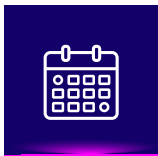# AFFINE

AI

Post Graduate Certificate Program in

Artificial Intelligence & Deep Learning

IIT - Guwahati

Program Overview

IIT Guwahati's Post Graduate Certificate Program in Artificial Intelligence & Deep Learning (PGCPAIDL) helps you acquire conceptual knowledge of AI and its application to business problems, simultaneously enhancing your future career prospects.

Programme Highlights

8-month programme for professionals from IT background

Comprehensive curriculum covering fundamentals to advanced topics

Contextually designed for working professionals with weekend sessions

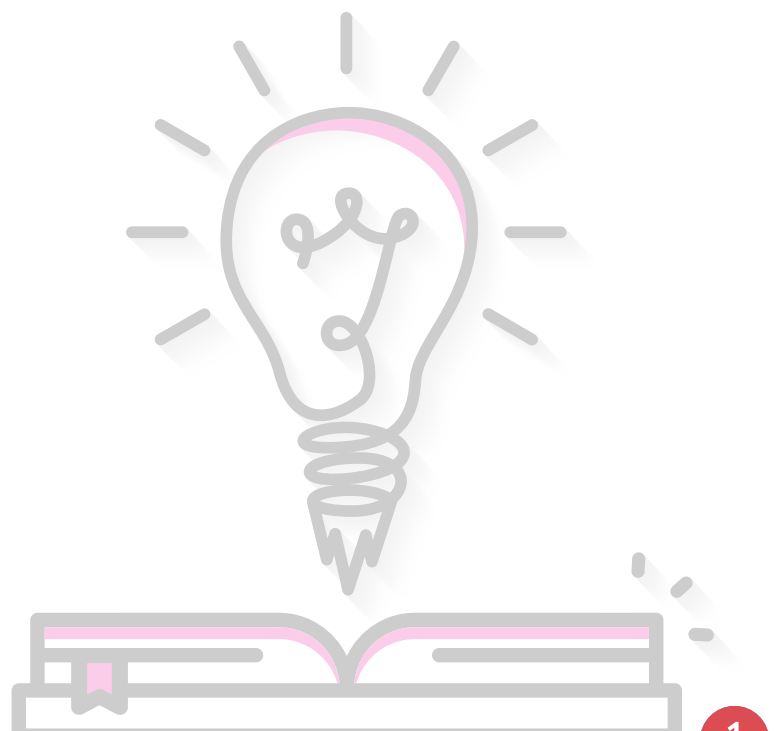5-day campus immersion at IIT Guwahati

Live online sessions by IIT Guwahati faculty, industry experts, and TSW faculty

Capstone project to demonstrate skills by solving business problems

Joint certification by IIT Guwahati and TSW

Learning Outcomes

The course is designed to provide in-depth knowledge of contemporary AI concepts and tools that enable you to lead your organisational AI strategy. At the end of the course, the participants will be able to:

Develop a conceptual understanding of AI and be able to apply it to business problems

Gain a holistic view of evolving AI tools and techniques, and their applications

Learn concepts that include Programming with Python, Tensorflow, Machine Learning, Neural Networks, Deep Learning, etc.

Ability to plan, design, deploy, and lead AI strategies effectively to enhance the efficiency of your organisational output

Programme Content

Sr. No	Module
Refresher	Maths and Statistics for AI (Self-paced)
1	Foundations of AI
2	Programming with Python
3	Data Wrangling and Data Analysis
4	Supervised Machine Learning and Text Analytics
5	Unsupervised Machine Learning
	Hackathon 1
6	Programming with Tensorflow
7	Neural Networks and Deep Learning
8	Computer Vision & Image Recognition
9	Natural Language Processing & Speech Recognition
10	Advanced AI Applications
11	Cloud Deployment of ML Model (Self-paced)
	Campus Immersion & Hackathon 2
	Capstone Project

Projects

1 Modelling based on the reviews dataset from Amazon

2 Auto tagging photos uploaded by users on Yelp review website

3 Music genre classification

4 Sentiment analysis on live Twitter feed

5 Classification of chest X-rays

6 Build a chatbot catering to customer service

7 Automate sorting of rotten produce in a supermarket

8 Predicting bone age from X-rays using Deep Learning

Pedagogy

- Case Studies & Assignments

- Capstone Project (to demonstrate skills by solving business problems)

- Live sessions by experience faculty

Programme Delivery

- The programme will be delivered in a two-way video/audio interactive mode.

- Students will attend the lectures on their own devices (Laptop/Desktop/Tablet/Mobile).

- Students will have access to a Learning Management System for referring to the content (the access will be provided for additional 6 months after program completion)

- Live online sessions by IIT Guwahati faculty, industry experts, and TSW faculty.

Programme Duration

- 8 months course

- 437 hours of online learning | 134 hours live online + 303 hours self-paced

--> 68 hours – Online sessions by IIT Guwahati Faculty

--> 66 hours – Online session by TSW faculty/industry experts

Class Schedule

Every Saturday & Sunday – 2:00 p.m. to 4:00 p.m.

Campus Immersion

There will be 5 days of campus immersion at IIT Guwahati.

Who Should Attend?

The programme is ideal for graduates/
post-graduates with an interest or background
in IT and who wish to acquire new-age skills
and seek a career in emerging technologies.

Eligibility Criteria

- Bachelor's degree with minimum 50%

- Minimum 2 years of work experience

- Work experience in IT preferred

Admission Criteria

Selection will be based on the
candidate's application.

Evaluation Criteria

10%	10%	20%	60%
Attendance	Quizzes	Capstone Project	Assignments