# Artificial Intelligence Engineer

## Master's Course

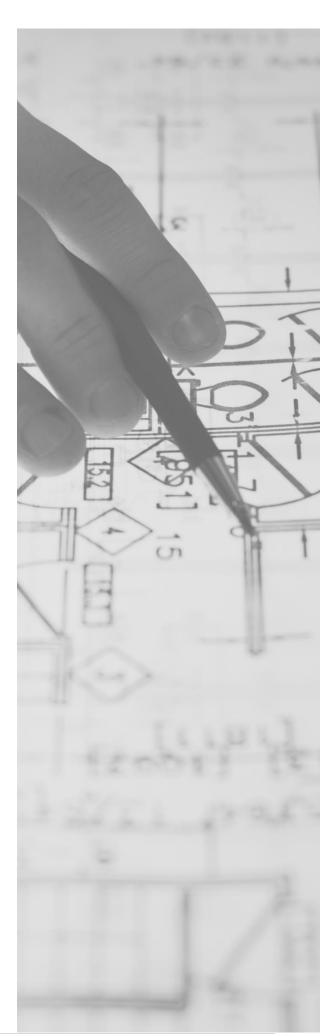
In Collaboration with IBM





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"The global AI market is projected to reach \$169.41 billion by 2025, registering a CAGR of 55.6%.

### About the Program

Intellipaat offers a comprehensive master's program in Artificial Intelligence to become a certified Artificial Intelligence Engineer. This AI Engineer course will help you learn various aspects of AI such as Machine Learning, Deep Learning with TensorFlow, artificial neural networks, statistics, Data Science, SAS Advanced Analytics, Tableau Business Intelligence, Python and R programming, and MS Excel through hands-on projects. As part of this online classroom training, you will receive five additional self-paced courses cocreated with IBM, namely, Machine Learning with Python, Deep Learning with TensorFlow, Building Chatbots with Watson Assistant, R for Data Science, and Python. Moreover, you will also get exclusive access to IBM Cloud Platforms, which are Cognitive Classes and IBM Watson Cloud Lab.



# IBM

### Collaborating with IBM

IBM is one of the leading innovators and the biggest player in creating innovative tools. Top subject matter experts from IBM will share knowledge in the domain of Artificial Intelligence through this training program, which will help you gain the breadth of knowledge and industry experience.

#### Benefits for students from IBM

- Industry-recognized IBM certificate
- Access to IBM Watson for hands-on training and practice
- Industry in-line case studies and project work



At Intellipaat, we are in a constant endeavor of changing the education culture to be more of an open-source collaborative environment.

