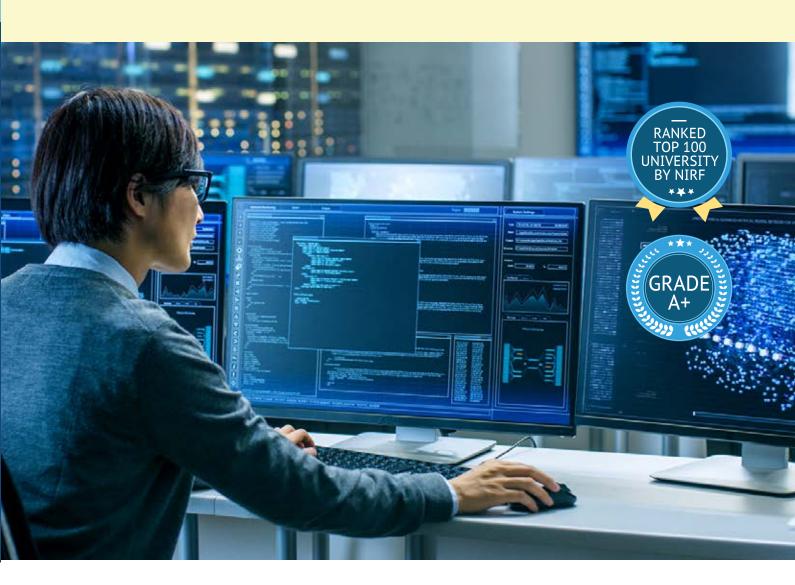


# Future proof your career

Be an industry-ready Data Science Professional







## Step into a future with great career possibilities

Businesses across industries are looking to apply Artificial intelligence, Machine Learning, and Data Science to improve business functioning. Data scientists and professionals with skills in AI & ML help change the way business functions across industries like information technology, banking & finance, advertising & marketing, consulting, healthcare & pharmaceuticals, manufacturing, government, gaming, and many more.



### **Education background**

of all data scientists have at least a Master's degree



of data scientists have a PhD

Harvard Business Review called data science the

"Hottest Job of the 21st Century"

### Learn from two nationally renowned institutions

NMIMS Global and INSOFE are both names to reckon with in the halls of the top corporates of India with alumni who have successfully transitioned to key leadership positions at Capgemini, Optum, Quadratyx, DXC technologies, Ericsson, HP, Honeywell, MosChip, Target, Tesco, Tech Mahindra, Amazon, Credit Suisse, Flipkart, Rakuten, BYJU's, Arcadis, The Math company, Sutherland, Uber, Soothsayer Analytics, HDFC Bank, SBI, and many more.









































#### Sources:

http://insidebigdata.com

http://www.glassdoor.com/

https://analyticsindiamag.com/pros-cons-of-choosing-a-career-in-data-science/)

#### Linkedin

https://www.forbes.com/sites/louiscolumbus/19/01/2020/roundup-of-machine-learning-forecasts-and-market-estimates2-020/?sh=35a10fd5c020

https://www.analyticsinsight.net/analytics-insight-predicts-1006945-job-openings-in-artificial-intelligence-in2021-/

### **Top emerging Jobs** 2020: LinkedIn



**Senior Data Scientist** ₹ 20 Lakhs Per Annum



**Quantitative Analyst** 

₹ 15 Lakhs Per Annum



**Data Scientist** 

₹ 10 Lakhs Per Annum



**Big Data Engineer** 

₹9 Lakhs Per Annum



**Machine Learning Engineer** ₹9 Lakhs Per Annum



₹8.5 Lakhs Per Annum



**Data Analyst** 

₹ 7.5 Lakhs Per Annum



**Business Analyst** 

₹7 Lakhs Per Annum

### Gain competitive advantage from an illustrious league of institutions

### About NMIMS Global

NMIMS Global, the online & distance learning arm of the SVKM's NMIMS Deemed-to-be University, is India's top Ed-tech University. The institution was founded in 1994 with an aim to provide distance education and in 2013 began the journey towards online learning making it a truly accessible university that is changing the dynamics of higher education delivery in India. With a focus on incremental innovation, the institution is unique in its approach as it uses technology across all aspects of functioning and learning delivery.

