

GLOBALLY RECOGNIZED · VENDOR-NEUTRAL · ANSI-ALIGNED

Certified AI Engineering Professional

— (CAIEP)

Become a Globally Recognized AI Engineering Professional

Earn the CAIEP credential — build production AI: Python and data pipelines, ML models, LLM applications, RAG, agents, MLOps, deployment, and monitoring. **Today's offer: \$800 → \$400.**



4.8/5 Reviews.io (96%) · **4.4/5** Trustpilot · **2,50,000+** certified

Enroll at gsdcouncil.org/ai-engineering-certification

Why This Certification, Why Now

Calling an API is not AI engineering. Shipping a system that stays accurate, fast, affordable, and observable in production is — and that gap is exactly what companies are hiring against right now.



Prototypes are easy, production is not

Serving, inference cost, latency, drift, and retraining decide whether an AI feature survives its first month.



The stack now spans ML and GenAI

Classic model development sits alongside LLM apps, prompt and context engineering, function calling, and evaluation.



RAG and agents are engineering problems

Chunking, embeddings, retrieval, reranking, tool calling, and orchestration all need testing and measurable evaluation.



MLOps is the difference between demo and product

Pipelines, experiment tracking, registries, CI/CD, observability, and reproducibility make AI work repeatable.

FROM THEORY TO PRACTICE

What You'll Be Able to Do



Master AI engineering fundamentals — machine learning, Generative AI, and foundation models



Develop practical Python skills for building, testing, and maintaining AI applications



Build reliable AI data pipelines for collecting, cleaning, transforming, and preparing data



Develop and evaluate machine learning models using modern engineering practices and tools



Build Generative AI applications with LLMs, prompt and context engineering, and function calling



Design RAG applications and AI agents using embeddings, vector databases, tools, and orchestration



Deploy, monitor, optimize, and maintain AI systems with MLOps and cloud infrastructure



Apply AI security, responsible AI, scalability, and reliability practices to enterprise projects

Why GSDC

**4.4 / 5**

Trustpilot · Excellent

**4.8 / 5**

Reviews.io · 96% recommend

2,50,000+

professionals certified

500+

Fortune clients

190+

countries served

Since 2016

US · SG · Switzerland

- ✓ Independent, vendor-neutral certification body established in 2016 — offices in the US, Singapore, and Switzerland.
- ✓ Accredited by ABICB (Accreditation Board for International Certification Bodies) and a proud member of ANSI.
- ✓ Alumni work at 500+ Fortune companies across 190+ countries; 100+ Authorized Training Partners worldwide.
- ✓ Certification built and reviewed with AI engineering experts, technology leaders, and practitioners building intelligent systems in production.

RECOMMENDED BY

Forbes · Indeed · TechTarget · CareerSidekick · LeanIX · People Managing People · Authentic**ABICB Accredited****ANSI Member****Vendor-Neutral**

Read verified reviews: trustpilot.com/review/gsdccouncil.org · reviews.io

Our Global Clients

Professionals across technology, cloud, finance, and enterprise engineering hold GSDC certifications.

Oracle

Amazon

Microsoft

Cisco

Veritas

HP

Bank of America

Deloitte

Volkswagen

IS THIS FOR YOU?

Who Is This Certification For?

- AI engineers, machine learning engineers, and AI developers
- Software developers, software engineers, and technical architects
- Data scientists and data engineers building production systems
- DevOps, MLOps, cloud engineers, and cloud architects
- Technology managers, IT leaders, and AI or technical product managers
- Robotics engineers and professionals transitioning into AI engineering careers

PRE-REQUISITES

There are no mandatory prerequisites. A basic understanding of AI, programming, software development, or machine learning concepts is beneficial, but no formal technical or AI engineering background is required — the program builds from AI fundamentals and focuses on practical AI engineering, model development, intelligent systems, implementation, and AI solution deployment.

Learn from Experts

Learn from experienced practitioners and industry leaders who design, update, and teach the program — bringing real-world AI engineering, machine learning, and production systems expertise to every module.



Maxim Salnikov
MICROSOFT

Digital and App Innovation Business
Lead, Western Europe



Trevor Wiseman
THE CIRCUIT

VP of Technology & AI Governance



Swathi Adimulam
ORACLE

OCI Cloud & AI Architect



Hayk Hakobyan
INSIGHTGENIE

Co-Founder



Baris Dirim
CULTUREASY

Human Systems Architect

What You'll Learn

16+ hours across 14 modules covering the full AI engineering lifecycle — from Python and data pipelines to production operations — with hands-on builds and Learn-By-Doing activities in every module.

