

AI MASTER ANALYST PROGRAM



12

MODULES

150

HOURS

55

INTERACTIVE
SESSIONS

04

INDUSTRY
PROJECTS



भारतीय सूचना प्रौद्योगिकी संस्थान भागलपुर
Indian Institute of Information Technology
Bhagalpur

Get Certified by IIIT-Bhagalpur as an
"AI MASTER ANALYST"
and grab an opportunity to obtain a Digital
Certificate & Badge from IBM

— in collaboration with —



Silver
Business
Partner



Project AI

Let's Walk the Talk

Future-proof yourself with
AI & ML course designed
and delivered by **top notch Faculty**
and **IIIT-Bhagalpur 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

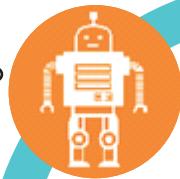
IIIT-BHAGALPUR in association with
VITTI

Offers training in Python Programming, Machine Learning,
Artificial Intelligence, IBM Watson, Natural Language Processing,
Computer Vision & Chatbots along with live Projects leading
to IIIT Certification as

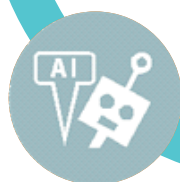
ARTIFICIAL INTELLIGENCE MASTER ANALYST

Line-up for rewarding career in AI & emerging technologies and become expert by gaining hands-on knowledge, practical know-how to solve complex business problems.

Vitti is uniquely positioned to offer world class learning in AI based used cases with focus on Data Science & Machine Learning.



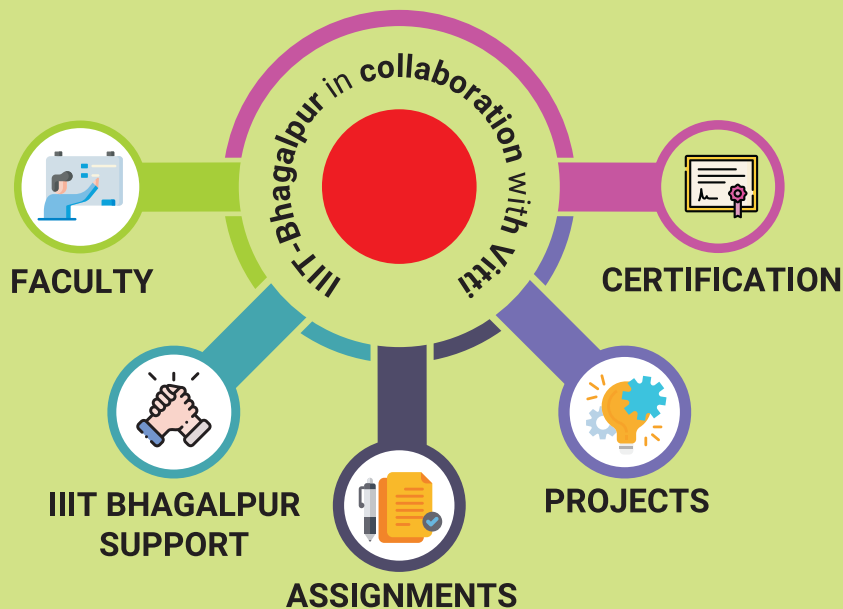
Vitti Interactive Digital Learning Platform ensures per excellence, quality education anytime in pervasive environment.



This Vitti & IIIT-BHAGALPUR Certified course is focused on building industry-ready “Artificial Intelligence Analyst” & “Data Scientist” who can work on machine learning, data mining, and statistical modeling 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.

Vitti has established an AI & Innovation hub in collaboration with IIIT- Bhagalpur and will continue to establish many such COEs in collaboration with academia and industry across the country.

We aspire to make learner, projects friendly and run internship programs thereby creating an ecosystem to encourage entrepreneurship.



PROJECT HIGHLIGHTS

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



EXPERIENCED FACULTY-LED SESSIONS

Live-Interactive classes (not recorded sessions). Program content & structure designed in collaboration with top notch faculty of IIIT- Bhagalpur, Vitti and IBM experts.



IBM ADVANTAGE

Real life case on any of the selected use cases, involving implementation of Python providing hands-on exposure. After completion of this course participant can appear for IBM exam and get the digital certificate and badge.



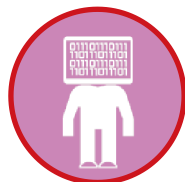
ASSIGNMENTS

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



LMS ACCESS

You get access to Vitti Learning Management System (LMS) where presentations, quizzes, installation guide & class recordings are available.



