



## IBM Digital – Nation Competition

### Required Learning

#### Core Skills Track

#	Course Name	22 hrs	URL
1	Web Development	3	<a href="https://developer.ibm.com/africa/skills/introduction-web-application-development/">https://developer.ibm.com/africa/skills/introduction-web-application-development/</a>
2	Node.js	4	<a href="https://developer.ibm.com/africa/skills/node-js/">https://developer.ibm.com/africa/skills/node-js/</a>
3	Cloud Computing	5	<a href="https://developer.ibm.com/africa/skills/cloud-computing/">https://developer.ibm.com/africa/skills/cloud-computing/</a>
4	Cloud Foundry	5	<a href="https://developer.ibm.com/africa/skills/cloud-foundry/">https://developer.ibm.com/africa/skills/cloud-foundry/</a>
5	Cloud Database	5	<a href="https://developer.ibm.com/africa/skills/database-services-cloud/">https://developer.ibm.com/africa/skills/database-services-cloud/</a>

#### Specialization Tracks (Choose at least one of these tracks)

1	AI Analyst	23.5 hrs	URL
1.1	AI v2	3.5	<a href="https://developer.ibm.com/africa/skills/artificial-intelligence-v2/">https://developer.ibm.com/africa/skills/artificial-intelligence-v2/</a>
1.2	IBM Watson v2	8	<a href="https://developer.ibm.com/africa/skills/ibm-watson-v2/">https://developer.ibm.com/africa/skills/ibm-watson-v2/</a>
1.3	Natural Language processing	5	<a href="https://developer.ibm.com/africa/skills/natural-language-processing-v2/">https://developer.ibm.com/africa/skills/natural-language-processing-v2/</a>
1.4	Chatbots v2	7	<a href="https://developer.ibm.com/africa/skills/chatbots-v2/">https://developer.ibm.com/africa/skills/chatbots-v2/</a>
2	Data Scientist	27 hrs	URL
2.1	Data Science Fundamentals	2.5	<a href="https://developer.ibm.com/africa/skills/data-science-fundamentals/">https://developer.ibm.com/africa/skills/data-science-fundamentals/</a>
2.2	Data Understanding and Preparation	10	<a href="https://developer.ibm.com/africa/skills/data-understanding-and-preparation/">https://developer.ibm.com/africa/skills/data-understanding-and-preparation/</a>
2.3	Cluster Analysis	5	<a href="https://developer.ibm.com/africa/skills/cluster-analysis/">https://developer.ibm.com/africa/skills/cluster-analysis/</a>
2.4	Classification	7	<a href="https://developer.ibm.com/africa/skills/classification-analysis/">https://developer.ibm.com/africa/skills/classification-analysis/</a>
2.5	Regression	2.5	<a href="https://developer.ibm.com/africa/skills/regression/">https://developer.ibm.com/africa/skills/regression/</a>
3	Blockchain	22 hrs	URL
3.1	Blockchain Fundamentals	2	<a href="https://developer.ibm.com/africa/skills/blockchain-fundamentals/">https://developer.ibm.com/africa/skills/blockchain-fundamentals/</a>
3.2	Hyperledger Composer Foundation	4	<a href="https://developer.ibm.com/africa/skills/hyperledger-composer-foundation/">https://developer.ibm.com/africa/skills/hyperledger-composer-foundation/</a>
3.3	Hyperledger Fabric Chaincode	3.5	<a href="https://developer.ibm.com/africa/skills/hyperledger-fabric-chaincode/">https://developer.ibm.com/africa/skills/hyperledger-fabric-chaincode/</a>
3.4	Hyperledger Fabric Integration	4.5	<a href="https://developer.ibm.com/africa/skills/hyperledger-fabric-integration/">https://developer.ibm.com/africa/skills/hyperledger-fabric-integration/</a>
3.5	Developing for Blockchain	6	<a href="https://developer.ibm.com/africa/skills/developing-for-blockchain/">https://developer.ibm.com/africa/skills/developing-for-blockchain/</a>
3.6	Track donations with Blockchain	2	<a href="https://developer.ibm.com/africa/skills/innovator-track-donations-with-blockchain/">https://developer.ibm.com/africa/skills/innovator-track-donations-with-blockchain/</a>
4	IoT & Advanced Cloud	13 hrs	URL
4.1	Build your First IoT Application: Node-RED: Basics to Bots	4	<a href="https://developer.ibm.com/africa/skills/innovator-node-red-basics-to-bots/">https://developer.ibm.com/africa/skills/innovator-node-red-basics-to-bots/</a>
4.2	Build a Notification System for your IoT Application	2	<a href="https://developer.ibm.com/africa/skills/innovator-build-notification-system-iot-application/">https://developer.ibm.com/africa/skills/innovator-build-notification-system-iot-application/</a>
4.3	Create a Smart Home IoT Application	2	<a href="https://developer.ibm.com/africa/skills/innovator-create-a-smart-home-iot-application/">https://developer.ibm.com/africa/skills/innovator-create-a-smart-home-iot-application/</a>
4.4	Create a Microservice using IBM Cloud Functions	2.5	<a href="https://developer.ibm.com/africa/skills/innovator-create-a-microservice-using-ibm-cloud-functions/">https://developer.ibm.com/africa/skills/innovator-create-a-microservice-using-ibm-cloud-functions/</a>
4.5	Deploy your First Application using DevOps	2.5	<a href="https://developer.ibm.com/africa/skills/innovator-deploy-your-first-app-using-devops/">https://developer.ibm.com/africa/skills/innovator-deploy-your-first-app-using-devops/</a>