Telecommunication
Development Bureau (BDT)

Ref.: BDT/PPS/CDS/DM/041

Geneva, 18 November 2026

To:
Administrations of ITU Member States in Africa

Subject: **ITU–Kazakhstan Partnership to Provide Training Opportunities for Participants from African Countries**

Dear Sir/Madam,

Further to my letter **Ref. BDT/DIR/DM/039** dated 26 October 2026, inviting ITU Member States in Africa to participate in the digital and artificial intelligence (AI) training opportunities generously offered by the Republic of Kazakhstan under the Partner2Connect Digital Coalition, I am pleased to provide updated and further information on the programmes available, their delivery modalities and the arrangements for participation. This initiative, co-signed by the Telecommunication Development Bureau (BDT) of the International Telecommunication Union (ITU) and the Government of Kazakhstan, offers 100 training places in digital technologies, programming and artificial intelligence, with particular attention to least developed countries (LDCs) and landlocked developing countries (LLDCs).

The initiative was announced during the annual ITU Regional Development Forum for the Commonwealth of Independent States (CIS) region, held on 29 and 30 September in Dushanbe, Tajikistan. The Forum was organized by the BDT and hosted by the Communications Service under the Government of the Republic of Tajikistan.

With an estimated value of CHF 100,000, the initiative will be implemented in phases through Kazakhstan's digital education ecosystem, including Astana Hub and the alem.ai International Centre for Artificial Intelligence. The initiative includes online self-paced courses, online instructor-led and in-person training programme scheduled to start in February 2027 in Astana, Kazakhstan. Practical information concerning registration procedures, eligibility criteria and the selection process is provided in **Annex 1**.

I would like to express my sincere appreciation to the Government of Kazakhstan for its valuable contribution and commitment to making this training programme possible.

I would be grateful if you could bring this information to the attention of the relevant authorities and prospective participants within your administration.

Yours faithfully,

(signed)

Cosmas Luckyson Zavazava
Director

Annex 1: Eligibility criteria, registration and selection process for each training programme

Annex 1
Eligibility criteria, registration and selection process for each training programme

1. Self-paced online training courses through QazCoders

QazCoders is an educational programme aimed at promoting digital literacy and developing national competencies in information technology (IT) and artificial intelligence (AI). Through this programme, self-paced online training courses will be offered to representatives of all African ITU Member States who meet the following criteria:

- Basic computer literacy.
- Proficiency in English, as all course materials and assessments will be in English.
- Relevant professional experience in governance, technology policy, artificial intelligence, data protection, cybersecurity or the ICT sector, which is considered an advantage.

Available courses

Interested representatives of ITU Member States are invited to submit their applications through the application link available on the ITU Academy by **15 December 2026**: https://academy.itu.int/training-courses/full-catalogue/qazcoders-programme

Applicants may express their interest in one or more of the following courses:

- AI Fundamentals (Duration: 20 hours)
- Programming Fundamentals (Duration: 49 hours)
- Data Science Fundamentals (Duration: 21 hours)
- Android Kotlin Fundamentals (Duration: 15 hours)

Course access and certification

Selected participants will be granted access to the Udacity learning platform and will have two months from the date of access to complete each selected course.

Upon completion of each course, participants will receive a certificate of completion issued by Astana Hub and the Udacity learning platform.

Number of available places: 50 participants.

Course availability: As of mid-January 2027.

2. In-person training programme through Tomorrow School

The in-person training programme will be delivered by Tomorrow School in Astana, Kazakhstan. It is open to representatives of African ITU Member States who meet the following eligibility criteria:

- **Age:** 18 years or older.
- **Basic skills:** Basic computer literacy and knowledge of coding.
- **Professional experience:** No prior professional experience is required. However, relevant experience in areas related to the programme is an advantage.
- **Motivation and teamwork:** Demonstrated interest in digital technologies, programming or artificial intelligence (AI), a willingness to strengthen practical skills, and an interest in peer-to-peer learning and teamwork.
- **English proficiency:** Ability to participate in the programme, as all training activities and materials will be in English.
- **Availability:** Commitment to participate fully in the 18-month programme in Astana, Kazakhstan.

