



KAIZENOVA TECHNOLOGIES LLC d/b/a TEK2KAREER

Program Catalog: Artificial Intelligence & Machine Learning Applications Specialist Certificate (384 Hours)

Institutional Status

KaizeNova Technologies LLC d/b/a TEK2KAREER is a proprietary, non-degree-granting institution authorized by the Michigan LEO. This program is an authorized vocational certificate program and prepares students for occupational roles in Artificial Intelligence and Machine Learning applications.

Program Overview

The **Artificial Intelligence & Machine Learning Applications Specialist Certificate** is a comprehensive, 384-hour program designed to prepare learners for high-demand AI, ML, and data automation careers.

This program provides both theoretical foundations and extensive practice in:

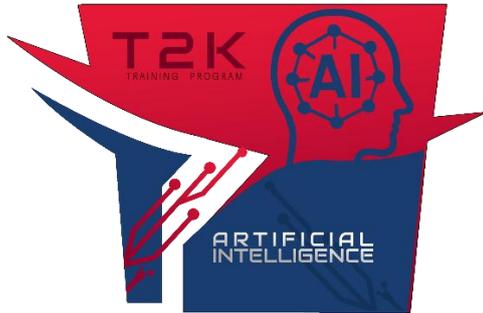
- Python programming for AI
 - Data analysis, statistical modeling, and automation
 - Machine learning fundamentals
 - Deep learning (CNNs, RNNs, transformers)
 - NLP and Generative AI
 - MLOps, model deployment, and real-world AI integration
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Occupational Objectives

Graduates will be prepared for roles including:

- Artificial Intelligence Applications Specialist
- Machine Learning Technician / Associate Engineer
- Data Science Technician
- AI Integration Analyst
- Automation & Model Deployment Associate
- ML Ops Assistant
- AI Product Support Specialist

The program aligns with the U.S. Bureau of Labor Statistics (BLS) and O*NET classification **15-2051 – Data Scientists / AI Specialists**.



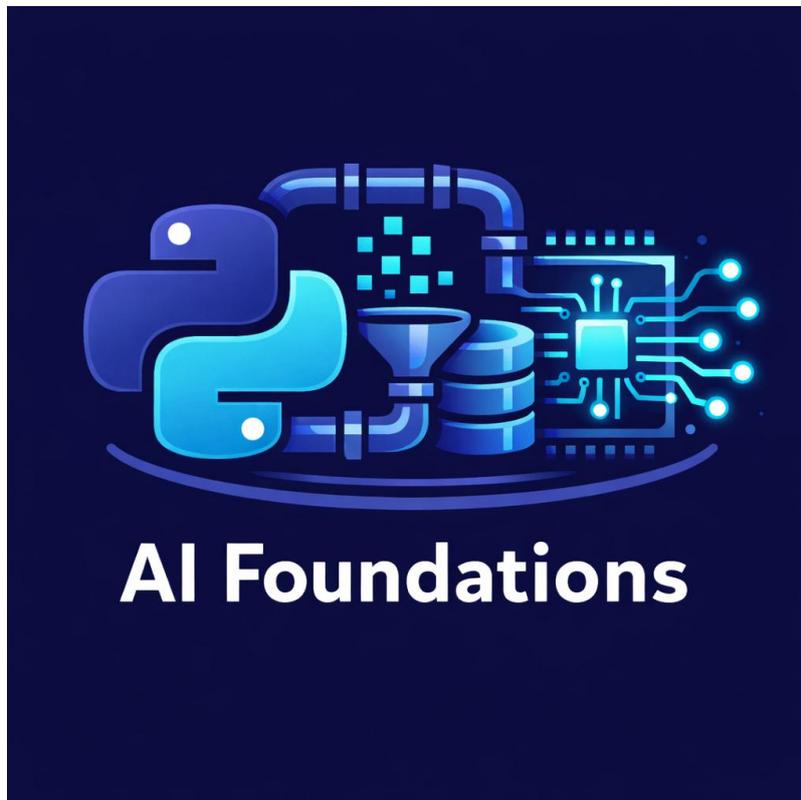
Program Structure (384 Hours)

