Training course outline

ITU and Sudatel Telecommunications Academy (SUDACAD)

Title	Internet Of Things (IoT)
Modality	Face to Face
Dates	24-26 May 2022
Duration	3 Days
Registration deadline	20 May 2022
Training fees	150 $
Description	IoT, is a system of interrelated computing devices, mechanical and digital machines, objects, animals or people that are provided with unique identifiers (UIDs) and the ability to transfer data over a network without requiring human-to-human or human-to-computer interaction.
Code	22WS28177ARB-A

1. LEARNING OBJECTIVES

The aim of this course is to discuss the role of the Internet of Things (IoT) for development and creating a smart world that facilitates sustainable economic development along with a high quality of life within smart sustainable cities.

2. LEARNING OUTCOMES

By the end of this training, participants should be able to:

- Determine the most appropriate IoT Devices and Sensors based on Case Studies.
- Setup the connections between the Devices and Sensors.
- Evaluate the appropriate protocol for communication between IoT.
- Analyse the communication protocols for IoT.

3. TARGET POPULATION

This training is targeting those who are smart city stakeholders, senior municipality managers and engineers working in IoT applications, service providers planning to deliver IoT solutions, and policy

and standards makers as well as IT experts from the industry, government, academia and experts and consultants involved in the implementation of IoT projects for the development of smart cities

4. ENTRY REQUIREMENTS

The course is flexible, yet intensive. Applicants are required to have basic of understand the converging technologies for building smart sustainable cities with integrated ecosystems.

5. TUTORS/INSTRUCTORS

Name of tutor(s)/instructor(s)	Contact details
Eng. Atif Hamad Abdalla	atifhamad3@gmail.com

6. TRAINING COURSE CONTENTS

- Introduction to Internet of Things.
- Applications.
- Polices & Regulations.
- Standards & Architecture.
- Physical Infrastructure.
- Sensors.
- RFID.
- Wireless Connectivity.
- Security.
- Data Science.
- AI, Big Data.
- WoT.
- Challenges and Business Aspects.

7. TRAINING COURSE SCHEDULE (Khartoum Time)

Date for 1st day	Time; Start time	Topics
24/May/2022	09:00-09:30	• Record attendance. • Setting the rules.
	09:30-11:00	• Introduction to Internet of Things. • Applications.
	11:00-11:30	• Break.
	11:30-02:00	• Polices & Regulations. • Standards & Architecture.

Date for 2nd day	Time; Start time	Topics
25/May/2022	09:00-09:30	• Record attendance.
	09:30-11:00	• Physical Infrastructure. • Sensors.
	11:00-11:30	• Break.
	11:30-02:00	• RFID. • Wireless Connectivity.

Date for 3rd day	Time; Start time	Topics
26/May/2022	09:00-09:30	• Record attendance.
	09:30-11:00	• AI, Big Data. • WoT.
	11:00-11:30	• Break.
	11:30-02:00	• Challenges and Business Aspects. • Closing Ceremony. • Group Picture.

8. METHODOLOGY (Didactic approach)

• Instructor-Led Class Lectures and presentations– Slides.
• Reviews and Revisions.
• Case Studies.

9. EVALUATION AND GRADING

Participants will be evaluated according to:

• Active interaction in the group exercises and discussions.
• Planned Quizzes.
• Dedication in attending the sessions.

Grading will take into consideration attendance (30%) and a final overall exam (70%).
IMPORTANT: a passing mark of 70% is required for obtaining a completion certificate.

10. TRAINING COURSE COORDINATION

Course coordinator:	ITU coordinator:
Ms. Sara Elmakki Planning & Development Dept., SUDACAD Mobile: +249 11 7947230 Tel: +249 183 490 999 Email: saraab@sudatel.sd	**Mr. Ahmed El Raghy** Senior Advisor ITU Arab Regional Office Tel: +202 3537 1777 Mobile: +201005281908 Fax: +202 3537 1888 Email: ahmed.elraghy@itu.int