24X7 EXPERT ONLINE

Support team to resolve all your technical queries

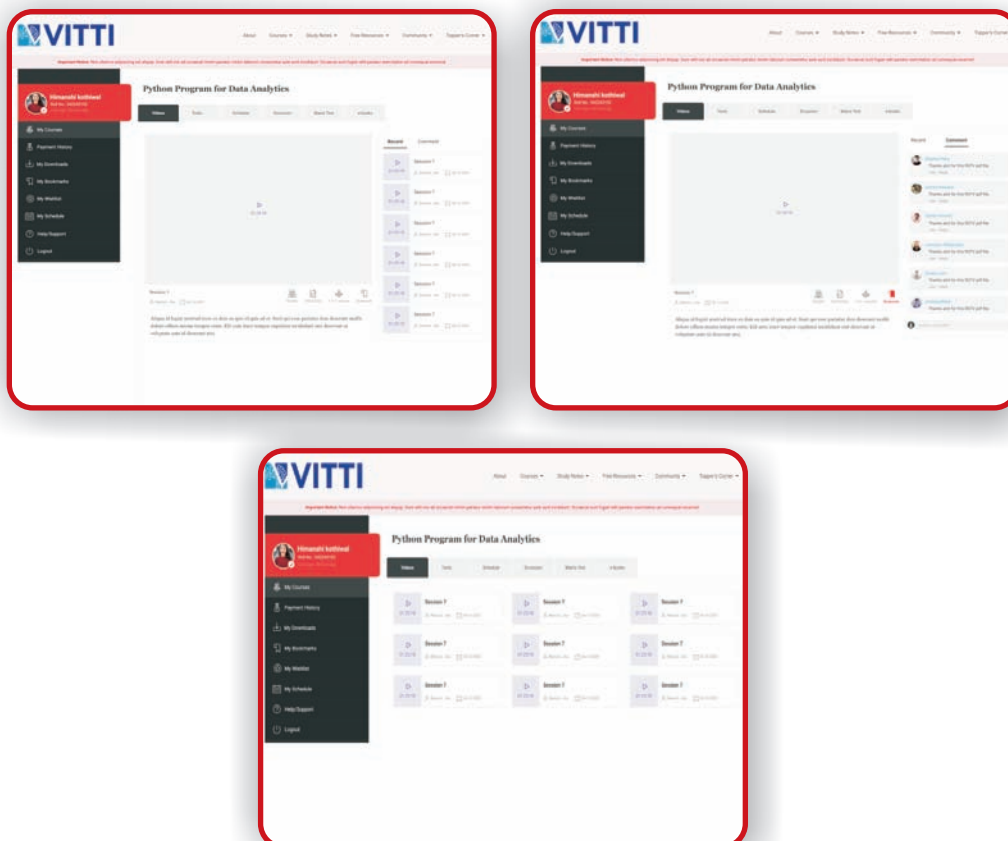
COURSE DELIVERY **METHODOLOGY**

The primary method of instruction is live Interactive learning lectures by eminent faculty of IIT-Bhagalpur & Vitti industry professionals. These Live- Interactive 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**



PROGRAM CONTENT

ARTIFICIAL INTELLIGENCE MASTER ANALYST

DURATION: 150 Hrs.

Artificial Intelligence Master Analyst is organized in 12 modules over 9 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.
- AI Landscape, AI Industry Adoption Approaches, Hands-on NL Understanding, Computer vision, Machine Learning & Deep learning and Future Trends for AI

1. Intro to Ativitti Platform & Computer Configuration

2. Introduction to AI

- Rise of Artificial.

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
- Convolutional Neural Network
- Multilayer Neural Network
- Industry Talk

5. Artificial Intelligence with Python

- Logic Programming with Prolog
- Heuristic Search
- Building Games with AI
- Industry Talk

6. AI Landscape

- AI Impact in the world today.
- History and Evolution of AI
- AI Explained
- AI Technologies
- Summary & Resources

7. AI Industry Adoption Approaches

- AI Industry Impact
- Autonomous Vehicles
- Smart Robotics
- Future workforce & AI
- Summary & Resources

8. Natural Language Understanding

- NLP Overview
- NLP Explained

- Virtual Agents Overview
- Virtual Agents for the Enterprise
- Summary & Resources

9. Computer Vision

- Computer Vision Overview
- AI Vision through Deep Learning
- Computer Vision for the Enterprise
- Experiments
- Summary & Resources

10. Machine Learning & Deep Learning

- Machine Learning Explained
- Deep Learning Explained
- Deep Learning Ecosystem
- Experiments
- Summary & Resources

11. Future Trends for AI

- Artificial Intelligence Trends
- Limits of Machine and Human
- AI predictions in the next 5 years
- Summary & Resources

12. Industry Projects

- 4 Industry Projects

IIIT - BHAGALPUR CERTIFICATION "AI MASTER ANALYST"



COURSE AT A GLANCE

On the payment of program fees and upon satisfying the requisite attendance and other evaluation criteria of “AI Master Analyst”, participants will be awarded by the IIIT-Bhagalpur Certificate. In addition after passing the IBM Exam they will get the digital certificate and badge.