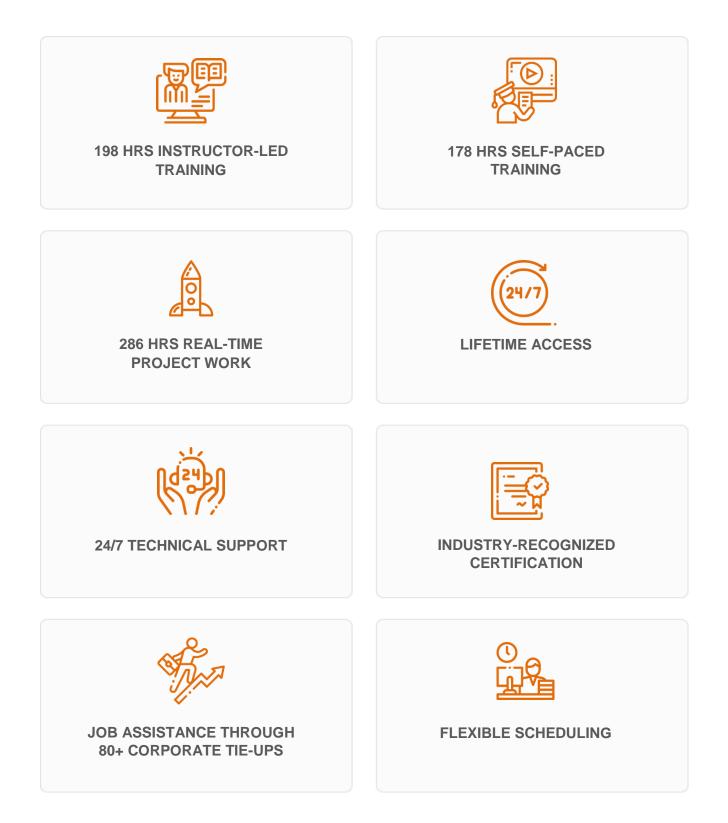


### About Intellipaat

Intellipaat is one of the leading e-learning training providers with more than 600,000 learners across 55+ countries. We are on a mission to democratize education as we believe that everyone has the right to quality education.

Our courses are delivered by subject matter experts from top MNCs, and our world-class pedagogy enables learners to quickly learn difficult topics in no time. Our 24/7 technical support and career services will help learners jump-start their careers in their dream companies.

### Key Features



IntelliPaat

### **Career Support**



#### SESSIONS WITH INDUSTRY MENTORS

Attend sessions from top industry experts and get guidance on how to boost your career growth



#### **MOCK INTERVIEWS**

Mock interviews to make you prepare for cracking interviews by top employers



#### **GUARANTEED INTERVIEWS & JOB SUPPORT**

Get interviewed by our 400+ hiring partners



#### **RESUME PREPARATION**

Get assistance in creating a world-class resume from our career services team



### Why take up this course?

Artificial Intelligence is one of the hottest domains and heralded as the one with the ability to disrupt companies, cutting across industry sectors. Intellipaat's Artificial Intelligence Engineer master's course will equip you with all the necessary skills needed to take on challenging and exciting roles in Artificial Intelligence, Data Science, Business Analytics, and Python and R statistical computing domains and grab the best jobs in the industry at top-notch salaries.

### Who should take up this training?

- Software Engineers and Data Analysts
- Business Intelligence Professionals
- SAS Developers wanting to learn the open-source technology
- Those aspiring for a career in Data Science



### Courses offered

#### **INSTRUCTOR-LED TRAINING COURSES**

- 1. Data Science with R
- 2. Python
- 3. Machine Learning
- 4. Deep Learning with TensorFlow
- 5. Natural Language Processing
- 6. Advanced Deep Learning and Computer Vision
- 7. AWS Big Data

#### SELF-PACED LEARNING COURSES

- 1. SAS
- 2. Excel
- 3. Tableau



### **Course Advisors**



#### **Suresh Paritala**

Solutions Architect at Microsoft, Texas A Senior Software Architect at Microsoft, Texas, who has previously worked with IBM Corporation, Suresh Paritala has worked on Big Data, Data Science, Advanced Analytics, Internet of Things, and Azure, along with AI domains like Machine Learning and Deep Learning. He has successfully implemented high-impact projects in major corporations around the world.



### Samanth Reddy

Data Scientist at ASCAP

A renowned Data Scientist who has worked with Google and is currently working at ASCAP, Samanth Reddy has a proven ability to develop Data Science strategies that have a high impact on the revenues of various organizations. He comes with strong Data Science expertise and has created decisive Data Science strategies for Fortune 500 corporations.



### **Program Curriculum**

### DATA SCIENCE WITH R

#### Learning Objective

This Data Scientist course online provides detailed learning through self-paced videos and live instructor-led sessions that help you gain skills in the shortest possible time. Data Scientists are among the highest-paid and most in-demand professionals. This in-depth Data Scientist course covers 'What is Data Science?,' statistical methods, data acquisition and analysis, Machine Learning algorithms, predictive analytics, data modeling, etc. At the end of the course, you will work on building a recommendation engine for an e-commerce site and will work on a real-time capstone project.