The program is divided into five distinct modules:

Module	Course Title / Focus	Hours
Module 1	Python & Data Foundations for AI	64 hrs
Module 2	Machine Learning Fundamentals	96 hrs
Module 3	Deep Learning & Neural Networks	96 hrs
Module 4	NLP & Generative AI Applications	64 hrs
Module 5	AI Capstone – Model Deployment & MLOps	64 hrs
Total	—	384 Hours

Detailed Module Descriptions

Module 1 — Python & Data Foundations for AI (64 Hours)



Students learn Python essentials, data structures, automation, and data cleaning using industry libraries.

Topics Covered:

- Python syntax, functions, logic flows
- NumPy, Pandas, Matplotlib
- Data wrangling, ETL, feature extraction
- Exploratory data analysis (EDA)
- Working with JSON, CSV, APIs
- File automation & preprocessing pipelines

Outcomes:

- Ability to write reusable Python scripts
- Build data pipelines
- Handle large datasets for ML prep

Module 2 — Machine Learning Fundamentals (96 Hours)



Applied machine learning training.

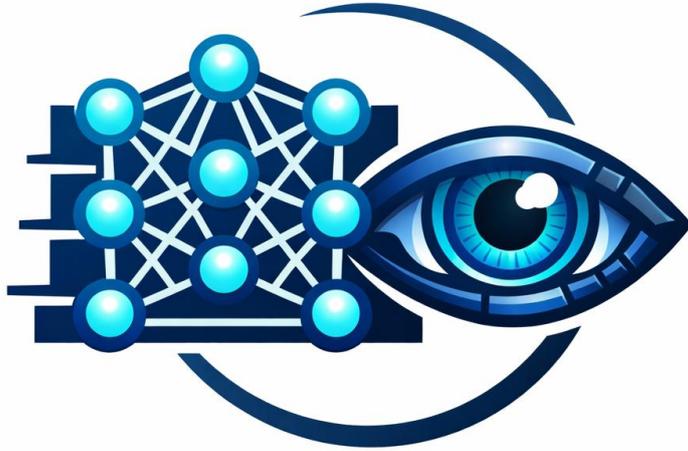
Topics Covered:

- Supervised & unsupervised learning algorithms
- Regression, classification, clustering
- Train/test split, K-fold cross-validation
- Scikit-learn workflows
- Feature engineering
- Bias/variance tradeoff
- Model evaluation: precision, recall, f1, ROC-AUC

Outcomes:

- Build ML models end-to-end
- Evaluate, tune, and optimize algorithms

Module 3 — Deep Learning & Neural Networks (96 Hours)



Students gain practical experience with advanced deep learning.

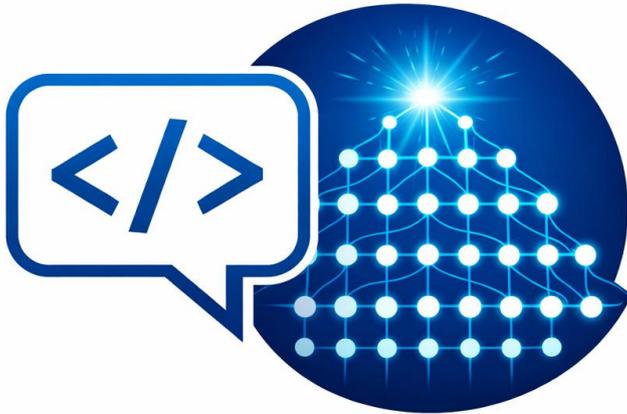
Topics Covered:

- Neural network fundamentals
- TensorFlow & PyTorch
- CNNs (vision models)
- RNNs, LSTM, GRU
- Transfer learning
- Hyperparameter tuning
- GPU acceleration
- Deep learning project workflows

Outcomes:

- Build and train neural networks
- Apply deep learning to image and text tasks

Module 4 — NLP & Generative AI Applications (64 Hours)



NLP & Generative AI

Students explore modern text-processing AI and generative models.

