AWS AI Talent Development for Higher Education Programme

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for Higher Education Programme

aws | KEMENTERIAN PENDIDIKAN TINGGI | USIM

The NextGen Cloud Innovators: AI & ML Essentials with AWS is a comprehensive 7-week blended learning experience designed to equip learners with the essential skills in cloud computing, artificial intelligence (AI), machine learning (ML), and generative AI development using AWS technologies.

This program is structured to guide participants from foundational cloud literacy to Generative AI application development through a combination of self-paced learning, in-person instructor-led training, and hands-on workshops. Each module ensures learners understand core concepts gain practical experience through simulations, labs, and real-world projects.

Participants will begin with a strong cloud foundation, advance through the principles of machine learning and natural language processing, and then immerse themselves in the rapidly evolving world of Generative AI. The journey concludes with a In-person workshop where participants will build an research assistant app with Amazon Q for Business followed by an exam-focused preparation, to earn the AWS Certified AI Practitioner (AIF-C01) certification.

Format: Self-paced Learning, In-person ILT, and Hands-on Workshop.

Target Role: Software Developer, Data Scientist, Data Analyst, Academician & Researcher.

Quota: 200 pax, 4 cohorts

Program Duration: October 2025 – Feb 2026

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Program Schedule

Week	Modality	Course/Workshop	Learning Goal	Certificate Completion /Digital Badge
Week 1	Self-paced (AWS Skill Builder)	AWS Cloud Practitioner Essentials	Understand the basics of AWS Cloud concepts, global infrastructure, pricing, and services.	Digital: AWS Certificate Completion
Week 2	Self-paced (AWS Skill Builder - Game-based)	AWS Cloud Quest: Cloud Practitioner	Practice cloud scenarios in a gamified 3D environment to reinforce foundational concepts.	Digital Badge: AWS Cloudquest Cloud Practitioner
Week 3	Instructor-Led Training	Machine Learning Foundations	This introductory course introduces students to the concepts and terminology of artificial intelligence (AI) and machine learning (ML). By the end of this course, students will be able to select and apply ML services to resolve business problems with guided labs.	
Week 4	Instructor-Led Training	Machine Learning for NLP	This intermediate-level course is designed for students who are pursuing careers that require machine learning knowledge. Students will learn how to describe the terms in the natural language processing (NLP) ecosystem; identify how to use NLP in business; and indicate the range of problems, tasks, and solutions with NLP.	
Week 5	In-Person Instructor-Led Training + Hands On Lab with AWS Skill Builder	Generative AI Essentials on AWS	Understand the basics of Generative AI, foundation models, and use cases on AWS.	Digital: AWS Certificate Completion
Week 6	In-Person Instructor-Led Training + Hands On Lab with AWS Skill Builder	Developing Generative AI Applications on AWS	Build hands-on experience developing GenAI apps using Amazon Bedrock and other tools.	Digital: AWS Certificate Completion
Week 6	In-person workshop	Amazon Q: AI-Powered Research Assistant	Build a functional AI-powered research assistant using Amazon Q by integrating real-time document search, summarization, and natural language interactions — all without writing complex code.	NA
Weeks 7–9	Self-paced (AWS Skill Builder) + Exam	Generative AI Simulearn Cloudquest Generative AI Generative AI Exam Prep: AWS Certified AI Practitioner (AIF-C01) Certification Exam: AIF-C01	Build solutions of Generative AI in interactive learning experiences by applying GenAI concepts and tools on AWS through gamified, real-world scenarios Deep-dive into exam domains, practice questions, and get exam-ready.	Digital Badge: AWS Cloudquest Generative AI

Program Schedule Timetable Series for all cohorts

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Week	Modality	Course/Workshop	Location	1st Cohort	2nd Cohort	3rd Cohort	4th Cohort
Week 1	Self-paced (AWS Skill Builder)	AWS Cloud Practitioner Essentials	Virtual	Oct 6-10	Oct 27-31	Dec 1-5	Dec 22-26
Week 2	Self-paced ((AWS Skill Builder - Game-based)	AWS Cloud Quest: Cloud Practitioner	Virtual	Oct 13-17	Nov 3-4	Dec 8-12	Jan 5-8
Week 3	Instructor-Led Training	Machine Learning Foundations	Virtual	Oct 20-24	Nov 10-14	Dec 15-19	Jan 12-16
Week 4	Instructor-Led Training	Machine Learning for NLP	Virtual	Oct 27-31	Nov 17-21	Dec 22-26	Jan 19-22
Week 5	In-Person Instructor-Led Training + Hands On Lab with AWS Skill Builder	Generative AI Essentials on AWS	AWS Office	Nov 3 Nov 10	Nov 24 Dec 8	Jan 12 Jan 19	Jan 26 Feb 9
Week 6	In-Person Instructor-Led Training + Hands On Lab with AWS Skill Builder	Developing Generative AI Applications on AWS	AWS Office	Nov 4-5 Nov 11-12	Nov 25-26 Dec 9-10	Jan 13-14 Jan 20-21	Jan 27-28 Feb 10-11
Week 6	In-person workshop	Amazon Q: AI-Powered Research Assistant	TBD	Nov 6 Nov 13	Nov 27 Dec 11	Jan 15 Jan 22	Jan 29 Feb 12
Weeks 7–9	Self-paced (AWS Skill Builder) + Exam	Generative AI Simulearn Cloudquest Generative AI Generative AI Exam Prep: AWS Certified AI Practitioner (AIF-C01) Certification Exam: AIF-C01	Virtual & Testing Center	Nov 17 – Dec 5	Dec 15 – Jan 2	Jan 26 – Feb 13	Feb 16 – Mar 6