1

Foundations of AI Engineering

Lifecycle, ML and GenAI fundamentals, foundation models, tools, roles

2

Python & AI Development

NumPy, Pandas, scikit-learn, PyTorch, TensorFlow, Git, testing

3

Data Engineering for AI

Collection, cleaning, preprocessing, feature engineering, labeling

4

ML Model Development

Supervised and unsupervised learning, training, tuning, evaluation

5

Generative AI Engineering

Foundation model APIs, prompt and context engineering, function calling

6

RAG & Knowledge-Based AI

Chunking, embeddings, vector DBs, retrieval, reranking, optimization

7

AI Agents & AI Applications

Agent architecture, tool calling, memory, planning, multi-agent systems

8

Evaluation & Optimization

Metrics, LLM evaluation, bias, error analysis, inference and cost

9

MLOps & Engineering Pipelines

ML pipelines, experiment tracking, registries, CI/CD, reproducibility

10

AI Deployment & Infrastructure

Model serving, real-time and batch inference, Docker, Kubernetes, GPU

11

AI Monitoring & Operations

Data and model drift, observability, logging, alerting, retraining

12

Security & Responsible Engineering

Secure development, privacy, model security, fairness, explainability

13

Production AI Engineering

Scalability, reliability, availability, cost, troubleshooting, tech debt

14

Enterprise AI Engineering

Standards, platform engineering, governance, metrics, project delivery

Module-by-Module

Module 1 — Foundations of AI Engineering

- Introduction to AI Engineering
- AI Engineering Lifecycle
- AI and ML Fundamentals
- Generative AI Fundamentals
- Foundation Models
- Large Language Models
- AI Engineering Roles
- AI Development Environments
- AI Engineering Tools
- AI Engineering Best Practices

Module 3 — Data Engineering for AI

- AI Data Fundamentals
- Data Collection
- Data Ingestion
- Data Cleaning
- Data Preprocessing
- Feature Engineering
- Data Transformation
- Data Quality
- Data Labeling
- Data Pipelines

Module 5 — Generative AI Engineering

- Generative AI Development
- Foundation Model APIs
- LLM Application Development
- Prompt Engineering
- Context Engineering
- Structured Outputs
- Function Calling
- Model Selection
- Model Parameters
- Generative AI Evaluation

Module 7 — AI Agents & AI Applications

- AI Agent Fundamentals
- Agent Architecture
- Agent Workflows
- Tool Calling
- Agent Memory
- Agent Planning
- Agent Orchestration
- Multi-Agent Systems
- Human-Agent Interaction
- Agent Evaluation

Module 2 — Python & AI Development

- Python for AI Engineering
- Python Libraries
- NumPy and Pandas
- Scikit-learn
- PyTorch and TensorFlow
- Jupyter Notebooks
- Git and Version Control
- AI Development Environments
- Code Organization
- Testing AI Code

Module 4 — Machine Learning Model Development

- ML Problem Definition
- Model Selection
- Supervised Learning
- Unsupervised Learning
- Classification
- Regression
- Clustering
- Model Training
- Hyperparameter Tuning
- Model Evaluation

Module 6 — RAG & Knowledge-Based AI

- RAG Fundamentals
- RAG Architecture
- Document Processing
- Chunking Strategies
- Embeddings
- Vector Databases
- Retrieval Methods
- Reranking
- RAG Evaluation
- RAG Optimization

Module 8 — AI Model Evaluation & Optimization

- Model Evaluation
- Model Performance Metrics
- Generative AI Evaluation
- LLM Evaluation
- Accuracy and Quality
- Model Bias
- Error Analysis
- Model Optimization
- Inference Optimization
- Cost Optimization

Module-by-Module

Module 9 — MLOps & AI Engineering Pipelines

- MLOps Fundamentals
- ML Pipelines
- Experiment Tracking
- Model Registry
- Data Versioning
- Model Versioning
- CI/CD for AI
- Pipeline Automation
- Pipeline Orchestration
- Reproducible AI

Module 11 — AI Monitoring & Operations

- AI System Monitoring
- Model Monitoring
- Data Drift
- Model Drift
- Performance Monitoring
- AI Observability
- Logging
- Alerting
- Model Retraining
- AI Incident Management

