



E&ICT Academy  
IIT Guwahati



# Executive Program in Data Science & AI

10 Months | Online Instructor Led

Improve your career prospects by gaining expertise in  
Data Science, Machine Learning, and Artificial Intelligence.



# Why Executive Program in Data Science & AI by E&ICT IIT Guwahati

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## E&ICT IITG

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Get certified from  
Top Tier-1 Institution

## Top Rank

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Ranked among India's  
Best

## Top 2

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trending careers in 2022  
(#2 Artificial Intelligence)

## 2.5 Million

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Data Science  
opportunities globally



# Who should Enroll in this Program

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- Engineers
- Project Managers
- Consultants
- Software Engineers
- Teachers



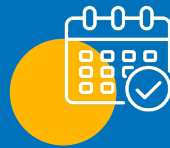
- Associates
- Operations Professionals
- Sales & Marketing Professionals
- Non IT/Non Tech professionals
- Professionals on a career break

# Program Highlights



## Certification

Get Certified by E&ICT Academy, IIT Guwahati



## 10 Months

Weekend Classes



## Campus Immersion

2-Day Campus Immersion at IIT Guwahati\*

(Depends on the availability of resources)



## Faculty

Learn from the top industry professionals



## LIVE

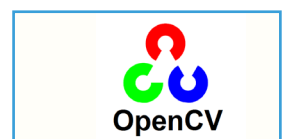
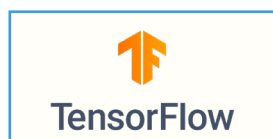
Instructor led Training



## Placements

100% career assistance

# Master 15+ Data Science Tools...



# Program Syllabus

## Term 1: Data Analysis with Python

- Data Science Fundamentals
- Recap: Python for Data Science
- Recap: Statistics for Data Science
- Data Operations with Numpy
- Data Manipulation with Pandas

## Term 2: Data Visualization Techniques

- Introduction to Data Visualization
- Data Visualization using Matplotlib
- Hands-on Pandas for Rapid Visualization
- EDA & Data Storytelling

## Term 3: EDA & Data Storytelling

- Introduction to Exploratory Data Analysis
- EDA Framework Deep Dive
- Scientific Exploration of Industry Data - I & II
- Student Presentations & Insight Delivery

## Minor Capstone Project

In a simulated environment get to work with a major Telecom company that seeks help from your team of Data Scientists to resolve a major marketing hurdle in front of them. Get a near real world exposure of working on industry problems within data science teams to reach a common end goal of helping customers win.

# Program Syllabus Cont.

## Term 4: Machine Learning Foundation

Introduction to Machine Learning

Linear Regression

Logistic Regression

Model Evaluation Techniques

## Term 5: Machine Learning Intermediate

Decision Trees

Random Forests

Dimensionality Reduction using PCA

Naive Bayes Classifier

## Term 6: Machine Learning Advanced

KNN (K- Nearest neighbors)

K-means Clustering

Ensemble Learning

Optimization

## Major Capstone Project

Experience a real world simulation of a company problem that needs to be solved using Data Science and Machine Learning. Work with a team of Data Scientists who are working towards solving issues for a company in trouble.

# Program Syllabus Cont.

## Term 7: Basics of AI and Deep Learning

Introduction to Artificial Intelligence

Introduction to Deep Learning

Components affecting Deep Learning Models

Deep Learning Model Practical with Tensorflow and Keras

## Term 8: Computer Vision (Opt either CV or NLP)

Intro to Convolutional Neural Networks

Decoding Image Components

Identifying MNIST using CNN

Preprocessing Image Data to apply CNN

## Term 8: Specialization in CV (Opt either CV or NLP)

Transfer Learning

Object Detection using CNN based Algorithms - I

Object Detection using CNN based Algorithms - II

Instance Segmentation in Images

## Term 9: Natural Language Processing (Opt either CV or NLP)

Introduction to NLP & Word Vectors

Decoding a Textual Data

NLP using Recurrent Neural Networks (RNN)

NLP using Memory Alterations

# Program Syllabus Cont.

## Term 9: Specialization in NLP (Opt either CV or NLP)

Teach Machines to Generate New Textual Data (Language Modeling)

Language Translation - English to Spanish using Seq2Seq Models

Techniques to Enhance Seq2Seq Models (Attention Mechanism)

Advanced NLP using BERT

## AI Capstone Project

In this ever evolving world, solving complex problems get easier using AI. In this capstone project you will be an AI expert who is helping a hypothetical company resolve some major challenges it faces by using AI. Get a chance to work with a team of AI specialists and a simulated environment to help you relate to real world challenges companies face regularly.

