TECH ONBOARDING GUIDE

AWS Foundations and AI Practitioner

4-week detailed curriculum | Target: AWS Certified AI Practitioner (AIF-C01)

I built this guide to give you a clear path into technology without expecting you to already know the language. You are not supposed to understand everything on day one. Your job is to show up consistently, practice, ask questions, and keep evidence of what you build. I will help you connect the pieces, but the hands-on work is where the confidence will come from.

Study rule: Do not only watch videos. Type the commands, build the labs, break things, fix them, and explain what happened in your own words.

Your outcome for this phase

Understand cloud basics, AI/ML concepts, generative AI use cases, responsible AI, and the AWS services used to deliver AI solutions.

Expected pace: 2-3 hours Monday through Friday, 3-4 hours Saturday, and Sunday reserved for rest or catch-up. Each week ends with something you can demonstrate.

Phase learning resources

Resource	How to use it
AWS Skill Builder	Official AWS digital training and certification preparation.
AWS Educate	Free beginner cloud and AI learning pathways.
AWS PartyRock	Build generative AI apps without starting with code.
AWS AI Practitioner exam guide	Official exam scope and task statements.
Elements of AI	Accessible AI fundamentals course.

How to prove you learned it

- Explain the concept without reading notes.
- Complete the lab twice: once with instructions and once from memory.
- Push scripts, diagrams, screenshots, or written reflections to GitHub.
- Write down one failure, the cause, and the fix each week.
- Answer practice questions only after performing hands-on work.

Week 1 - Cloud and AWS fundamentals

Weekly deliverable: Complete the assigned lab, update your GitHub notes, and record a 3-5 minute explanation of what you learned.

Day	Exact learning assignment	Proof of work
Mon	Cloud computing, shared responsibility, regions, Availability Zones, edge locations.	Notes + commands/screenshots
Tue	AWS account safety: root user, MFA, IAM users, roles, policies, least privilege.	Notes + commands/screenshots
Wed	Core services overview: EC2, Lambda, S3, RDS, DynamoDB, VPC, CloudWatch.	Notes + commands/screenshots
Thu	Pricing models, elasticity, scalability, high availability, managed services.	Notes + commands/screenshots
Fri	AWS console navigation, budgets, billing alarms, and tagging.	Notes + commands/screenshots
Sat	Lab: secure a new AWS account, create a budget, launch and terminate a small resource using free-tier awareness.	Completed lab + weekly recap

End-of-week questions

1. What problem does this technology or concept solve?
2. What are the most important commands, services, or components?
3. What broke during the lab, and how did you identify the cause?
4. How does this week connect to cloud or DevOps work?

Week 2 - AI and machine learning foundations

Weekly deliverable: Complete the assigned lab, update your GitHub notes, and record a 3-5 minute explanation of what you learned.

Day	Exact learning assignment	Proof of work
Mon	AI vs ML vs deep learning vs generative AI; supervised, unsupervised, reinforcement learning.	Notes + commands/screenshots
Tue	Training, validation, testing, inference, features, labels, models, parameters.	Notes + commands/screenshots
Wed	Classification, regression, clustering, recommendation, computer vision, NLP.	Notes + commands/screenshots
Thu	Model quality: accuracy, precision, recall, F1, bias, variance, overfitting.	Notes + commands/screenshots
Fri	AI/ML lifecycle: business problem, data, training, evaluation, deployment, monitoring.	Notes + commands/screenshots
Sat	Exercise: choose appropriate AI approaches for ten business scenarios and explain why.	Completed lab + weekly recap

End-of-week questions

1. What problem does this technology or concept solve?
2. What are the most important commands, services, or components?
3. What broke during the lab, and how did you identify the cause?
4. How does this week connect to cloud or DevOps work?

Week 3 - Generative AI and AWS AI services

Weekly deliverable: Complete the assigned lab, update your GitHub notes, and record a 3-5 minute explanation of what you learned.

Day	Exact learning assignment	Proof of work
Mon	Foundation models, tokens, embeddings, context windows, prompts, inference.	Notes + commands/screenshots
Tue	Prompt techniques: role, context, examples, constraints, chain structure, evaluation.	Notes + commands/screenshots
Wed	RAG, vector databases, fine-tuning, continued pretraining, agents.	Notes + commands/screenshots
Thu	Amazon Bedrock models, Knowledge Bases, Guardrails, Agents; SageMaker overview.	Notes + commands/screenshots
Fri	Amazon Q, Textract, Comprehend, Rekognition, Transcribe, Translate, Polly.	Notes + commands/screenshots
Sat	Lab: build a small PartyRock application and document prompt iterations and output quality.	Completed lab + weekly recap

End-of-week questions

1. What problem does this technology or concept solve?
2. What are the most important commands, services, or components?
3. What broke during the lab, and how did you identify the cause?
4. How does this week connect to cloud or DevOps work?

Week 4 - Responsible AI, security, and exam readiness

Weekly deliverable: Complete the assigned lab, update your GitHub notes, and record a 3-5 minute explanation of what you learned.

Day	Exact learning assignment	Proof of work
Mon	Bias, fairness, explainability, transparency, robustness, hallucinations.	Notes + commands/screenshots
Tue	Data privacy, encryption, IAM, data residency, intellectual property, human review.	Notes + commands/screenshots
Wed	Cost and performance choices: model size, latency, throughput, batching, caching.	Notes + commands/screenshots
Thu	AI governance, model cards, monitoring, auditability, acceptable-use controls.	Notes + commands/screenshots
Fri	Official domain review and scenario questions.	Notes + commands/screenshots
Sat	Practice exam, weak-area review, final project demonstration, and exam readiness decision.	Completed lab + weekly recap

End-of-week questions

1. What problem does this technology or concept solve?
2. What are the most important commands, services, or components?
3. What broke during the lab, and how did you identify the cause?
4. How does this week connect to cloud or DevOps work?

Final phase assessment

Do not move forward based only on time spent. Move forward when you can perform and explain the following:

- Complete the main project without copying every step.
- Troubleshoot at least three intentionally introduced failures.
- Explain the architecture or workflow using a diagram.
- Score at least 80% on two separate practice assessments when a certification is targeted.
- Teach the core concepts back to another person in plain language.

Certification note

Target: **AWS Certified AI Practitioner (AIF-C01)**. Certification dates should be adjusted based on readiness. Passing quickly is less important than retaining the skill and being able to use it in a real environment.