to analyse and interpret complex data sets, derive meaningful insights and make data-driven decisions across various domains. Every major company in the world is actively looking for data science talents (Deloitte 2022), and this programme will help you acquire and apply essential data science skills to boost your career while alleviating bottlenecks and improving business outcomes.

## Elevate Your Career with Data Brilliance

VIT's Master of Science in Data Science (M.Sc. Data Science) programme will help you dig out insights from heaps of data through its industry-focused curriculum delivered through a mix of recorded and live sessions. You will gain a competitive advantage through a solid foundation in data science concepts and enhanced knowledge through a choice of electives, such as marketing analytics, econometric analytics, financial data analytics and risk analytics, big data analytics, supply chain analytics, web and social media analytics.



### Acquire In-Demand Skills

Data science is one of the fastest-growing fields, and organisations across various industries are actively seeking professionals with data analytics and machine learning expertise. By acquiring these skills, you position yourself as a valuable asset in the job market.



### Increase Your Earning Potential

Data scientists are often among the highest-paid professionals. A master's in data science can lead to a substantial increase in earning potential, making it a sound investment in your financial future.



### Achieve Career Versatility

Data science skills are transferable across industries. Whether you start in finance, healthcare, retail or any other field, your data analytics expertise can open doors to various sectors, providing you with greater career flexibility.

# Programme Highlights



An online M.Sc. Data Science programme that is easily accessible.



A M.Sc. Data Science degree, which is comparable to a postgraduate programme obtained via traditional classroom learning.



A comprehensive curriculum with a choice of electives to blend knowledge from different domains.



Live online learning from VIT's distinguished faculty, along with recorded sessions.



Alumni status from Vellore Institute of Technology.



A well-priced, esteemed M.Sc. Data Science programme that unlocks career opportunities.



# Who Should Choose This Programme?

VIT's Master of Science in Data Science programme caters to midlevel professionals poised to take their careers to the next level. This programme will complement your existing experience and expertise by empowering you with advanced data science skills.

## Aspiring Senior Roles and Data Science Careers



This programme is tailored for those looking to step into senior roles and secure analytics-based or data science-related positions. Whether you come from tech, finance, healthcare or any industry, this programme equips you with the analytical knowledge needed to excel.

## A path to better pay, position and career growth



If you are seeking a better pay, enhanced job opportunities, and accelerated career growth, our online Master of Science in Data Science programme is your strategic vehicle. It unlocks opportunities in the data-driven world and positions you for success.

# Application-Based Learning with Tools



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# Vellore Institute of Technology (VIT) - a Place to Learn; a Chance to Grow



Ranked  
**#8 Best University**  
2023 NIRF university rankings in India



Ranked  
**#11 Best Research**  
2023 NIRF university rankings in India



**Top 3  
Institutions of India**

2022 Shanghai ARWU Ranking



VIT is the first institute in India to receive a QS four-star rating in the overall category.



VIT received five-star ratings in the teaching, employability, facilities, innovation and inclusiveness categories.



Programmes recognised by the Distance Education Bureau (DEB) of the University Grants Commission (UGC)



Fourth Cycle Accreditation of A++ (the highest grade) from the National Assessment and Accreditation Council (NAAC) in 2021



Programmes recognised by World Education Services (WES)

# Programme Modules

## Year One Learning

### Semester I

- Linear Algebra
- Probability and Distribution Models
- Exploratory Data Analysis
- Data structures and algorithms
- Python Programming

### Semester II

- Forecasting and Predictive Analytics
- Statistical Inference
- Data Base Management Systems
- Data Mining
- Artificial Intelligence

## Year Two Learning

### Semester III

- Elective I
- Elective II
- Elective III
- Elective IV
- Elective V

### Semester IV

- Elective VI
- Elective VII
- Project Work

## Elective Courses

- Big Data Analytics
- Multivariate Data Analysis
- Machine Learning
- Programming in Java
- Econometric Analysis
- Web and Social Media Analytics
- Financial Data Analytics
- Risk Analytics
- Supply Chain Analytics
- Marketing Analytics