### About INSOFE

With a lineage of about a decade, International School of Engineering (INSOFE) is amongst India's largest data science/big data analytics schools. INSOFE is the brainchild of veteran scholars and academicians Dr. Dakshinamurthy V Kolluru, Dr. Sridhar Pappu, and ASL Ganapathi Kumar, and boasts of a pre-eminent team of data scientists. It has routinely ranked amongst the top data science schools in the country and has academic affiliations with several high-ranking Indian and International Universities and several prominent institute-industry. INSOFE also does high-end consulting globally for product, consulting, and services companies in various domains, helping them build their Centres of Excellence in the space of Big Data and Analytics.

### Gain academic and industry insights from expert faculty



**50**+

Nationally acclaimed scholars, PhD. Holders from Top Universities

**Patents** 

**20**+

Years average work experience 300 +

Research papers

The faculty pool consists of over 50+ world class Products Builders, Researchers and Consultants Scholars. These practicing academicians together bring depth in the approach to data science education.



Dr. Dakshinamurthy V Kolluru

M.S. and Ph.D. in Material Science and Engineering from Carnegie Mellon University, USA



Dr. Sridhar Pappu

M.S. and Ph.D. in Material **Science and Engineering** from The University of Texas at El Paso, USA



Prof. Anuradha Sharma

**Masters in Applied Statistics from Bowling Green University** 



Dr Brinda Sampat

Ph.D., M.Sc in Information **Technology, University of** Mumbai



Dr. Venkatesh Sunkad

Ph.D. in Electrical **Engineering from the** University of Colorado, USA

M.S in Electrical **Engineering from The** University of Texas at Arlington, USA



Dr Anand Narasimhamurthy

Ph.D. and M.S in Computer Science and Engineering from Penn State University, HSA

<sup>\*</sup>Faculty assigned to a subject for each semester will be at the discretion of the university. It is not necessary that the mentioned faculty will teach across all batches and in all terms.

## Why should you opt for Al and Data Science Programs from NMIMS Global?



#### Rigorous and holistic curriculum

Industry-focused curriculum offered in a flexible online blended interactive format that works for busy professionals.



#### Flexible Program Design

Choose the Program that suits your professional goals

- 6 month Professional Certificate Program
- 12 month Professional Diploma Program
- 24 month M.Sc. Programs



#### **Deep Dive Study Plan**

Participants deep dive into a subject for 15 - 20 days before the next subject begin

### **Blended Immersive Learning**



Online mode of learning via theory, Q&A Mentor Sessions, and Hands-on Projects



#### On-Campus Bootcamp\*

Bootcamp for a hands-on immersive learning experience which will include an opportunity to solve real industry problems and build a prototype.



#### Masters Dissertation\*

The Masters Dissertation encourages exhaustive study and requires students to validate research paper results and prove those results using real data under the guidance of an assigned mentor

\*Only valid for the 24-month programs

Create your success story with the NMIMS Global Seamless Online **Learning Experience** 

#### **Learning Management System**



 Live face-to-face online classes with self-paced coursework



 Avail lecture recordings within 4 hrs



 Get video transcripts for ease of learning



 Connect with faculty for addressing doubts on any topic



· Access the entire system with a mobile app



 Access to a vast NMIMS e-library



 Customised update management process to suit individual needs

#### Learn from the best



50+ nationally renowned academicians, scholars, and experts



 Option to post your query to faculty



• Option to set up a 15-minute call with faculty

Accelerate your career with industry-ready **Machine Learning and Data Science skills** 

The Data Science programs at NMIMS Global are designed to equip you with deep technical training in the field of Data Science, Machine Learning, and Artificial Intelligence, so you can address real-world business problems. The programs are designed for 



### **Learn In-Demand Skills**

Acquire the skills most frequently posted by employers and gain confidence and mastery in data science and machine learning.