#### **Topics:**

- Introduction to Data Science with R
- Data Exploration
- Data Manipulation
- Data Visualization
- Introduction to Statistics
- Machine Learning
- Logistic Regression
- Decision Trees and Random Forest
- Unsupervised Learning
- Association Rule Mining and Recommendation Engines

### Self-paced Course Content

- Introduction to Artificial Intelligence
- Time Series



- Support Vector Machine (SVM)
- Naïve Bayes
- Text Mining

### PYTHON

#### Learning Objective

The Python training certification course will help you understand the high-level, generalpurpose dynamic programming language. In this Python training course, you will be exposed to both the basic and advanced concepts of Python, such as Machine Learning, Deep Learning, Hadoop streaming, and MapReduce in Python, and you will work with packages such as SciKit and SciPy.

#### **Topics:**

- Python Environment Setup and Essentials
- Python Language Basic Constructs
- OOP Concepts in Python
- Database Connection
- NumPy for Mathematical Computing
- SciPy for Scientific Computing
- Matplotlib for Data Visualization
- Pandas for Data Analysis and Machine Learning
- Exception Handling
- Multi-threading and Race Condition
- Packages and Functions
- Web Scraping with Python



### MACHINE LEARNING

#### Learning Objective

This Machine Learning online course is curated and developed by SMEs from top product-based companies to meet the needs of the current data-driven industry. It covers a detailed overview of various algorithms and techniques, such as regression, classification, time series modeling, supervised and unsupervised learning, Natural Language Processing, etc. You will also use Python programming language to write code for implementing numerous algorithms in this certification training.

#### Topics:

- Introduction to Machine Learning
- Supervised Learning and Linear Regression
- Classification and Logistic Regression
- Decision Trees and Random Forest
- Naïve Bayes and Support Vector Machine (self-paced)
- Unsupervised Learning
- Natural Language Processing and Text Mining (self-paced)
- Introduction to Deep Learning
- Time Series Analysis (self-paced)

### AI AND DEEP LEARNING

#### Learning Objective

Intellipaat offers a comprehensive Artificial Intelligence program that will help you work on today's cutting-edge technology, Artificial Intelligence (AI). As part of this best AI training, you will master various aspects of artificial neural networks, supervised and unsupervised learning, logistic regression with a neural network mindset, binary classification, vectorization, Python for scripting Machine Learning applications, and much more.

#### **Topics:**

• Introduction to Deep Learning and Neural Networks

- Multi-layered Neural Networks
- Artificial Neural Networks and Various Methods
- Deep Learning Libraries
- Keras API
- TFLearn API for TensorFlow
- DNNs (Deep Neural Networks)
- CNNs (Convolutional Neural Networks)
- RNNs (Recurrent Neural Networks)
- GPU in Deep Learning
- Autoencoders and Restricted Boltzmann Machine (RBM)
- Deep Learning Applications
- Chatbots

### NLP

#### Learning Objective

This NLP Training and certification course will allow you to master all the core concepts of Natural Language Processing. Basically, you will learn about NLP and gain a wealth of hands-on experience using Python.

This online Natural Language Processing course is a complete package of theory and practical sessions where you can apply your learning in real-time exercises. You will learn about Text Processing, Text Classification, Tokenization, Text Mining, Lemmatization, Sentence Structure, Sequence Tagging, and Language Modeling, POS tagging, efficient usage of Python's regular expressions, and Natural Language Toolkit.