Topics Covered:

- NLP preprocessing, tokenization
- Word embeddings (Word2Vec, GloVe)
- Transformer models
- ChatGPT-style architectures
- Prompt engineering fundamentals
- Text classification, summarization
- Sentiment analysis
- Conversational AI & chatbot design

Outcomes:

- Apply NLP to business problems
- Implement transformer-based workflows

Module 5 — AI Capstone: Model Deployment & MLOps (64 Hours)



Students deliver a full AI project, from architecture to deployment.

Topics Covered:

- MLOps fundamentals
- Model deployment using Flask/FastAPI
- RESTful AI inference services
- TensorFlow Serving
- Version control for ML models
- GitHub Actions for ML workflows
- Cloud deployment concepts (AWS / GCP basics)

Capstone Deliverables:

- Deployed AI model
 - Documentation + presentation
 - Code repository with automation
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Program Length & Schedule

Item	Details
Total Hours	384 Hours
Length	Up to 24 Months
Schedule	4 hours/week
Format	Instructor-led live classes, Applied project workshops, Capstone evaluation

Tuition & Fees

Item	Cost
Program Tuition	\$15,000
Registration Deposit (required)	\$1,000

Payment Plans: Customized monthly installments available.

Payment Methods: Zelle, Venmo, Stripe, PayPal, Square, Credit/Debit.

Refund Policy (LEO-Compliant)

Timing	Refund Percentage
7+ days before course start	100%
After 1–2 months	50%
After 3–4 months	25%

Timing	Refund Percentage
After 4 months	No refund

Refund requests must be submitted to info@tek2kareer.com. All refunds are processed within 14 business days.

Admission Requirements

Required:

- High school diploma / GED
- Basic computer literacy
- English proficiency
- Government-issued ID
- Stable internet + capable computer
- Completion of Enrollment Agreement

Recommended (NOT required):

- Basic Python or programming background
 - Basic math/statistics familiarity
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Attendance Policy

- **80% minimum attendance** is required.
 - More than 20% absence will result in failure unless approved.
 - Excused absences require documentation (medical/family emergencies).
 - Students must make up missed work.
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Grading Policy

Component	Weight
Module Assignments	30%
Quizzes & Projects	30%
Midterm ML Project	20%
Final Capstone Project	20%

Minimum passing grade: **70%**

Completion Requirements

To graduate with this state-licensed certificate, students must:

- ✓ Complete all 5 modules
 - ✓ Maintain $\geq 70\%$ overall grade
 - ✓ Complete and present the Capstone
 - ✓ Attend at least 80% of sessions
 - ✓ Submit all required assignments
 - ✓ Fulfill tuition obligations
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Tools & Resources Provided by School

Students receive access to:

- Tutor LMS
- Zoom
- Python IDE (PyCharm/VS Code)
- Google Colab / Jupyter Notebooks
- TensorFlow & PyTorch
- Scikit-learn

- HuggingFace Transformers
 - GitHub Repositories
 - Dataset libraries (Kaggle, OpenML)
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Instructor Qualifications

AI instructors must have:

- 5–10+ years of AI/ML industry experience
 - Proficiency in TensorFlow/PyTorch
 - Python expertise
 - Model deployment/MLOps experience
 - Prior teaching or corporate training background
 - Degree in CS, Engineering, Data Science, or equivalent industry experience
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Student Equipment Requirements

Laptop with:

- 8–16GB RAM
 - Python 3.9+
 - GPU access recommended (Colab provided)
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Disclaimer

This program is a MI LEO authorized program certificate for Artificial Intelligence & Machine Learning Applications Specialist Certificate. Completion does not guarantee employment, but prepares students for industry-recognized AI roles.