

Urban League of Greater Pittsburgh Training Academy

AWS Certified AI Practitioner (AIF-C01) — Fall/Winter 2026–2027

Course Focus: Foundations of Artificial Intelligence, Machine Learning, Generative AI, and AWS Cloud | **Format:** Instructor-Led / Hybrid | **Meeting:** Wednesdays, 6:00–8:00 PM | **Dates:** November 11, 2026–February 17, 2027

First Class	November 11, 2026	Instructional Period	Nov. 11, 2026–Feb. 17, 2027
Review/Makeup	Feb.10 & Feb. 17, 2027	Length	12 sessions, including review/makeup
Certification	AWS Certified AI Practitioner (AIF-C01)	Materials/Exam	Materials provided; exam cost covered for eligible participants

Course Description

This foundational professional education course prepares students to understand and discuss artificial intelligence (AI), machine learning (ML), generative AI (GenAI), foundation models, responsible AI, and AWS cloud technologies. Students examine practical business and organizational use cases while building familiarity with AWS AI services, cloud fundamentals, prompt engineering, Amazon Bedrock, Amazon Q, security, compliance, governance, and certification exam preparation. The official AWS Certified AI Practitioner exam is a foundational credential with 65 questions and a 90-minute duration.

Learning Expectations

- Attend scheduled classes and participate actively in discussions and activities.
- Complete assigned learning activities, quizzes, knowledge checks, and practical exercises.
- Review course materials between sessions and participate in exam-preparation activities.
- Demonstrate professional, ethical, and responsible conduct when discussing AI use.

Curriculum Schedule

Date	Module	Major Topics
Nov. 11	1. Why Certify?	AWS certification, AI growth, career opportunities, exam structure, resources
Nov. 18	2. AWS Fundamentals	Cloud models, Regions, Availability Zones, core services, IAM, shared responsibility
Dec. 2	3. AI & ML	AI concepts, ML lifecycle, SageMaker, MLOps, AWS ML services
Dec. 9	4. Generative AI	Foundation models, transformers, diffusion, GenAI capabilities and limitations
Dec. 16	5. AI Applications	Computer Vision, NLP, Rekognition, Comprehend, Kendra, Lex, Polly, Transcribe, Translate, fraud detection
Jan. 6	6. Bedrock & Amazon Q	Amazon Bedrock, model selection, agents, customization, Amazon Q Business and Developer
Jan. 13	7. Prompt Engineering	Prompt anatomy, prompting techniques, zero-shot/few-shot prompting, prompt security
Jan. 20	8. Responsible AI	Fairness, explainability, privacy, security, transparency, safety, governance
Jan. 27	9. Security & Governance	AI security, compliance, privacy, risk management, responsible deployment
Feb. 3	10. Certification Preparation	Comprehensive review, exam strategies, AI/ML, GenAI, responsible AI, security, compliance, governance
Feb. 10	Review / Makeup	Questions, remediation, missed content, examination preparation
Feb. 17	Review / Makeup	Final review, practice examination, certification readiness