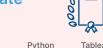
6 months

#### **Professional Certificate** in Data Science





Probability and Statistics













months

#### **Professional Diploma** in Data Science









#### Master of Science in **Artificial Intelligence**



Two Specialisations to choose from:

• Deep Learning • DevOps



### Study while you work

- · Designed for working executives
- Live, face-to-face online classes with self-paced coursework.

#### **Get Career Assistance**

- Get access to NMIMS Global Job portal to support placement activities
- Get access to 500+ top hiring partners of NMIMS Global & **INSOFE**
- · Apply to unlimited job positions through the portal till the end of the program.
- Gain CV & interview assistance



# M.Sc. in Artificial Intelligence **Deep Learning Specialisation**

### **Duration: 2 years program, 8 terms**

The M.Sc. in Artificial Intelligence with Deep Learning Specialisation aims to transform you into a data science and artificial intelligence researcher, popularly known in the industry as an 'Al Specialist'. The program equips participants who are strong in mathematics with deep technical training in the areas of core artificial intelligence methods, algorithm building, simple end to end application deployment, and courses that incorporate computer vision, text mining and natural language processing.

#### At the end of the program, you are expected to:

- Understand and solve complex machine learning problems with competencies in data mining, regression analysis, text mining, and predictive analytics
- Deploy and Scale Al applications
- Specialise in advanced areas like computer vision, **NLP and Quantum Computing**

#### **Learning Outcomes of the Program**

- Confidence and mastery in the entire Al algorithm development and basics of deployment cycle (understanding business problem to analytical and mathematical problem, data understanding, data preparation, modelling, evaluation and deployment).
- · Competency in algorithm development and

- visualisation tools including R, Python and Tableau.
- Hands-on experience with industry algorithm building and working to apply business and data thinking to complex research problems.

#### **Unique Features of the Program**

- Rigorous curriculum offered in a flexible online blended interactive format that works for busy professionals.
- Algorithm development bootcamp to solve real industry problems via robust algorithm building
- On campus career assistance during Algorithm **Development Bootcamp**
- A mentor-guided Masters Dissertation to disseminate findings and learnings of complex research problems using given data.
- Online mode of learning via theory and hands-on practical sessions.

#### **Career Opportunities after the Program**

After successful completion of the program, the participants can advance their careers in the following roles in data-driven companies like Amazon, Google, LinkedIn, Facebook among many others.



**Applied Scientist** 



**Data Scientist** 



**Quantitative Analyst** 



**Business Analyst** 

#### **Program Details**

### **Eligibility Criteria**



- Mid-Level experienced professionals with preferably 2 yrs. of work experience
- Engineering (B Tech degree) or graduation in Maths/Computer Science/Information Technology/Statistics/ Economics/M.Sc. Degree with Math components with minimum 50% marks at graduation level

### **Qualifying Skills Required for Deep Learning Specialisation**

- Math skills of linear algebra, calculus and coordinate geometry at college level are mandatory for the program.
- Programming skills like understanding of concepts like looping and iteration (such as while and for loops), branching (if-then-else constructs), functions and recursion and experience of writing simple programs that use these constructs are an added advantage
- Qualifying test is applicable at the time of admission for those candidates who do not meet the eligibility criteria of their chosen specialisation.
- If the student wishes to change their specialisation before Term 5, they need to meet qualifying criteria or appear qualifying test.





### **Payment Options**

### **Option 1**

#### **Full Fee Payment**

INR 570,000/-

### **Option 2**

#### **Full Fee Payment with 0%** interest EMI option

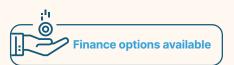
INR 6,00,000/-\*

### **Option 3**

#### **Annual Fee Payment**

 INR 3,00,000/ annum (with 0% interest EMI options available\*)

Admission Processing Fee: INR 1,500/-



Refer website for fee refund policy

<sup>\*</sup>Processing fee applicable



# M.Sc. in Artificial Intelligence -**DevOps Specialisation**

### **Duration: 2 years program, 8 Terms**

The M.Sc. in Artificial Intelligence with DevOps Specialisation aims to transform you into a product developer, popularly known in the industry as 'ML Engineer'. The program equips participants who are strong in programming desiring to deploy ML algorithms with deep technical training in the areas of advanced programming, computation science and engineering & application architecture.

