Get Certified As
Artificial Intelligence Master Analyst

IN ADDITION, GET CERTIFIED BY IBM AS "ARTIFICIAL INTELLIGENCE ANALYST" AND RECEIVE A DIGITAL BADGE

Future-proof yourself with AI & ML course designed and delivered by IIT Faculty and IBM professionals.

"Salaries up to $500k a year: Silicon Valley rolls out red carpet for AI specialists"

– New York Times

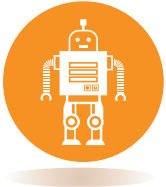**Fast-forward your Career with market-relevant AI Courses from the best in the Industry**

ATIVITTI in association with IIT & IBM

Offers training in Python Programming, Machine Learning, Artificial Intelligence, IBM Watson, Natural Language Processing, Computer Vision & Chatbots along with live Projects leading to IIT Certification as "ARTIFICIAL INTELLIGENCE MASTER ANALYST"

ATIVITTI AI TECHNOLOGIES PRIVATE LIMITED

Line-up for rewarding careers in emerging technologies and become experts with IIT & IBM to gain knowledge, practical know-how to solve complex business problems.

Ativitti is uniquely positioned to offer world class courses in partnership with leading Industry leaders in Artificial Intelligence e.g. IBM, NVidia, Microsoft, Google etc. and premier institutes like IITs with focus on Data Science & Machine Learning.
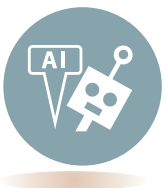
Ativitti has established "Centre of Excellence" for Artificial Intelligence & Robotics and will continue to establish many such COEs in collaboration with academia and industry across the country. We aspire to extend the research facilities to learners for projects and Internships thereby creating an environment to encourage entrepreneurship.

ATIVITTI ADVANTAGE

PROGRAM OVERVIEW

Ativitti
Interactive Digital Learning Platform ensures par excellence, quality education anytime in pervasive environment.

This **IIT** & **IBM** Certified course is focused on building industry-ready "Artificial Intelligence Analyst" & "Data Scientist" who can work on machine learning, data mining, and statistical modelling for predictive and prescriptive enterprise analytics. This program will enable you to develop deep understanding and experience with machine learning and data analysis. Familiarity with common tools for data management and analysis including machine learning can be applied on real world problems for building predictive models using machine learning on your own.
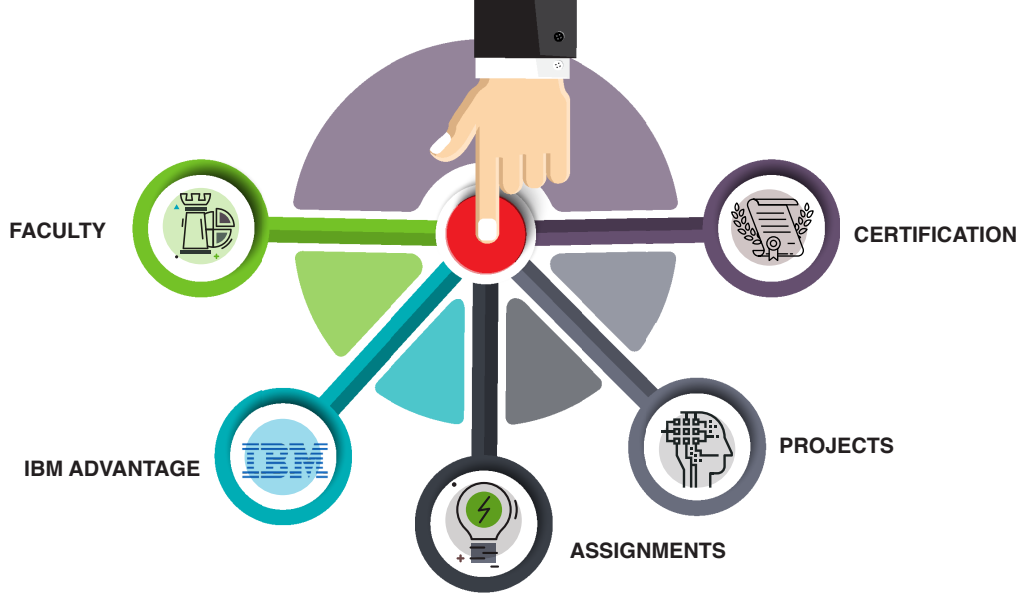
6 Months Projects, 2 hours per session twice a week

10
MODULES

55
INSTRUCTION SESSIONS

15
SOLVING ASSIGNMENT

2
INDUSTRY PROJECTS

FLAUNT YOUR IBM BADGE ON RESUME, SOCIAL NETWORKING SITES AND YOUR SIGNATURE

FACULTY

CERTIFICATION

IBM ADVANTAGE

PROJECTS

ASSIGNMENTS

Program Highlights

Especially developed in collaboration with academia & AI Industry experts to reskill and retool working professionals towards Artificial Intelligence space, this program offers the following benefits:

Experienced Faculty-Led Sessions: Live-Tutored classes (not recorded sessions). Program content & structure designed in collaboration with IIT faculty and IBM experts.