Application and selection process

Interested representatives of African ITU Member States are invited to submit their applications through the ITU Academy by **15 December 2026**, using the following link: https://academy.itu.int/training-courses/full-catalogue/tomorrow-school-programme

Applicants will be required to submit a motivation letter explaining their interest in the programme.

The selection process includes online assessments evaluating memory, logical thinking and problem-solving skills. Candidates who pass these assessments will proceed to the Piscine, an intensive 26-day online programme focused on peer-to-peer learning, teamwork and project-based education. Successful candidates will then be admitted to the main 18-month programme.

Applications will be reviewed following the application deadline, and selected participants will be notified in due course by Tomorrow School.

Programme content and learning approach

The 18-month programme is practice-oriented and focuses on developing programming and AI skills through hands-on projects, independent problem-solving and collaboration with peers. It includes more than 50 practical projects and offers three learning pathways:

- **AI Imperative Programming:** Programming fundamentals, algorithms, Go programming, backend development and collaborative software development.
- **AI Full Stack:** Development of AI-powered web applications using technologies such as Python, JavaScript, React and FastAPI, alongside practical applications of computer vision, natural language processing and large language models.
- **AI Core Tech:** Data analysis, machine learning, computer vision, recommendation systems and the integration of AI models into real-world products.

Programme costs and accommodation

Participants will be responsible for arranging and covering their own accommodation for the duration of the programme, as well as other costs relating to participation in the programme, including their flight costs and daily living expenses in Kazakhstan.

Number of available places: Five (5) participants.

Expected start date: February 2027.

Visa and residence permit: Selected participants will receive a formal visa-support letter and the necessary supporting documents from the Partner to apply for a visa (for study purposes) upon arrival in Kazakhstan.

Certification: Upon completion of the programme, participants will receive a Certificate of Completion issued by Astana Hub, a major innovation hub in Central Asia supporting technology businesses, specialist training and startup development.

3. Online IT Training Courses Through the Tech Orda Programme

Programme Overview

The Tech Orda programme, implemented since 2022, aims to develop qualified IT professionals and improve employment opportunities by providing practical, industry-relevant digital skills training. It works with accredited IT schools to deliver training in high-demand areas, including artificial intelligence (AI), programming, data analytics, web development and AI-powered product development.

Available courses

The following table summarizes the available courses by level and duration:

No.	Course title	Level	Duration	Description
1	Python and Data Engineering	Beginner	6 months	Designed for individuals with no prior programming experience, this course focuses on data automation. Over a six-month period, participants will develop proficiency in Python (including object-oriented programming and testing methodologies), SQL, PostgreSQL, Pandas, and data visualization. They will also learn to extract data from APIs and websites, culminating in the integration of large language models (LLMs) during the final weeks. Graduates will complete the programme with a portfolio of six GitHub projects, preparing them for further studies in machine learning.
2	AI Engineering for Beginners	Beginner	6 months	This comprehensive online programme guides participants from foundational programming to the development and deployment of fully functional AI systems. The curriculum covers software engineering best practices, LLM APIs, prompt engineering, AI agent architecture, AI evaluation and safety, as well as deployment and monitoring. The learning format combines pre-recorded lectures on the LMS, weekly live online sessions, and daily mentor consultations. The programme concludes with a capstone project in which participants develop and defend a production-ready AI product.
3	AI Workflow Automation Engineering	Beginner	6 months	This course introduces participants to the automation of organizational processes using accessible no-code tools such as Make, Zapier, and n8n. Guided by industry experts with experience at leading global technology firms, the programme features weekly live workshops and rigorously reviewed assignments. Each participant will deploy a functional AI automation solution for a real-world organization and present their final project during a concluding Demo Day.
4	AI-Powered Data Analyst - from manual foundations to automation with AI: Excel, SQL, Python & Power BI with Copilot	Beginner	6 months	This project-based programme guides participants from foundational data concepts to practical proficiency in data analytics. Using AI tools such as Copilot and ChatGPT, the curriculum covers Excel, SQL, Python, and Power BI. Participants will work on real-world business cases and develop a comprehensive portfolio, culminating in a final Power BI dashboard using localized, real-world data. Led by industry-certified experts, the course prepares graduates for junior data analyst positions.
5	Applied Machine Learning: Predictive Modeling and Neural Networks	Intermediate	6 months	Designed for analysts and developers seeking to build models with tangible business impact, this course covers the entire lifecycle, from problem framing to service deployment. Key topics include regression and classification, gradient

