



# **AI Testing Training Course**

**CURRICULUM**

# Module I – Python for AI & Testing

- Python Basics: variables, data types, loops, conditionals
- Functions, modules, exception handling
- OOP: classes, objects, inheritance
- File handling: CSV, JSON, OS, Sys
- Libraries: NumPy, Pandas, unittest, pytest

## Module II – Machine Learning Essentials

- Supervised Learning: Linear/Logistic Regression
- Classification: KNN, Decision Trees
- Unsupervised Learning: Clustering, PCA
- Model Evaluation: Accuracy, Precision, F1, AUC
- Feature scaling, encoding, model persistence

## Module III – Deep Learning Basics

- Neural Networks: perceptron, activation functions
- Backpropagation, optimizers, loss functions
- ANN & CNN overview using TensorFlow/Keras
- Overfitting, dropout, early stopping
- Model serialization: Pickle, ONNX, SavedModel

## Module IV – NLP for AI Testing

- Text preprocessing: tokenization, lemmatization, stopwords
- Vectorization: TF-IDF, word embeddings
- NLP tasks: Sentiment analysis, NER, Classification
- Evaluation: BLEU, ROUGE, perplexity
- Transformers overview: BERT, GPT, spaCy, NLTK

## Module V – AI Testing Fundamentals

- AI Testing vs Traditional Testing
- Testing Lifecycle: Unit, Integration, System
- Data Testing: Quality, Schema, Drift
- Feature/Label validation, leakage, skew
- Black-box vs White-box testing

## Module VI – Model Testing & Explainability

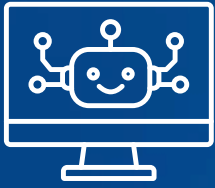
- Robustness Testing: noise, incomplete, OOD data
- Adversarial Testing
- Bias & Fairness Testing: AIF360, Fairlearn
- Explainability: SHAP, LIME, ELI5
- Metrics Monitoring, Test Logs, Dashboards

# Module VII – API Testing and ML Workflow Testing

- REST API Testing: Postman, Swagger
- API Automation using requests and pytest
- ML Pipeline Testing: Preprocessing → Model → Scoring
- Dependency and versioning testing
- Workflow testing with MLflow, Pandera

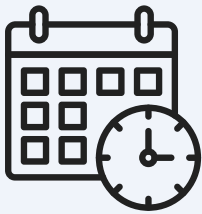
## Module VIII – Monitoring, Ethics & Advanced AI Testing

- Monitoring in Production: MLflow, Evidently AI
- Drift Detection: Concept Drift, Model Drift
- LLM Testing: Prompt tuning, hallucination detection
- Ethical AI Testing: GDPR, HIPAA, auditability
- Review of Tools, Strategies, and Best Practices



# AI Testing Training Course

**Schedule**



**Duration**

**2 Months**

(8 Weeks)

## Training Schedule



**Weekdays Training**

Monday to Friday



**Weekend Training**

Saturday & Sunday



**Daily / Weekly Session**

Live Online Instructor Led Session



# AI Testing Training Course Fee

Limited Time Offer

| Currency           | Code | Offer Price | Regular Price     |
|--------------------|------|-------------|-------------------|
| US dollar          | USD  | 450         | <del>650</del>    |
| Canadian dollar    | CAD  | 620         | <del>820</del>    |
| Australian dollar  | AUD  | 700         | <del>900</del>    |
| Sterling pound     | GBP  | 360         | <del>560</del>    |
| New Zealand dollar | NZD  | 780         | <del>980</del>    |
| Indian rupee       | INR  | 35,000      | <del>55,000</del> |



Fee is inclusive of all applicable taxes and include examination and certification fee.



No other hidden charges of any type.

# Thank You!

Thank you for downloading our curriculum!

We're excited to be part of your learning journey. Feel free to reach out if you need more information.

## Contact Us



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