*Note : the sequence of modules is subject to change and the final schedule will be shared during the orientation session.*

# Applied Learning via Real-Time Projects

	<b>Real Estate</b>	House Price Prediction
	<b>Retail and Ecommerce</b>	Market Basket Analysis
	<b>Healthcare</b>	Stroke Prediction
	<b>Banking and Finance</b>	Fraud Detection
	<b>Manufacturing</b>	Product Quality Optimisation
	<b>Energy, Oil and Gas</b>	Predictive Maintenance
	<b>Supply Chain and Ops</b>	Demand Forecasting
	<b>Automotive</b>	Customer Segmentation
	<b>Tourism</b>	Recommender System
	<b>Retail and E-commerce</b>	Market Basket Analysis
	<b>Media and Entertainment</b>	Sentiment Analysis



# Learn from VIT's Top Faculty

## Programme Coordinator



**Dr Tulasi Prasad Sariki**

*Associate Professor*

## Faculty



**Dr Kalyani Desikan**

*Professor*



**Dr Prabukumar  
Manoharan**

*Professor*



**Dr Rushi Kumar B**

*Professor*



**Dr Ramani S**

*Associate Professor*



**Dr E Vijayan**

*Associate Professor*



**Dr B S R V Prasad**

*Associate Professor*



**Dr Ranichandra C**

*Associate Professor*



**Dr Hannah Grace G**

*Assistant Professor Sr.*

# Credentials

- On successful completion of the programme, participants will be awarded the M.Sc. DS degree.
- Participants will be evaluated through a combination of internal assessment and an end-term examination, with a 30% weightage given to the internal assessment and a 70% weightage assigned to the end-of-term examination. Each participant must achieve a score of at least 50% in each course/subject.
- The Final Assessment Test (End term examination) will be conducted in centers in offline mode. Currently, VIT has 20 centers across India. VIT center list will be expanded.**



Note: all certificate images are for illustrative purposes only and may be subject to change at the discretion of VIT.

# Dive Deeper into the Learning Experience

VIT's M.Sc. Data Science programme embraces a cutting-edge blended format, seamlessly merging the best of both worlds. Get access to bite-sized, pre-recorded videos by VIT faculty that cater to your schedule, allowing you to learn at your own pace. These videos are complemented by weekly live sessions led by VIT's renowned faculty or subject matter experts for real-time interaction, insights and personalised guidance.

This approach is designed to empower you with the best in education while accommodating the demands of your busy life.

## Orientation

Meet your teaching faculty and module mentors, understand the programme structure and gain access to the learning management system.



## Live Online Sessions

Connect with VIT faculty or course mentors each week over live online sessions. Get guidance on modules and real-world applications, and have your questions answered by these experts.

## Learn from Top Faculty

Get access to pre-recorded, high-definition videos for self-paced learning, featuring top VIT faculty. Engage with rich content across modules.

## Networking

Discover opportunities to network with like-minded individuals. Discuss concepts and real-world scenarios across different industries.

## Support Services

Stay on track with regular follow-ups from our student support team, encouraging you to attend live sessions and submit assignments on time.

### Note :

- Weekly live sessions or any other live interaction in this programme will be conducted by either faculty members or course mentors.
- Course mentors are subject matter/domain experts who will clear your doubts and guide you through your journey.

## Graduation

Celebrate your academic achievement. Receive an industry recognized M.Sc.. DS degree from VIT, and advance your career goals.

# Be a Proud Member of the VIT Alumni Network



Receive invitations to exclusive VIT alumni events and networking opportunities.



Join fellow alumni on 26 January every year at the annual VIT Alumni Meet, held at the VIT Vellore campus, to meet friends, faculty and staff members.



Gain access to 'TRACKS', the annual newsletter that records the events and development at VIT and the activities of the VIT Alumni Association (VITAA).



Celebrate as alumni who have made prominent contributions to academics and research, corporate career, entrepreneurship and social development are honoured with the 'Distinguished Alumni Award' and young alumni (under 30 years old) who have made significant strides in their fields of expertise are honoured with the 'Young Alumni Achiever Award.'