#### At the end of the program, you are expected to:

- Understand and solve complex machine learning problems with competencies in data mining, regression analysis, text mining, and predictive analytics
- Deploy and Scale ML applications with concepts and skills in machine learning to prepare you to build, tune, and discover actionable insights from predictive models.

#### **Learning Outcomes of the Program**

- Confidence and mastery in the entire Al algorithm development and basics of deployment cycle (understanding business problem to analytical and mathematical problem, data understanding, data preparation, modelling, evaluation and deployment).
- Strong computational and application architecture

- knowledge to deploy and scale Al and ML applications.
- Hands-on experience with industry prototype building and working to apply business and data thinking to complex research problems.

#### **Unique Features of the Program**

- Rigorous curriculum offered in a flexible online blended interactive format that works for busy professionals
- Product development bootcamp to solve real industry problems via building of product prototypes
- On campus career assistance during Product **Development Bootcamp**
- A mentor-guided Masters Dissertation to disseminate findings and learnings of complex research problems using given data
- Online mode of learning via theory and hands-on practical sessions

#### **Career Opportunities after the Program**

After successful completion of the program, the participants can advance their careers in the following roles in data-driven companies like Amazon, Google, LinkedIn, Facebook among many others.







**Big Data Engineer** 

#### **Program Details**

### **Eligibility Criteria**



- Mid-Level experienced professionals with preferably 2 yrs. of work experience
- Engineering (B Tech degree) or graduation in Maths/Computer Science/Information Technology/Statistics/ Economics/M.Sc. Degree with Math components with minimum 50% marks at graduation level

### **Qualifying Skills Required for Dev Ops Specialisation**

- Programming background is mandatory with an understanding of concepts like looping and iteration (such as while and for loops), branching (if-then-else constructs), functions and recursion and experience of writing simple programs that use these constructs.
- Math skills of linear algebra, calculus and coordinate geometry at college level are an added advantage.
- Qualifying test is applicable at the time of admission for those candidates who do not meet the eligibility criteria of their chosen specialisation.
- If the student wishes to change their specialisation before Term 5, they need to meet qualifying criteria or appear qualifying test.





#### **Payment Options**

### **Option 1**

#### **Full Fee Payment**

INR 570,000/-

### **Option 2**

#### Full Fee Payment with 0% interest EMI option

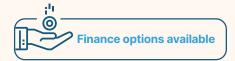
INR 6,00,000/-\*

### **Option 3**

#### **Annual Fee Payment**

 INR 3,00,000/ annum (with 0% interest EMI options available\*)

Admission Processing Fee: INR 1,500/-



Refer website for fee refund policy

<sup>\*</sup>Processing fee applicable



## **Professional Diploma in Data Science**



### **Duration: 1 year program, 4 terms**

The Professional Diploma in Data Science program aims to enable you to build a career as a data scientist armed with some of the most in-demand skills for the market. The program is designed to provide deep technical understanding of data science and core artificial intelligence methods. At the end of the program, you will be able to solve complex machine learning problems with structured and unstructured data, and develop knowledge of business aspects that are important for solving and implementing data science solutions.

#### **Learning Outcomes of the Program**

- Confidence and mastery in the entire Al algorithm development
- · Competency in algorithm development and data Visualisation tools including R, Python and Tableau
- Hands-on experience with building and applying learning to simple and complex projects involving structured and unstructured data.

#### **Unique Features of the Program**

- Rigorous curriculum offered in a flexible online blended interactive format that works for busy professionals
- 2 Hands-on Data Science Projects using given data and business problems
- Online mode of learning via theory and hands-on practical sessions

#### **Career Opportunities after the Program**

After successful completion of the program, the participants can advance their careers in the following roles in data-driven technology companies:





## Eligibility Criteria



- Mid-Level experienced professionals with preferably 2 yrs. of work experience
- Engineering (B Tech degree) or graduation in Maths/Computer Science/Information Technology/Statistics/Economics/M.Sc. Degree with Math components with minimum 50% marks at graduation level.