#### **Topics:**

Overview of Natural Language Processing and Text Mining

**IntelliPaat** 



- Text Mining, Cleaning, and Pre-processing
- Text Classification
- Sentence Structure, Sequence Tagging, Sequence Tasks, and Language Modeling
- Introduction to Semantics and Vector Space Models
- Dialog Systems

### Advanced Deep Learning and Computer Vision

#### **Topics:**

- RBM and DBNs & Variational AutoEncoder
- Object Detection using Convolutional Neural Net
- Generating images with Neural Style and Working with Deep Generative Models
- Distributed & Parallel Computing for Deep Learning Models
- Reinforcement Learning
- Deploying Deep Learning Models and Beyond

### AWS BIG DATA

#### Learning Objective

Big Data processing is the frequent and popular use of cloud services and resources, especially due to the necessity of sheer computing power. AWS (Amazon Web Services) has developed a myriad of services that help in the effective utilization of Big Data. This AWS certification for Big Data from Intellipaat aims to help you acquire all the skills and become proficient in AWS Big Data. In this course, you will learn basic as well as advanced concepts of this field and become certified in the field. So, boost your career in this domain and register for this course today!

#### Topics:



- Introduction to Big Data and Data Collection
- Introduction to Cloud Computing & AWS
- Elastic Compute and Storage Volumes
- Virtual Private Cloud
- Storage Simple Storage Service (S3)
- Databases and In-Memory DataStores
- Data Storage
- Data Processing

Data AnalysisData Visualization and Data Security

### Self-paced Courses

As a part of this online classroom training, you will receive five additional self-paced courses co-created with IBM, namely, SAS, Excel and Tableau. Moreover, you will also get exclusive access to IBM's cloud platforms, Cognitive Classes and IBM Watson Cloud Lab.



### **Project Work**

#### Data Science with R

- Market Basket Analysis
- Credit Card Fraud Detection
- Loan Approval Prediction
- Netflix Recommendation System
- Case Study 1: Introduction to R Programming
- Case Study 2: Solving Customer Churn Using Data Exploration
- Case Study 3: Creating Data Structures in R
- Case Study 4: Implementing SVD in R
- Case Study 5: Time Series Analysis

#### Python

- Analyzing the Naming Pattern Using Python
- Performing Analysis on Customer Churn Dataset
- Python Web Scraping for Data Science

#### **Machine Learning**

- Analyzing the Trends of COVID-19 with Python
- Customer Churn Classification
- Creating a Recommendation System for Movies
- Case Study 1 Decision Tree
- Case Study 2 Insurance Cost Prediction (Linear Regression)



- Case Study 3 Diabetes Classification (Logistic Regression)
- Case Study 4 Random Forest
- Case Study 5 Principal Component Analysis (PCA)
- Case Study 6 K-means Clustering

#### Al & Deep Learning

- Auto-encoder Assignment
- CNN Assignment
- Binary Classification on 'Customer\_Churn' Using Keras
- Face Detection Project
- Keras Assignment
- MLP Assignment
- Al and Deep Learning Intro Assignment
- RNN Assignment
- TensorFlow Assignment
- TFLearn Assignment

#### Natural Language Processing

Analyzing Movie Review Data with NLP

#### **AWS BIG DATA**

- Integration of Big Data with AWS
- Big Data Analysis



### Certification

After the completion of the course, you will get a certificate from IBM and a course completion certificate from Intellipaat.



You will also receive a certificate from Intellipaat.



### **Success Stories**



#### Vishal Pentakota

The best part of this online course is the series of hands-on demonstrations the trainer performed. Not only did he explain each concept theoretically, but he also implemented all those concepts practically. Great job! A must go for beginners.



#### Sampson Basoah

The Intellipaat team helped me in selecting the perfect course that suits my profile. The whole course was practically oriented, and the trainers are always ready to answer any question. I found this course to be impactful.

Thank you.



#### Kevin K Wada

Thank you very much for your top-class service. A special mention should be made for your patience in listening to my queries and giving me a

solution, which was exactly what I was looking for. I am giving you a 10 on 10!



#### Giri Karnal

I had taken up the Artificial Intelligence master's program, which is a combo of many individual courses. Since there are so many technologies involved in this course, getting

your query resolved at the right time becomes the most important aspect. But with Intellipaat, there was no such problem as all my queries were resolved in less than 24 hours.



### **CONTACT US**

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