

# APPLIED GENERATIVE AI ENGINEERING

## LLMS, RAG SYSTEMS, AGENTS & GENAI APPLICATIONS

### AI Era Job Ready Skills

Applied Generative AI Engineering is a 16-week intensive program that trains students to design and build production-grade generative AI applications. Students master prompt engineering, LLM fine-tuning, retrieval-augmented generation (RAG), AI agents, and multi-modal AI systems. The program covers OpenAI, Anthropic, Google Gemini, LangChain, and vector databases, preparing graduates for GenAI Engineer and AI Developer roles.

*"Build production-grade GenAI applications with LLMs, RAG, and AI agents"*

**16 WEEKS**

DURATION

**192**

CONTACT HOURS

**7.7**

CREDIT HOURS

**\$4,600.00**

TOTAL PROGRAM COST

**1+**

CERTIFICATIONS

**TWC Licensed**

#S6776

**WIOA Approved**

Funding Available

**Monthly Intakes**

Enroll Anytime

**DURATION:** 16 Weeks

**TUITION:** \$4,600.00

**NEXT COHORT:** Monthly Intakes

## PROGRAM HIGHLIGHTS

- ✓ Live Instructor-Led Training
- ✓ Hands-on Labs & Real-World Projects
- ✓ Career Support Services
- ✓ Industry Certification Prep (1 Voucher)
- ✓ WIOA Funding Available
- ✓ TWC Licensed (#S6776)

## CAREER PATHWAYS

GenAI Engineer

Agentic AI Architect

LLMOps Engineer

AI Product Developer

Multi-Agent Systems Engineer

AI Solutions Architect

## WORK ENVIRONMENTS

Tech Companies

AI Startups

Financial Services

Healthcare AI

Media & Content

Consulting Firms

## LATEST TOOLS & TECHNOLOGIES (2025–2026)

AWS Bedrock

Azure AI Studio

LangGraph

Flowise

Pinecone

Anthropic Claude 3

Google Vertex AI

Hugging Face

AutoGen

CrewAI

## ADMISSIONS REQUIREMENTS

- High school diploma or GED required
- Basic Python programming knowledge
- Recommended: Introductory AI/ML concepts
- 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

1+ 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 •

## GENAI FOUNDATIONS TRACK

### GenAI 101 Foundations of Generative AI

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

- Understand the core principles of Generative AI, including g...
- Differentiate between GANs, VAEs, Diffusion Models, and L...
- Explore applications of GenAI in various industries (art, med...

Tools: *Google Colab, OpenAI Playground*

### GenAI 102 Generative Neural Networks (GANs & ...

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

- Build and train basic Generative Adversarial Networks (GANs).
- Implement Variational Autoencoders (VAEs) for data genera...
- Analyze training instability issues and apply stabilization tec...

Tools: *TensorFlow, PyTorch, Hugging Face*

## LLM ENGINEERING TRACK

### GenAI 103 Diffusion Models & Stable Diffusion

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

- Understand and implement diffusion-based generative models.
- Fine-tune Stable Diffusion models for image generation tasks.
- Explore latent diffusion and conditional generation workflows.

Tools: *Hugging Face Diffusers, DreamBooth*

### GenAI 104 LLMs & Prompt Engineering

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

- Understand Large Language Models (LLMs) and tokenizatio...
- Apply prompt engineering to control outputs for tasks like su...
- Explore few-shot, zero-shot, and chain-of-thought prompting...

Tools: *OpenAI API, Hugging Face Transformers*

## CURRICULUM HIGHLIGHTS

### ✓ Hands-On Labs

Every module includes real cloud lab exercises

### ✓ Industry Tools

Learn with the same tools used by top employees

### ✓ Live Instruction

Expert-led sessions, online and in-person

### ✓ Project-Based

Build portfolio-ready projects each week

### ✓ Certification Prep

Included exam vouchers for 1+ certifications

### ✓ Career Support

Resume, LinkedIn, and interview coaching

- Live Instructor-Led
- Real-World Projects
- Industry Certifications
- WIOA Approved
- Job Placement Support

## ADVANCED APPLICATIONS TRACK

### GenAI 105 Multimodal & Creative AI

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

- Design AI systems combining text, image, audio, and video ...
- Work with CLIP models, DALL-E, and Imagen architectures.
- Build applications for generative storytelling, art, and video s...

Tools: *OpenAI CLIP, DALL-E, Runway ML*

### GenAI 106 AI Agents, Voice, and Real-Time Appli...

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

- Build autonomous AI agents capable of real-world tasks (se...
- Implement voice cloning and text-to-speech generation.
- Integrate real-time LLM pipelines for dynamic interaction.

Tools: *LangChain, ElevenLabs, OpenAI APIs*

## CURRICULUM HIGHLIGHTS

### ✓ Hands-On Labs

Real cloud lab exercises in every module

### ✓ Industry Tools

Same tools used by top employers

### ✓ Live Instruction

Expert-led sessions, online and in-person

### ✓ Project-Based

Portfolio-ready projects each week

### ✓ Certification Prep

Included exam vouchers for industry certs

### ✓ Career Support

Resume, LinkedIn, and interview coaching

### 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 Enoh (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 + 1 Industry Certification (Vouchers Included)

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

- AWS Certified Machine Learning – Specialty
- Microsoft Certified: Azure AI Engineer Associate (AI-102)
- Google Professional Machine Learning Engineer
- NVIDIA DLI: Fundamentals of Deep Learning
- DeepLearning.AI Generative AI Specialization
- Databricks Generative AI Fundamentals

## STANDALONE FEE BREAKDOWN

1. Instructional Tuition	<b>\$3,735.00</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>\$165.00</b>	<i>(1 Voucher Included)</i>
<b>TOTAL PROGRAM INVESTMENT</b>	<b>\$4,600.00</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**