#### **Payment Options**

#### **Option 1**

**Full Fee Payment** 

INR 3,25,000/annum

#### Option 2

Semester-wise Fee **Payment** 

• INR 1,75,000/semester

#### Admission Processing Fee: INR 1,500/-



Refer website for fee refund policy

\*Processing fee applicable



## **Professional Certificate** in Data Science



### **Duration: 6 months program, 2 terms**

The Professional Diploma in Data Science program aims to enable you to develop and consolidate a career in data science. The program is designed to provide understanding of using data science to solve real-world business problems. At the end of the program, you will be able to understand business problems through the lens of data science, critically analyse data using programming and tools, and build statistical models for business problems.

#### **Learning Outcomes of the Program**

- Develop confidence in basic programming with R and Python.
- · Competency in statistical concepts like probability, inference, and hypothesis testing for business data analysis and intervention strategies.
- Competency in algorithm development and visualisation tools including R, Python and Tableau.
- Hands-on experience with structured data algorithm

building and working to apply business and data thinking to real world problems.

#### **Unique Features of the Program**

- Rigorous curriculum offered in a flexible online blended interactive format that works for busy professionals
- 1 Hands-on Data Science Project using given data and business problems
- Online mode of learning via theory and hands-on practical sessions

#### **Career Opportunities after the Program**

After successful completion of the program, the participants can advance their careers in the following roles in data-driven technology companies:



**Applied Data** Scientist



**Data Science Analyst** 



**Business** Intelligence **Managers** 

## Eligibility Criteria



- Mid-Level experienced professionals with preferably 2 yrs. of work experience
- Engineering (B Tech degree) or graduation in Maths/Computer Science/Information Technology/Statistics/Economics/M.Sc. Degree with Math components with minimum 50% marks at graduation level.



#### **Payment Options**

#### **Full Fee Payment**

• INR 1,75,000/-

Admission Processing Fee: INR 1,500/-



Refer website for fee refund policy

\*Processing fee applicable

Skills in Data Analytics

Using R

and Python

Statistics and Probability

in Decision Modeling - 1

Statistics and Probability

in Decision Modeling - 2

 The Art and Science of Storytelling with Data

Visualisations Hands-on Data Science

Project 1

## Solve real-world problems with Data Science & Machine Learning Skills

The curriculum of AI & Data Science Programs at NMIMS Global covers basic skills in mathematics, computer science, management, and law in the 1st 4 Terms and completes the Certificate and Professional Diploma Programs. In the last 4 Terms, for completing the M.Sc Program, you can choose to specialise in two areas: Deep Learning or DevOps . In the Deep Learning, you will build competencies in computer vision, text mining, natural language processing, and core artificial intelligence methods. In the DevOps Specialisation, you will learn advanced programming, computation science, and engineering & application architecture.

#### Term 2 Term 3 Term 4 Term 1 AI & ML **Business and AI & ML** Mathematics, **Business and AI & ML Computer Science** and Business The second term The third term focuses on The fourth term teaches The first term focuses on creating a fundamental continues to focus on business courses along participants advanced AI and base of mathematics, creating statistics and with the machine learning ML concepts along with computer science and simple model building, courses. It helps economic concepts. They business courses. along with communication participants learn about move on to learn advanced via data visualisation and consumer analytics and machine learning. They also Foundations of storytelling. It also project management, and have to complete one more **Probability and Statistics** incorporates the first introduces them to machine second Hands-on Data for Data Science learning concepts and Science Project 2 to test Hands-on Data Science Digital and Social Media Project for participants to design thinking. more advanced concepts **Analytics** and solve business apply all learnings to Business Communication Behavior Science and demonstrate problems. and Presentation Skills **Analytics** understanding of the for Data Analytics Project Management Methods and Algorithms in concepts. Essential Engineering Methods and Algorithms in Machine Learning - 2

Machine Learning - 1

Design Thinking

Al and Decision Sciences

Economics for Analysts

Hands-on Data Science

Project 2



### Term 5

#### Mathematics, Al & **ML**, and Business

#### **Deep Learning** Specialisation

In term five, participants who choose the Deep Learning Specialisation are taken through basic and advanced math courses in linear algebra, coordinate geometry and calculus. They study complex AI & ML subjects like Computer vision fundamentals, deep learning applications1-, and Business Ethics.