Gain access to the VITAA website that:

1. Maintains up-to-date information of alumni and their activities
2. Acts as a professional and personal platform (batchmates, seniors and juniors)
3. Increases the leverage of the alumni network for the benefit of the alumni
4. Improves the modes of alumni-alumni and VIT-alumni communications
5. Allows alumni to submit their accomplishments in the 'Alumni Achievements' section
6. Allows alumni members to view jobs posted by other alumni and post jobs for fellow alumni

# Accelerate your career growth with Career Services

## Note:

- The career services mentioned here are offered by Emeritus. These Career Services are offered as a service that empowers you to manage your career proactively.
- Placement assistance service is available only for Indian residents.
- Job placement assistance is focused for students with 0 to 5 years of experience.
- Vellore Institute of Technology or Emeritus does NOT promise or guarantee a job or progression in your current job. VIT is NOT involved in any way and makes no commitments regarding the career services mentioned here.

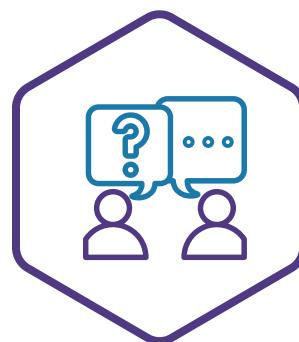
## Gain access to the following career services:



Recorded session on LinkedIn profile building



Recorded session on Resume building



Recorded session on Interview preparation



Recorded Guest Sessions



Navigating Job Search



Job placement Assistance

# Essential Programme Details

Programme Fees:

INR 1,50,000

Programme Start Date:

