

# APPLIED MLOPS AND AI SYSTEMS ENGINEERING

## MODEL DEPLOYMENT, MONITORING & AI INFRASTRUCTURE

### AI Era Job Ready Skills

Applied MLOps and AI Systems Engineering is a 28-week intensive program that trains students to deploy, monitor, and maintain machine learning systems in production. Students master MLflow, Kubeflow, DVC, model monitoring, feature stores, and AI infrastructure on AWS, Azure, and GCP. The program bridges the gap between data science and software engineering, preparing graduates for MLOps Engineer, AI Platform Engineer, and ML Infrastructure roles.

*"Operationalize AI models with production-grade MLOps pipelines and infrastructure"*

**28 WEEKS**

DURATION

**336**

CONTACT HOURS

**13.3**

CREDIT HOURS

**\$8,500.00**

TOTAL PROGRAM COST

**4+**

CERTIFICATIONS

**TWC Licensed**

#S6776

**WIOA Approved**

Funding Available

**Monthly Intakes**

Enroll Anytime

**DURATION: 28 Weeks**

**TUITION: \$8,500.00**

**NEXT COHORT: Monthly Intakes**

### PROGRAM HIGHLIGHTS

- ✓ Live Instructor-Led Training
- ✓ Hands-on Labs & Real-World Projects
- ✓ Career Support Services
- ✓ Industry Certification Prep (4 Vouchers)
- ✓ WIOA Funding Available
- ✓ TWC Licensed (#S6776)

### CAREER PATHWAYS

- MLOps Engineer
- LLMOps Engineer
- AI Platform Engineer
- Agentic Systems Architect
- AI Systems Architect
- Model Deployment Specialist

### WORK ENVIRONMENTS

Tech Companies

Financial Services

Healthcare AI

E-Commerce

Research Labs

Cloud Service Providers

### LATEST TOOLS & TECHNOLOGIES (2025–2026)

MLflow

Databricks

Snowflake Cortex

Seldon Core

BentoML

NVIDIA NIM

Prometheus

Grafana

Airflow

Terraform

### ADMISSIONS REQUIREMENTS

- High school diploma or GED required
- Python programming and basic ML knowledge
- Recommended: Cloud fundamentals or DevOps background
- Background check required prior to enrollment

### PROGRAM OUTCOMES & EARNING POTENTIAL

#### ✓ Job Placement Support

Career coaching & resume prep

#### ✓ Real-World Projects

Live client project experience

#### ✓ Industry Certifications

4+ globally recognized certs

#### ✓ Flexible Schedule

6 cohort options per week

#### ✓ WIOA Eligible

100% tuition coverage available

#### ✓ TWC Licensed

Texas Workforce Commission #S6776

• TWC Licensed #S6776 • WIOA Approved • Monthly Intakes • 100% Hands-On • Job Placement Support •

## MLOPS FOUNDATIONS TRACK

### MLOps 101 ML Engineering Foundations

Weeks 1–2 | Lec 6 Hrs / Lab 18 Hrs / Ext 0 Hrs | 24 Total Hr...

- Understand ML system design and architecture
- Refactor ML code for production readiness
- Implement data validation and feature engineering pipelines

Tools: TensorFlow Extended (TFX), MLflow, Git

### MLOps 102 Production-Ready ML Pipelines

Weeks 3–4 | Lec 6 Hrs / Lab 18 Hrs / Ext 0 Hrs | 24 Total Hr...

- Automate end-to-end ML workflows
- Build training, validation, and deployment pipelines
- Handle data drift and schema evolution

Tools: Kubeflow Pipelines, MLflow, Metaflow

## PIPELINE & AUTOMATION TRACK

### MLOps 103 Containerization & Model Serving

Weeks 5–6 | Lec 6 Hrs / Lab 18 Hrs / Ext 0 Hrs | 24 Total Hr...

- Containerize ML models using Docker
- Deploy models to production with FastAPI and TensorFlow ...
- Design scalable model serving architectures

Tools: Docker, Kubernetes, TensorFlow Serving

### MLOps 104 CI/CD for AI Pipelines

Weeks 7–8 | Lec 6 Hrs / Lab 18 Hrs / Ext 0 Hrs | 24 Total Hr...