- Mathematical Analysis for Data Science
- Advanced Mathematical Analysis for Data Science
- Computer vision fundamentals and deep learning applications - 1
- Business Law and Ethics

#### **Computer Science** and Business

#### **DevOps Specialisation**

In term five, participants who chose the DevOps Specialisation are taken through basic and advanced programming courses. They study business subjects like **Product Management and** Business Ethics.

- Data Structures and Algorithms
- Product Management
- Business Law and Ethics

### Term 6

#### AI & ML and **Computer Science**

#### **Deep Learning** Specialisation

In term six, participants continue and complete their AI & ML advanced courses along with studying Quantitative Research Methods, and learning about end to end application deployment with Data Engineering - 2.

- Computer vision fundamentals and deep learning applications - 2
- Text mining and Natural Language Processing using Deep Learning
- Quantitative Research Methods
- Data Engineering- 2

#### AI & ML and **Computer Science**

#### DevOps Specialisation

In quarter six, participants learn Data engineering 1 and 2, and Architecting enterprise applications where they study how to scale and deploy ML algorithms.

- Data Engineering 1
- **Architecting Enterprise Applications**
- Quantitative Research Methods
- Data Engineering- 2



#### Term 7 Term 8

#### **ML Algorithm Building or Product Deployment Bootcamp and Masters** Dissertation

In term seven, participants finish most of the courses for their specialisations and undertake a ML algorithm building or a product deployment bootcamp. The type of bootcamp is based on the specialisation they have chosen which allows them to apply all the concepts they have learnt in the previous modules, and get ready for solving real world problems. They also start work on their Masters Dissertation.

- ML Algorithm building Bootcamp/Product Deployment Bootcamp
- Masters Dissertation

### **Mentor-Guided Masters Dissertation**

In term eight, participants continue to work towards completion of their rigorous Masters Dissertation.

- The Masters Dissertation requires participants to validate research paper results.
- . It enables them to think about the business problem, use data to understand how to apply research results, and prove or disprove the hypothesis
- Participants are expected to submit research results and defend them. The research papers given to students will differ based on their specialisations.

#### **Admission**

#### **Selection and Admission Process**

- 1 Application
- 2 Test/Online Interview
- ▶ 3 Selection Procedure
- ▶ 4 Documents Submission
- ► 5 Program Fee Payment
- ▶ 6 Confirmation

### Step1

### Step2



### Step3



#### **Application**

- Fill an online registration form
- Submit application fee: ₹ 1500/- + initial fee: ₹ 10,000 /-\*\*

#### **Test/Online Interview**

Admission Committee may conduct
Test / Interview as part of the selection process

#### **Selection Procedure**

- Your selection will be determined on the basis of your academic records, work experience, test scores and interview (when applicable).
- An offer letter will be shared with successful candidates

#### Step4



## Step5



#### Step6



#### **Documents Submission**

 Candidates will need to submit all the required documents mentioned in the mandatory list of documents as per eligibility criteria

### **Program Fee Payment**

- Seat reservation fee will need to be deposited within 7 days of receiving offer letter
- Full or annual program fee to be deposited within 1 month of offer letter / program start - whichever is earlier

#### Confirmation

- Your admission will be confirmed basis the selection procedure, document authentication and fee payment
- A welcome letter, ID card, student number and portal access will be shared upon successful completion of the admission process







Website: online.nmims.edu

Toll Free: 1800-1025-136 | Email id: ngasce@nmims.edu

For an in-person counselling session register on:

online.nmims.edu



**Version: December 2021**