IBM Advantage: Real-life Case: Live project based on any of the selected use cases, involving implementation of Python providing hands-on exposure

Assignments: Each class has practical assignments which shall be finished before the next class and helps you to apply the concepts taught during the class.

Industry Projects: Access to LMS. You get access to Learning Management System (LMS) where presentations, quizzes, installation guide & class recordings are there.

24 x 7 Expert Online Support team to resolve all your technical queries

Course Delivery Methodology

The primary method of instruction is virtual instructor led training lectures by eminent faculty & industry professionals. These Live-Tutored sessions and not recorded sessions will be beamed online via internet to participant's desktop/laptop or classrooms. All enrolled participant's will also be provided access to other learning aids, reference materials, assessments and hands on workshops as appropriate. Throughout the duration of the course, students will have the flexibility to reach out to the faculty, real time during the LIVE lectures or offline to raise questions and clear their queries.

At the end of the course students will also be allocated Project work that is designed to provide adequate practical and hands on experience in implementing the concepts learn during the course.

There are many advantages to students in using this approach, as it allows them to:

● Develop transferable skills and enhance their employability
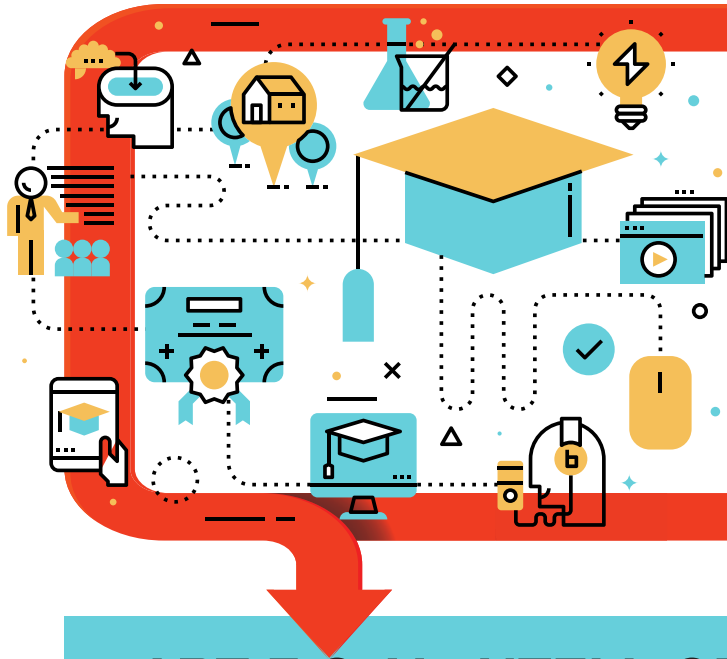
● Improve communication and team working

● Practice research and information processing

● Develop Machine Learning analytical skills

CERTIFICATION

IIT (ISM) certifies you as a 'Artificial Intelligence Master Analyst" based on your project performance, reviewed by our expert panel.

IBM Pearson VUE testing to be certified as "Artificial Intelligence Analyst"

Program Content

Artificial Intelligence Master Analyst is organized in Ten modules over 6 months. The course is divided into three main parts

- Introduction to Python, Data Visualization & statistics with hands on lab sessions..
- Building predictive models & introduction to latest tools/ technologies for solving real-life problems.
- IBM Watson, it's services on cloud, Hands-on NLP experience and case studies, building Chatbots and Computer vision & image classification

ARTIFICIAL INTELLIGENCE MASTER ANALYST

1 **Intro to Ativitti Platform & Computer Configuration**

2 **Introduction to AI**
Rise of Artificial Intelligence

3 **Python Programming Basics**
Introduction to Python Programming
Packages in Python
Data Types and Operations
Statements and Syntax in Python
File Operations
Database Connection
Industry Talk

4 **Data, Knowledge and Machine Learning with Python**
✓ Introduction to Machine Learning & Artificial Intelligence
✓ Building Intelligent Machines to Transform Data into Knowledge
✓ Applications of AI
✓ Data Pre-processing
✓ Dealing with Missing Data
✓ Handling Categorical Data
✓ Data Normalization
✓ Data Visualization
✓ Probability Theory
✓ Probabilistic Learning in Python
✓ Probability Distribution
✓ The Naive Bayes Algorithm
✓ Industry Talk
✓ Statistical Analysis
✓ Unsupervised Learning
✓ Hierarchical Clustering
✓ K means Clustering
✓ Self Organizing Maps
✓ Practical Learning
✓ Supervised Learning & Classification
✓ Naïve Bayes Classifier
✓ Regression Analysis
✓ K Nearest Neighbour Algorithm
✓ Artificial Neural Network

✓ Support Vector Machine
✓ Reinforcement Learning
✓ Exercise Using Python
✓ Deep Learning in Python
✓ Convolutional Neural Network
✓ Multilayer Neural Network
✓ Industry Talk

5 **Artificial Intelligence with Python**
✓ Logic Programming
✓ Heuristic Search
✓ Building Games with AI
✓ Industry Talk

