# AI Machine Learning

Self-Paced Program

- Get Skilled
- Get Hired
- Get Promoted



## High Impact, Multifaceted Training

Embark on a transformative journey with our Artificial Intelligence & Machine Learning (AIML) Training course, an online, self-paced experience that empowers you to learn on your own schedule, at your own pace.

Designed to serve as your launchpad into the dynamic realm of AIML, this course guarantees to equip you with comprehensive knowledge and skills essential for a successful career in AI and Machine Learning, regardless of your prior experience.

Immerse yourself in a world of learning through lecture videos, engaging assignments, quizzes, and labs. This AIML course provides you with the fundamentals, key skills, and techniques necessary for success in the AIML landscape. This is your opportunity to shape your future with the added benefit of placement assistance to kickstart your career journey.

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INSTITUTE

**STUDY AT YOUR OWN PACE**

**ADVANCE YOUR CAREER**

**REAL WORLD INSTRUCTION**

# Course Overview

The Artificial Intelligence and Machine Learning (AIML) Training course at WFI is an online self-paced program designed to propel your career towards becoming a proficient AI and ML practitioner. Acquire comprehensive knowledge and skills to analyze data effectively, empowering you to assist business leaders in making informed decisions, regardless of your prior practical experience in the field of AI and ML.

The program is rigorous and packed with challenges covering concepts, theories and projects. You will learn AI and Machine Learning fundamentals, key skills and techniques in this unique course.

**At the end of this program, you will:**



Develop essential skills in Artificial Intelligence and Machine Learning



Learn the secrets, methodologies and tips and tricks used by AI/ML experts



Gain both theoretical and practical knowledge of the AIML field



Earn a course completion certificate

# Who Should Attend This Training?

The AIML course is a diverse program that caters to anyone interested in building a career in Artificial Intelligence and Machine Learning. Whether you're a millennial, a college grad or a diploma holder, going through any of the following career phases, this course is meant for you:

### New Career Seekers

AIML is an in-demand profession across the United States and even globally, and one that is quite lucrative if you have the right training.

### Career Changers

Think you have a knack for AIML and want to test out a different career phase? The program gives a foundational training to anyone who wants to learn about AIML right from the start.

### Career Advancers

Been in the industry for long but want to sharpen your AIML skills? The program's advance training & coaching sessions with AIML experts will empower you with the knowledge you need to improve.

# Jobs You Will Be Ready For

Here is a list of real-world jobs that you can apply this bootcamp to:

- Machine Learning (ML)
- Engineer Data Scientist
- NLP Engineer
- Robotics Engineer

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# Course Outline

Module 1:

## Introduction to Python and its Libraries

- Introduction to Python: Syntax
- Pythonic Functions and Good Practices
- Linear Algebra: NumPy Plotting
- Matplotlib and Seaborn
- Dataframes: Pandas

Module 2:

## Introduction to Machine Learning

- Overview: AI and Machine Learning
- Linear Regression and Loss Functions
- Gradient Descent
- Genetic Algorithms
- Advanced Genetic Algorithms

Module 3:

## First Models and Tests

- Data Pre-Processing and Feature Engineering
- Logistic Regression
- Decision Trees Demo
- Building a Complete Model

Module 4:

## Common Machine Learning Models

- Regression Trees and Random Forests
- Support Vector Machines
- Machines Ensemble Methods and Hyper Parameter Search
- Unsupervised Learning: Clustering

Module 5:

## Neural Networks 1

- Neural Networks
- Deep Neural Networks and Backpropagation
- Modularity of Neural Networks
- Gradient-based Learning
- Demo: Building a Neural Network in TensorFlow

Module 6:

## Neural Networks 2

- Convolutional Neural Networks
- Recurrent Neural Networks
- Autoencoders
- Generative Adversarial Networks

Module 7:

## Natural Language Processing

- Introduction to NLP
- N-Grams
- NLTK Neural Networks in NLP 1
- Neural Networks in NLP 2
- Recurrent Neural Networks

Module 8:

## AWS and SQL for Machine Learning

- Databases
- Cloud Computing