Technical Orientation: 14 August 2024

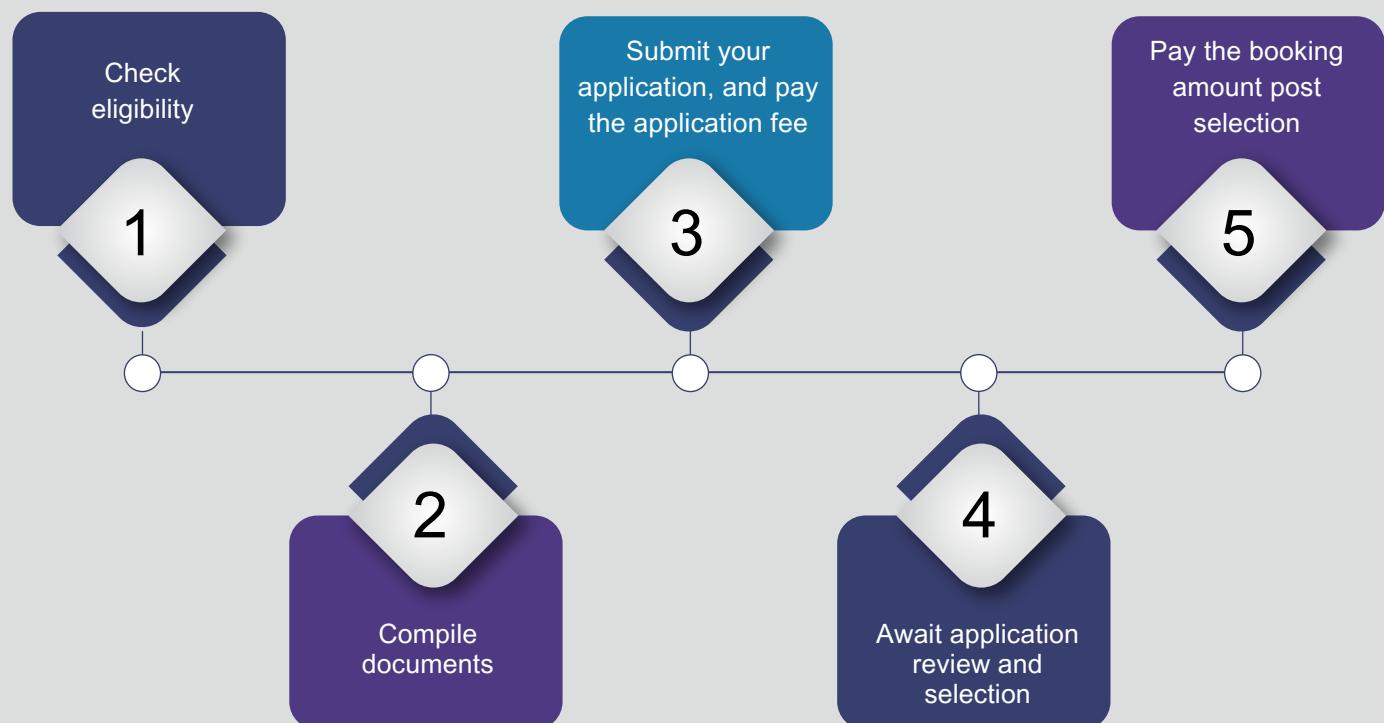
Academic Orientation: 17 August 2024

**Tentative Lives Sessions Timing (Frequency: One hour/week/subject)**

**Sessions will be conducted either on Monday to Friday — after the regular working hours or on Saturday and Sunday.**

**Please Note:** The session timings for the programme may be subject to change. As the programme extends over a considerable duration, unforeseen circumstances such as faculty availability or other operational needs may necessitate adjustments to the schedule.

## Admission Process



# Fee Structure

## Programme Fee Instalment Schedule

### Fee Schedule (option 1)

Particular	Date	Fee
Year I -1st and 2nd Semester Fee	Within 7 days post selection	INR 75,000
Year II - 3rd and 4th Semester Fee	10 August 2025	INR 75,000

### Fee Schedule (option 2)

Particular	Date	Fee
1st Semester Fee	Within 7 days post selection	INR 37,500
2nd Semester Fee	10 February 2025	INR 37,500
3rd Semester Fee	10 August 2025	INR 37,500
4th Semester Fee	10 February 2026	INR 37,500

*Note: any extra payment during the tenure of the programme will have to be borne by the students (such as arrear fees, reregistration fees, payment gateway charges, taxes, etc.)*

## Eligibility

Candidates must have a bachelor's degree of at least 3 years duration in statistics, mathematics, computer science, engineering, technology, or any other discipline, with a minimum of 2 years learning mathematics or statistics from a recognised university/institution and an aggregate grade of at least 50% (45% for reserved categories).

## Documents Required

### Category: Indian Regular

- Passport-sized photo
- Digital signature
- Proof of age (10th Marksheets)
- 12th Marksheets
- ID Card(Aadhar Card)
- UG mark statements/UG consolidated mark statements
- UG provisional/UG degree
- Experience certificate (if any)
- Community certificate (for reserved category students only)

### Category: NRI/OCI/Foreign

- Passport-sized photo
- Digital signature
- 12th Marksheets
- Proof of age (first two pages of passport)
- Visa/NRI status of parent/candidate (for NRI candidates only)
- Proof of nationality (passport/birth certificate/national ID)
- UG mark statements/UG consolidated mark statements
- UG provisional/UG degree
- Experience certificate (if any)



# Learn from the Best

VIT Online Learning was started with the objective of offering online education to aspiring learners around the globe. This institute caters to the needs of students and working professionals interested in pursuing higher education at their own pace, and it provides flexibility in learning. The development in information and communication technologies paves the way for taking education to the doorstep of learners. It aims to create and offer programmes and courses in emerging areas with a focus on quality, adhering to the regulations of statutory bodies. It has state-of-the-art facilities for the development and delivery of online programmes. It uses experienced faculty members from academia and industry to offer the programmes. It is a new flagship offering that draws from the strength of VIT's rich academic history and experience.



Connect with a  
programme adviser

SCHEDULE A CALL

Apply for  
the programme

APPLY NOW



For registration and any other information, please get in touch  
with us at [programmes@vitonline.in](mailto:programmes@vitonline.in)