## Real World Business Use Cases





# World Class Learning Experience

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Experience a dynamic and engaging environment that inspires and challenges you to think critically. Become a worldclass Data Analytics through hands-on learning, collaboration, and interaction with experts in the field.

## Live Classes

Online Interactive

## Top Faculty

Industry Experts

## Lifetime

access to study material

## PowerBI

Data Empowered Insights

## SQL

Unleash Data Potential

## Campus

Immersion

# Career Support with 8 Powerful Sessions

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Upon enrolling in the program, you will have access to INSAID Career Support module. This module includes comprehensive career development sessions aimed at enhancing your job profile and helping you excel in your interviews.

## RESUME PREP

We'll help you build a sharp Data Science Resume.

## 1-ON-1 CAREER COUNSELLING

Get a dedicated career coach for you!

## SIMULATED MOCK INTERVIEWS

Participate in mock interviews and be prepared.

## DS INTERVIEW RESOURCES

Get access to 2023 Data Science interview resources.

*The Career Services provided by INSAID are intended to empower you to actively manage your career and are not a promise of employment.*

# Key Statistics

**10 months**

Comprehensive  
Learning

**160+**

Hours of Live  
Classes

**9**

Terms

**15+**

Tools & Frameworks

**8**

Career Assistance  
Sessions

## Get Certified from India's Premier Institution



# Why INSAID



“INSAID’s Data Science program gives in-depth knowledge and practical insights at an affordable value. The instructors at INSAID have played a vital role in shaping my career, and I’m really thankful to the entire team for that.”

- Priyanki Das, Data Science Engineer, CXsphere

## Learn from India’s Top Data Science Industry Experts



Principal Investigator



E & ICT Academy  
IIT Guwahati



Sr. Faculty



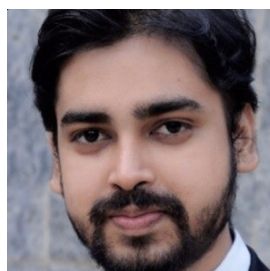
Sr. Faculty



Sr. Faculty



Data Science  
Consultant



Lead Data Scientist

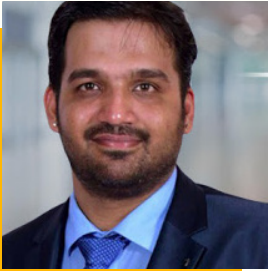


Data & Analytics  
Engagement Manager



Associate Director -  
Data Science





*I would like to thank INSAID team for helping me develop discipline needed to become a Data Scientist.*

*- Anirudh Acharya, Data Scientist, DXC Technology*



*INSAID helped me a lot to understand statistics, the different nuances, and terminologies of statistics, and how to deal with data.*

*- Debaritra Chatterjee, Data Engineer, Exponentia.ai*



*INSAID program helped me be very consistent in my journey. I loved how the course progressed from the very basics and touched upon the important topics*

*- Radhika Mirani, Data Analyst, Tiger Analytics*



*INSAID started teaching everything from scratch in a step-by-step manner. The faculty members, assignments, and the capstone project were very helpful. INSAID has helped me fulfill my dream.*

*- Arun Kumar, Data Scientist, FinTech Domain*

# Program Snapshot

## START DATE

Check website for latest batch start dates

## DURATION

10 Months

## PROGRAM TERMS

9 Terms

## ELIGIBILITY CRITERIA

Total Years of Experience: **3+ Years**

Education: **Graduate** (*more than 50% score*)

## WEEKLY SCHEDULE

Online classes on weekends

Self practice/assignments on weekdays

## PROGRAM FEE

₹ 2,00,000 + GST

Scholarships & attractive EMI options available

**Talk to your Learning Advisor**

 +91 96258 11095



 [admissions@insaid.co](mailto:admissions@insaid.co)

 [www.insaid.co](http://www.insaid.co)