- Build CI/CD pipelines for ML systems
- Automate model retraining and redeployment
- Integrate GitHub Actions and GitLab CI for MLOps

Tools: GitHub Actions, Jenkins, MLflow

### MLOps 105 Monitoring, Drift & Feedback Loops

Weeks 9–10 | Lec 6 Hrs / Lab 18 Hrs / Ext 0 Hrs | 24 Total Hrs | 1.0 Credit Hrs

- Implement monitoring of model performance in production
- Detect data drift and concept drift
- Set up feedback loops for retraining

Tools: Evidently AI, Prometheus, Grafana

## CURRICULUM HIGHLIGHTS

### ✓ Hands-On Labs

Every module includes real cloud lab exercises

### ✓ Project-Based

Build portfolio-ready projects each week

### ✓ Industry Tools

Learn with the same tools used by top employees

### ✓ Certification Prep

Included exam vouchers for 4+ certifications

### ✓ Live Instruction

Expert-led sessions, online and in-person

### ✓ Career Support

Resume, LinkedIn, and interview coaching

## MONITORING & GOVERNANCE TRACK

### MLOps 106 Scaling AI Workloads

Weeks 11–12 | Lec 6 Hrs / Lab 18 Hrs / Ext 0 Hrs | 24 Total ...

- Scale training and inference across cloud and edge
- Optimize compute, memory, and network resources
- Implement batch and streaming pipelines

*Tools: AWS SageMaker, Azure ML, Google Vertex AI*

### MLOps 107 LLMOps & GenAI Deployment

Weeks 13–15 | Lec 9 Hrs / Lab 27 Hrs / Ext 0 Hrs | 36 Total ...

- Deploy large language models (LLMs) at scale
- Implement retrieval-augmented generation (RAG) pipelines
- Fine-tune and deploy custom LLMs

*Tools: LangChain, Hugging Face, OpenAI API*

## INFRASTRUCTURE & CAPSTONE TRACK

### MLOps 108 Observability & Compliance

Weeks 16–18 | Lec 9 Hrs / Lab 27 Hrs / Ext 0 Hrs | 36 Total ...

- Apply observability techniques across ML systems
- Build explainability (XAI) modules for models
- Implement AI model compliance frameworks

*Tools: WhyLabs, Weights & Biases, TensorBoard*

### MLOps 109 Advanced Orchestration

Weeks 19–21 | Lec 9 Hrs / Lab 27 Hrs / Ext 0 Hrs | 36 Total ...

- Design orchestrated ML workflows across distributed systems
- Optimize DAGs for ML workloads
- Implement advanced scheduling with Airflow, Prefect, and A...

*Tools: Apache Airflow, Prefect, Argo Workflows*

### MLOps 110 Capstone AI Lifecycle Project

Weeks 22–28 | Lec 2 Hrs / Lab 2 Hrs / OJT + Capstone 80 Hrs | 84 Total Hrs | 3.6 Credit Hrs

- Complete a real-world AI lifecycle project
- Build end-to-end pipelines from ingestion to deployment and monitoring
- Produce production-ready documentation, dashboards, and presentations

### WIOA APPROVED PROGRAM

## Zero-Cost AI & Cloud Training JOB-READY SKILLS FOR THE AI ERA

100% Tuition Coverage for WIOA-eligible residents of Texas & Louisiana.

*(More states coming soon!)*

Not WIOA eligible? Ask about flexible 7–36 months financing or one-time payment discounts.

TWC Licensed (#S6776)

Live (Online/In-Person)

Real-World Projects

Industry Certified



**John Enoch (MSc)**  
AI GOVERNANCE LEAD & CHIEF AI ARCHITECT

- Authority: Microsoft MVP | Engineering Hiring Manager
- Global Footprint: Microsoft & IBM (Principal Architect)
- Elite Education: MIT (AI Modeling), Stanford (Strategy)



**Dr. Paul Idowu (PhD)**  
RESEARCH AUTHORITY & FACULTY LEAD

- Authority: PhD in AI Systems | 390+ Google Scholar Citations
- Elite Academic Pedigree: PhD Pattern Recognition & AI
- Technical Domain: NLP for 130+ African Languages



**Devonte Sykes (MSc)**  
DIGITAL TRANSFORMATION

- Authority: Senior Cloud Architect @ Microsoft
- Elite Academic Pedigree: MSc Information Technology (UCF)
- Technical Domain: Azure IaaS/PaaS, Cloud Migration



**Abiodun Olatunji, MBA**  
ENTERPRISE STRATEGIST & CLOUD AUTHORITY

- Authority: Senior Specialist, Cloud & AI @ Microsoft
- Elite Academic Pedigree: MSc Information Systems, MBA
- Technical Domain: Azure Synapse, Databricks, Big Data