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.

VITTI
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, e-Commerce, 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 to learn Data.
- Individuals who aspire to switch 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.

FACULTY PROFILE



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

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.



Kunal Gera

A profound data scientist with rich experience of 8+ years. with national and international exposure worked on multiple projects such as consumer analytics, credit card analytics, NLP implementation, spend analysis.



DR. RUPAM BHATTACHARYYA

Rupam Bhattacharyya is Ph.D. in Computer Science & Engineering from Tezpur University. Recipient of Scholarship by University of Stirling, Scotland, UK, GATE Scholarship and got Williamson Magor Scholarship. Certified FPGDST from CDAC Bangalore. Presently Teaching at IIIT Bhagalpur.



DR. SANDEEP RAJ

Sandeep Raj (Member, IEEE), Ph.D in Electrical Engineering from IIT, Patna, Currently serving as an Assistant Professor with the Deptt. of Electronics and Communication Engineering, IIIT- Bhagalpur. He served as a Visiting Faculty with the National Institute of Technology Patna. His current research interests include biomedical signal & image processing, embedded systems, machine learning, and Internet-of-Things.



DR. DILIP KUMAR CHOUBEY

He is Ph.D. in Engineering from Birla Institute of Technology, Ranchi and has more than 9 years teaching & research experiences. He is an Assistant Professor in the Deptt. of Computer Science & Engineering, IIIT- Bhagalpur. He is a author of 2 book and has more than 44 reputed research publications in international journals, book chapters and conference proceedings. He has also one project as a Co-PI funded by TEQUIP Collaborative Research Scheme.



INDUSTRY EXPERTS



KUNDANA LAL

As part of the founding team of Vitti, Kundana Lal is the President @ Vitti. Kundana brings over 25 years of industry experience in various IT-related senior leadership role, building businesses, handling corporate and marketing strategies, solidifying profitable relationships with Fortune 500 companies. He was Vice President with Capgemini heading Cloud & AD deliveries for Continental Europe. He has done his Masters in EEE from BIT, Ranchi with specialization in Artificial Intelligence.

SHWETANK SHARAD

He is a Managing Partner on the Executive Board of Vitti. He is a Senior Executive with over 25 years of experience in IT, ITES/Business Process Services covering Business Transformation, Robotic Process Automation (RPA), Artificial Intelligence and Service Excellence. He is a GE certified Six Sigma Master Black Belt, Certified Robotic Process Automation and Artificial Intelligence-Machine Learning (AI-ML) professional.



SHASHIKANT CHOUDHARY



He completed his MBA in Marketing & IT in 2001 from Symbiosis Institute of Management Studies, Pune. He has more than 19 years of enriched and diverse experience in IT Sales and Business Development in Companies such as, Oracle India, Wipro Technology, and BMC Software etc. He has rich experience of engaging at leadership levels in Govt. and PSUs.



DR. DILIP NANDKEOLYAR

An alumnus of Asian Institute of Management Manila Philippines, DR. DILIP NANDKEOLYAR is a Management post graduate, specialized in Marketing and Strategic Planning & is a B.Sc. (Hons) in Chemistry. He has a Doctoral degree from Thapar University, Patiala.

The guiding philosophy behind all the endeavours of Dr. Nandkeolyar has always been to succeed because his Employers, Peers, Subordinates, Customers, Clients, Students/Trainees or anyone choosing to associate with him must – by delivering value plus.

SOUMITRA PODDAR

He is one of the distinguished alumni of Vinod Gupta School of Management, IIT Kharagpur. He graduated from the institute in the year 1995 after achieving his specialization in Finance and Information Systems.

Before coming to VGSoM, he worked with Mastek Limited as a consultant and gained a good technical



VANESSA KLOTZMAN



A USA based Software Engineer Gained experience with performance analysis and optimization from a database perspective. She has worked closely with the SIMBA administration team in the Walt Disney Company to develop a self-service portal for all SIMBA users. This portal assist the SIMBA users in submitting requests to the administration team and aid in the automation of manually intensive tasks.

YOGESH PARGAIEN

experienced and driven data scientist with rich experience in the industry. Conducted individual training sessions for employees in Microsoft Azure, Big Data Tools & Technology, Machine Learning and Amazon Web Services. Trained 30+ groups in Big Data technology stack along with machine learning and projects.



HOW TO APPLY

For admissions, students can register at our
www.vittiai.com/admissions



भारतीय सूचना प्रौद्योगिकी संस्थान भागलपुर
Indian Institute of Information Technology
Bhagalpur

— in collaboration with —



Silver
Business
Partner



ADDRESS FOR COMMUNICATION

Comm Off: 8/3, 2nd Floor,
Abdul Aziz Road, W.E.A. Karol Bagh
Delhi - 110005

Write to us at: contact@vittiai.com

Or Call at: **1800 270 2060**