				boosting techniques (CatBoost and LightGBM), model interpretation using SHAP, time-series forecasting, and customer segmentation. Participants will also gain hands-on experience with neural networks in PyTorch for image and text processing.
6	AI Automation Engineering (Intermediate level)	Intermediate	6 months	This course focuses on the design and implementation of AI-driven automations for complex business processes. Participants will develop the skills to integrate AI models with diverse workflows, APIs, databases, and third-party services. The curriculum emphasizes building intelligent assistants and automation pipelines, as well as deploying end-to-end solutions using modern low-code and developer tools. The course is delivered by industry experts with extensive real-world experience in AI automation.
7	AI Engineering (Intermediate level)	Intermediate	7 months	This online programme focuses on developing AI agent systems. Level 1 consists of 15 modules delivered through live sessions, requiring 8–12 hours of study per week. Participants will learn agentic coding, Python engineering practices, LLM fundamentals, evaluation methods, and memory management techniques such as RAG and vector stores. The programme concludes with a capstone or research project, which participants present to an expert committee.
8	Generative AI and LLMs: Scaling AI to Production	Advanced	6 months	Designed for experienced engineers seeking to integrate LLMs into enterprise workflows, this course covers the development of advanced AI systems. Participants will learn to build RAG systems for corporate documents, develop agents using LangGraph and MCP, and fine-tune models using QLoRA. The course also covers deployment, monitoring, cost optimization, and protection against prompt injection. Participants will develop an LLM-based system suitable for deployment in a company.
9	Building AI Agents: From Architecture to Deployment	Advanced	6 months	This advanced course covers the AI agent development lifecycle, including agent architecture, tool use, memory management, multi-agent workflows, API integration, evaluation, security, and deployment. Through practical projects, participants will develop and deploy AI agents for real-world business applications. The course is delivered by practitioners with experience in developing and scaling AI products at major technology companies.

Selection criteria

- **Basic skills:** Basic computer literacy for beginner-level courses, and knowledge of AI tools for intermediate- and advanced-level courses.
- **Professional experience:** No prior professional experience is required. Relevant experience in AI-related areas may be considered.

- **Motivation and teamwork:** Demonstrated interest in artificial intelligence and digital technologies.
- **English proficiency:** Sufficient proficiency in English to participate in the programme, as all training activities and materials will be in English.

Application and selection process

Interested representatives of ITU Member States in Africa are invited to apply through the ITU Academy by **15 December 2026**: https://academy.itu.int/training-courses/full-catalogue/tech-orda-programme

As part of the application process, applicants will be asked to provide a motivation statement outlining their interest in the selected course and how it relates to their professional development goals.

Applications will be reviewed according to the criteria established by the respective training providers. Selected participants will be notified in due course.

Duration and certification

Most courses have a duration of six months, although some programmes may have different durations.

Completion requirements vary by course and may include minimum attendance requirements, homework and quizzes, practical assignments, final examinations, capstone projects or presentations before an expert committee. Participants must meet the requirements of their selected course to receive the relevant completion certificate.

Number of available places

A total of 45 places are available in this programme. Applicants will be asked to indicate their preferred course(s) when applying through the ITU Academy and may express interest in more than one course. Participants will be assigned to a course based on their preferences and the selection process.

Course start dates: February 2027.