**Taiwo Olatunde (MSc)**  
DATA ARCHITECTURE & ENGINEERING LEAD

- Authority: Microsoft Fabric Expert | Technical Lead
- Elite Academic Pedigree: MSc Business Analytics (UNT)
- Technical Domain: Microsoft Fabric, ETL/ELT Pipelines



**Syed Ishaq Ali, MBA**  
BI STRATEGIST & FINANCIAL ANALYTICS

- Authority: 15-Year Financial Sector Veteran | PMP®
- Global Footprint: Bank of Montreal (BMO), Scotiabank
- Technical Domain: Financial Forecasting, SQL, Power BI



**Vaishali Singh**  
AI & MACHINE LEARNING SPECIALIST

- Authority: Lead AI Engineer
- Technical Domain: Deep Learning, Computer Vision
- Global Footprint: Fortune 500 Tech Companies



**Dr. Ibrahim Olokodana**  
DATA SCIENCE & ANALYTICS EXPERT

- Authority: PhD in Data Science
- Technical Domain: Predictive Modeling, Statistical Analysis
- Elite Academic Pedigree: Advanced Research in ML



**Abdullahi Olapojoye**  
CLOUD INFRASTRUCTURE ARCHITECT

- Authority: Senior Cloud Engineer
- Technical Domain: AWS, GCP, Kubernetes, Terraform
- Global Footprint: Enterprise Cloud Migrations



**Mackay Ogunleye**  
CYBERSECURITY & COMPLIANCE LEAD

- Authority: CISSP, CISM Certified Expert
- Technical Domain: Network Security, Threat Intelligence
- Global Footprint: Global Financial Institutions



**Sai Sudha Malluru**  
SOFTWARE ENGINEERING & DEVOPS

- Authority: Principal Software Engineer
- Technical Domain: CI/CD, Microservices, Agile
- Global Footprint: Leading Tech Startups



**Solomon Adegboye**  
FULL STACK DEVELOPMENT LEAD

- Authority: Senior Full Stack Developer
- Technical Domain: React, Node.js, System Design
- Global Footprint: E-commerce & SaaS Platforms

## WORK WITH NVIT BUILDERS

“ **Real-World Projects: This training is 100% hands-on. You will work directly with NVIT builders** who support clients across North America. Gain experience on live projects, solving actual business challenges — not just theoretical exercises.

## CERTIFICATIONS & VOUCHERS

### NVIT Certificate + 4 Industry Certifications (Vouchers Included)

Graduates receive the NVIT Certificate of Completion plus Exam Vouchers to write and pass globally recognized certifications from this list:

- AWS Certified DevOps Engineer – Professional
- AWS Certified Machine Learning – Specialty
- Microsoft Certified: DevOps Engineer Expert (AZ-400)
- Google Professional Cloud DevOps Engineer
- CKA: Certified Kubernetes Administrator
- HashiCorp Certified: Terraform Associate
- MLflow Certified Practitioner
- Databricks Certified ML Professional

## STANDALONE FEE BREAKDOWN

1. Instructional Tuition	<b>\$7,206.00</b>	
2. Registration Fee	<b>\$50.00</b>	<i>(One-time, non-refundable)</i>
3. Books & Supplies	<b>\$500.00</b>	<i>(Cloud labs, software, e-books)</i>
4. Background Check	<b>\$150.00</b>	<i>(Security clearance processing)</i>
5. Professional Exam Vouchers	<b>\$594.00</b>	<i>(4 Vouchers Included)</i>
<b>TOTAL PROGRAM INVESTMENT</b>	<b>\$8,500.00</b>	

## 2026–2027 COHORT SCHEDULE

Cohort Name	Days	Time	Format
Alpha / Nova / Forge	Mon – Wed	9:30 AM – 12:30 PM	Morning Session
Helix / Array / Delta	Mon – Wed	1:30 PM – 4:30 PM	Afternoon Session
Photon / Pipeline / Fabric	Mon – Wed	6:00 PM – 9:00 PM	Evening Session
Beta / Snow / Grid	Thu – Sat	9:00 AM – 12:30 PM	Weekend Morning
Cloud / Lambda / Sigma	Thu – Sat	1:30 PM – 4:30 PM	Weekend Afternoon
Nebula / Data / Voyager	Thu – Sat	6:00 PM – 9:00 PM	Weekend Evening

## ADMISSIONS & NEXT STEPS

Ready to Apply? Contact our admissions team to secure your spot in the next cohort.  
[learn.nvit.tech](https://learn.nvit.tech) | [www.nvit.tech](https://www.nvit.tech) | Mobile: +1 (214) 764-7360

[info@nvit.tech](mailto:info@nvit.tech)  
**+1 (214) 407-7229**