Module 13 — Production AI Engineering

- Production AI Systems
- AI Scalability
- AI Reliability
- High Availability
- Performance Optimization
- AI Cost Management
- Disaster Recovery
- AI Technical Debt
- Production Troubleshooting
- Continual Improvement

Module 10 — AI Deployment & Infrastructure

- AI Deployment Fundamentals
- Model Serving
- Real-Time Inference
- Batch Inference
- REST APIs
- Containers for AI
- Docker
- Kubernetes
- GPU Infrastructure
- Cloud AI Platforms

Module 12 — AI Security & Responsible Engineering

- AI Security Fundamentals
- Secure AI Development
- Data Privacy
- Access Control
- Model Security
- AI Vulnerabilities
- Responsible AI
- Fairness and Bias
- Explainability
- Human Oversight

Module 14 — Enterprise AI Engineering

- AI Engineering Architecture
- AI Development Standards
- AI Engineering Workflows
- AI Platform Engineering
- AI Governance Integration
- AI Security Integration
- Engineering Documentation
- AI Engineering Metrics
- AI Project Delivery
- Future of AI Engineering

A Guided Path to Certification

Self-paced study, daily live sessions, personal mentoring, and hands-on practice — finish at your own pace.



STEP 1 • FOUNDATION

Self-paced modules

16+ hrs expert-led video, e-books, templates, cheat sheets & toolkits · lifetime access



STEP 2 • DAILY LIVE

GSDC Studio

Daily live sessions with global experts · 100+ monthly · free recordings



STEP 3 • PRACTICE

Learn by Doing + 1-on-1 SME

Build a RAG application and an ML pipeline, then deploy and monitor it — with personal SME reviews



STEP 4 • CERTIFICATION

Apply & Get Certified

Unlimited practice exams + capstone project, final proctored exam · portfolio-ready deliverables

Move at your own pace. Study self-paced with lifetime access to all materials, live sessions, and recordings.

ALL IN ONE ENROLLMENT

Everything Included



Expert-Led Videos

16+ hours, self-paced



SME Connect

3 personalized 1-on-1 sessions



Capstone Project

Ship a production-ready AI system



GSDC Studio

100+ live monthly sessions



Learn By Doing

Hands-on RAG, agent, MLOps & deployment builds



Job Support

LinkedIn Enhancer, Resume Builder + free membership

Exam & What to Expect

This is a certification, not a course. Study self-paced with the materials provided (plus live support), then sit a proctored online exam. Lifetime access to materials, plus unlimited practice exam access.

40

EXAM QUESTIONS

MCQ

EXAM FORMAT

65%

PASSING SCORE

90 min

DURATION

English

LANGUAGE

No

OPEN BOOK

5 Years

VALIDITY

Yes

FREE RETAKE

IS THIS FOR YOU?

Where CAIEP Takes You

YOUR ROLE	HOW CAIEP HELPS YOU	CAREER OUTCOME
Software Engineer / Developer	Move from calling APIs to building evaluated, production LLM apps.	→ AI Engineer
Data Scientist	Take models out of notebooks into pipelines, serving, and monitoring.	→ Machine Learning Engineer
Data Engineer	Build AI-grade pipelines, feature engineering, and data versioning.	→ AI Data Engineer
DevOps / Cloud Engineer	Run MLOps: CI/CD, registries, GPU infrastructure, and observability.	→ MLOps Engineer
Technical Architect	Standardize AI workflows, platform engineering, and delivery practice.	→ AI Platform Engineer
Tech Manager / Product Manager	Judge feasibility, cost, and quality of AI systems your team ships.	→ AI Engineering Lead



7-Day Money-Back Guarantee

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Single Access

~~\$800~~ **\$400**

1

CERTIFICATION

- ✓ Self-paced expert-led videos + GSDC Studio
- ✓ 3 SME Connect (1-on-1) sessions
- ✓ Book of Knowledge + Capstone + Job Support
- ✓ Exam + 1 free retake & practice · membership (\$109 free)

Bundle Access

MOST POPULAR

~~\$1200~~ **\$600**

3

CERTIFICATIONS

- ✓ Everything in Single, across 3 certifications — just \$200 each
- ✓ Unlimited SME Connect (1-on-1)
- ✓ Exam + 2 free retakes & practice
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