6 **IBM Watson**
✓ Unit 1. Introduction to IBM Watson
✓ Unit 2. Evolution from Deepqa to Watson Services on IBM cloud
✓ Unit 3. Build with Watson
Exercise 1. Exploring Watson Services with Watson API Explorer

7 **Natural Language Processing**
✓ Unit 1. Introduction to Natural Language Processing
✓ Unit 2. Pipeline and Concepts
✓ Unit 3. NLP and IBM Watson
Exercise 1. Ingest, Convert, Enrich, and Query with Watson Discovery Service

8 **Chatbots**
✓ Unit 1. Introduction to Chatbots
✓ unit 2. Chatbot Fundamentals
✓ unit 3. IBM Watson Conversation Service
Exercise 1. Getting Started with Watson Conversation Services

9 **Computer Vision**
✓ Unit 1. Introduction to Computer Vision
✓ Unit 2. Computer Vision Fundamentals
✓ Unit 3. IBM Watson Visual Recognition Service
Exercise 1. Classifying Images with Watson Visual Recognition

10 **Industry Projects**
✓ 2 Industry Projects

Program Outcome

On completion of the program, students will have developed a world-class skillset in their selected technology domain that provides "Employability Enhancing" skills and capabilities thereby substantially increasing their earning potential and compensation benchmarks.

Candidates can expect to be hired in positions such as:

● **Machine Learning Specialist**   ● **Artificial Intelligence Analyst**   ● **Data Science Researcher**   ● **Data Engineer**

On the payment of program fees and upon satisfying the requisite attendance and other evaluation criteria of "Artificial Intelligence Master Analyst", participants will be awarded a Certificate of Completion by IIT. Additionally, IBM will award "Artificial Intelligence Analyst" certification along-with digital badge after successfully passing via Pearson VUE testing.

For Indian Participants – Graduates (10+2+3) or Diploma Holders (only 10+2+3) from a recognized university (UGC/AICTE/State Government) in any discipline.

For International Participants – Graduation or equivalent degree from any recognized University or Institution in their respective country.

For Indian and International Participants – Interns or Working professionals.

IIT & IBM CERTIFICATE

WHO SHOULD ATTEND

ELIGIBILITY CRITERIA

PREREQUISITES

Professionals who want to learn the practical aspects of data handling across applicable areas like Machine Learning, IT Services, Marketing, eCommerce, Research etc.

Project Managers, Business Managers and Senior Leaders managing data analytics, machine learning based projects interested in gaining understanding of AI/ML domain.

Executives, young professionals & managers with analytical aptitude who are interested in and want to learn Data
Individuals who aspire to switch to or embark on a career in Business Analytics & Machine Learning

Studied Mathematics till Class XII.

Programming knowledge is preferred

Students are encouraged to use their own laptops for project work; Minimum computer hardware requirements can be provided on request

Faculty

DR. SUSANTA MUKHOPADHYAY
Associate Professor Department of Computer Science and Engineering, Indian Institute of Technology (ISM) Dhanbad

DR. DEEPTI
She is an enthusiastic Data Scientist with 16 years of experience in teaching, research & consultancy and holds Ph.D. in machine learning based data analysis from IIT (Roorkee). Currently, she resides in Silicon Valley, California, USA and provides Data Scientist related consultancy services.

SOUMYA PRASADA
She is a Cognitive Engineer in IBM Watson Lab Services India. In this role, she has been involved in developing Watson solutions for customers in Insurance and financial sector across geographies. She has over 17 years of industry experience, worked with world's largest retailer's implementing IBM order management. She has been a speaker in various International customer conferences, conducting bootcamps, University relations and workshops.

DR. DIPANKAR RAY
System Programmer, Indian Institute of Technology (ISM) Dhanbad

DR. SUBHASHIS CHATTERJEE
Associate Professor, Department of Applied Mathematics, Indian Institute of Technology (ISM) Dhanbad

DR. A. K. SINHA
He holds Ph.D degree in Systems Modeling from IIT Delhi and B.Sc. Engineering from Bihar University. He has 35 years of teaching, research and consultancy experience. Guided 7 Ph.D and more than 30 M.Tech scholars

LALIT AGARWALLA
He is Technology Specialist, in Delivery Services for Watson AI and Cloud Platform at IBM India Pvt. Ltd. He has over 14 years of experience with 5 years in AI domain. He has performed diverse roles including Developer, Solution Architect, Consultant and Technology Specialist. He has delivered AI projects across geographic implementing various Watson AI and cloud based solutions. He has conducted multiple enablement sessions on Watson for customers like HCL, Wipro, Concentrix, EXL Services. He has 7 filed patents in the area of AI and 2 published disclosures.

Program Details

Duration
Approx. 6 months;
2 hours per session
twice a week

HOW TO APPLY
For admissions, students can register at our
website: www.ativitti.ai/admissions

Address for Communication
Ativitti AI Technologies Pvt. Ltd,
IIT (ISM) Centre,4th Floor,
Unit # 401, NBCC Centre, Plot # 2,
Okhla Phase -1, New Delhi 110020
For any enquiry,
please write to us at:
enquiry@ativitti.ai
Call us at: +91- 9267999473;
+91- 9267994573