Unitar Online Catalogue

Bridging the Digital Technology Gap: Connect Africa to the World by Empowering the People for AI Readiness

20 9 2024

	Course
	Web-based
	16 9 2024 to 30 10 2024
	5 Weeks
	Public Finance and Trade
	https://unitar.org/
	US$0.00
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	Microsoft Africa

Artificial Intelligence (AI) is rapidly transforming the world, and Africa is no exception. As AI continues to evolve, its potential to transform various sectors in Africa is immense. However, to fully realize this potential, African countries must address challenges such as infrastructure limitations, skill gaps, and data privacy concerns. Collaboration between governments, private sector, and international

organizations will be crucial in overcoming these challenges

This programme is made possible by UNITAR and Microsoft Africa for AI readiness and exploring the AI paradigm in Africa, a continent of extraordinary diversity, the continent is home to some of the fastest-growing economies in the world and is becoming more integrated into the global economy.

To this end, this programme seeks to enhance the adoption of AI and employability of African youth and women in the global workforce, readying them with 4IR and future of work in the era of emerging technologies.

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UNITAR and Microsoft Africa collaboration have designed an emerging technology module to support Youth and women to tap into AI and related technologies particularly Generative AI, Responsible AI applications that have the potential to revolutionalise humanity and entrepreneurship. This is fundamental to achieving high-quality growth and empowering youth and women in the African continent leaving no one behind.

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- Demonstrate comprehensive understanding of AI policies and frameworks to ensure responsible innovation, address ethical concerns, and promote equitable access to AI benefits for all communities in Africa.
- Examine and assess how emerging technologies such as AI contributes to long-term economic stability and growth, focusing on sustainability and economic impact in Africa.
- Critically review how AI can enhance employment and innovation opportunities enabling participants to analyze how acquiring AI and related technology skills can open up more jobs and entrepreneurial prospects.
- Gain a comprehensive understanding of state of AI in Africa such Generative AI technology, explore its influence on various sectors, and identify ways it can address specific challenges within their local communities.
- Expand knowledge on different types of AI models, Data cleaning techniques and machine learning algorithms, learning how they function and can be applied in practical scenarios.
- Understand and grasp principles of ethical AI usage, deploy AI and ML models to foster collaboration and ignite AI innovations in Africa while

observing AI applications for social good as well as the broader societal implications of AI technologies.
- Apply learned digital and AI competencies to enhance decision-making processes and boost efficiency in enterprises while demonstrating a deep understanding of societal needs in Africa.

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Our vision for the participants is to equip them with the essential theoretical and practical knowledge to innovate, impact, and elevate through digital skills, particularly in Generative AI. To achieve this, the modules are meticulously structured and integrated into the curriculum to align with our vision. These modules cover the fundamental skills required for any generative AI engineer to be effective with minimal supervision. Below is a detailed explanation of each module.

- State of AI in Africa
- Generative AI
- Programming languages
- Machine learning algorithms
- Data cleaning techniques
- ML model deployment techniques
- Ethical AI and AI for good applications
- Cyber Security
- Big Data
- Related technologies

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In order to ensure the best possible outreach, participants will complete self-led online asynchronous courses following a training design created by UNITAR, Microsoft Africa - with their technical implementation partner KEPSA. The online modules will be supplemented by reading materials and video tutorials.

Using a state-of-the-art training architecture, UNITAR will combine self-learning with assessments and online discussions, as well as coaching and mentoring. This pedagogical approach will help train participants through various experiences: absorb (read); do (activity); interact (socialize); reflect (relate to one’s own

reality).

The First Phase (2 weeks)

Participants will engage in self-paced (asynchronous) e-modules on a MCT digital learning platform. The objective of this initial phase is to reinforce their foundational knowledge of AI, preparing them for the subsequent advanced, practical, and intensive phases where they will apply this knowledge to develop AI models. This phase focuses primarily on theoretical concepts, providing a robust theoretical foundation that will facilitate a practical approach and the implementation of these theories in real-world scenarios.

The Second Phase (2 weeks)

The second phase consists of augmented webinars, online coaching, and mentoring support. This phase is an instructor-led approach to guide participants toward a comprehensive understanding of status of AI in Africa especially Generative AI. African expertise drawn from various industries will provide one on one master classes on AI.

Applicants will be selected based on merit, with rigorous criteria including performance on assignments, proposals, ideas, and presentations throughout the programme. Evaluators will also provide personalized recommendations and feedback on participants' presentations, ensuring a thorough and constructive learning experience.

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To qualify, you should be from the 24 African English Speaking countries.

Botswana, Burundi, Eritrea, Eswatini, Ethiopia, Gambia, Ghana, Kenya, Lesotho, Liberia, Malawi, Namibia, Nigeria, Rwanda, Seychelles, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Tanzania, Uganda, Zambia and Zimbabwe

- Demonstrate commitment to emerging technology.
- Have an idea or innovation that increases access to AI adoption in your country.
- Be eager to learn through hands-on experience, with a passion for development and information technologies.

- Be at least 18 years old (Please Note: Women of all ages, including those over 35, are encouraged to apply, as their unique experiences and skills are valued).
- Possess good oral and written English communication skills.
- Be proficient with computers and have access to a laptop and internet.
- Be committed to completing the Programme and to continually update your emerging tech skills.
- Provide a recommendation letter from an individual with verifiable credentials.
- Ideally, be a university graduate and tech-savvy.

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Additional Information

A Certificate of Completion will be issued by UNITAR to all participants who complete the course-related assignments and assessments successfully.

Recommended to have

The following are the recommended hardware and software requirements for taking our e-learning courses:

- Operating System: Windows OS (10 or 11), Linux OS (Debian), MacOS version 11 and later
- Software: Microsoft Word, Microsoft Excel, Microsoft Powerpoint and Adobe Acrobat Reader (downloadable for free at adobe.com).
- Browser: Latest version of Microsoft Edge or Safari or Google Chrome or Mozilla Firefox (downloadable for free).
- Internet connection: Stable LAN or Wifi Internet connection
- Note: JavaScript and cookies must be enabled, pop-up blockers disabled.