



**ITU Centre of Excellence Network for Arab Region
Naif Arab University of Security Sciences (NAUSS)**

**Face-to-Face Training course on
“Internet of Things (IoT) Security”**

Riyadh-Saudi Arabia, 27-31 October 2019

COURSE OUTLINE

COURSE DESCRIPTION

Title	Internet of Things (IoT) Security
Objectives	This course aims to equip the trainers with essential knowledge and skills to understand the principals of IoT, its architecture, protocols, ecosystem and applications. It also discusses information security concepts and techniques. The course investigates security threats and vulnerabilities found in each layer of the IoT architecture using popular use cases to elicit the requirements needed for protection. It sheds the light on the governance, risk and compliance standards and frameworks newly adopted to secure IoT applications.
Dates	27-31 October 2019
Duration	5 Days
Registration deadline	10 October 2019
Training fees	500 USD
Course code	19WS24273ARB-A

LEARNING OUTCOMES

This course aims to achieve the following learning outcomes:

- 1- Identify and recognize IoT architecture and ecosystem components.
- 2- Explain the functionality of widely used IoT protocols.
- 3- Understand and differentiate between security concepts.
- 4- Demonstrate the application of security concepts on IoT ecosystem.
- 5- Analyze security vulnerabilities found in IoT ecosystem.
- 6- Describe the application of IoT security standards on IoT ecosystem.

The main purpose of this training is to equip the participants with essential knowledge of IoT architecture and application in addition to emphasizing the importance of securing IoT devices through discussing its security vulnerabilities and threats.

TARGET POPULATION

This IoT security course caters to developers, security officers, auditors, and security professionals who want to understand IoT infrastructure and its security concerns. It also targets CxO level and middle management professionals who want to enhance business value and ROI leveraging IOT. This course is ideal for anyone who wishes to learn the fundamentals of IoT or pursue a career in this growing field.

TUTORS/INSTRUCTORS

NAME OF TUTOR(S)/INSTRUCTOR(S)	CONTACT DETAILS
Dr. Fatimah Alakeel, is a cybersecurity specialist, trainer and consultant.	fyakeel@gmail.com Mobile : 00966552220130

EVALUATION

Participants are assessed according to their attendance and passing a final test. The latter includes MCQ from different parts of the course.

TRAINING SCHEDULE AND CONTENTS / AGENDA

Date for 1 st day	Time; Start time	Topics/Activities
27/10/2019	11:00 - 11:30	Break the ice and introduce the course
	11:30 - 2:30	Module 01: Computer Networks Fundamentals
Date for 2 nd day	Time; Start time	Topics/Activities
28/10/2019	13:00 - 16:00	Module 02: Introduction to Internet of Things (IoT) Module 03: IoT Architecture
Date for 3 rd day	Time; Start time	Topics/Activities
29/10/2019	13:00 - 16:00	Module 04: IoT Protocols Module 05: Cybersecurity Principals
Date for 4 th day	Time; Start time	Topics/Activities
30/10/2019	13:00 - 16:00	Module 06: Cybersecurity analysis of IoT Module 07: IoT Use cases
Date for 5 th day	Time; Start time	Topics/Activities
31/10/2019	13:00 - 16:00 16:00 – 17:00	Module 08: IoT standards and frameworks Final Exam

METHODOLOGY

The training methods are instructor-led presentations, case studies discussions, group exercises and labs.

COURSE COORDINATION

Training Coordinator: Mr. Raed Al-Rashidi NAUSS Tel: + 966 11 246 34 44 ext.1077 Fax: +966 11 246 47 13 Mobile: +966 55 462 22 03 E-mail: ralrashidi@nauss.edu.sa	ITU Coordinator: Eng. Mustafa Al Mahdi Programme Administrator Arab Regional Office-ITU Tel: +202 3537 1777 Mobile: +20114 117 75 73 Fax : +202 3537 1888 Email : mustafa-ahmed.al-mahdi@itu.int
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REGISTRATION AND PAYMENT

ITU Academy portal account

Registration and payment should be made online at the ITU Academy portal.

To be able to register for the course you MUST first create an account in the ITU Academy portal at the following address:

<https://academy.itu.int/index.php/user/register>

Training registration

When you have an existing account or created a new account, you can register for the course online at the following link: <https://academy.itu.int/training-courses/full-catalogue/internet-things-iot-security>

You can also register by finding your desired course in our training catalogue

<https://academy.itu.int/index.php/training-courses/full-catalogue>

Payment

1. On-line payment

A training fee of USD 500 per participant is applied for this training. Payments should be made via the online system using the link mentioned above for training registration at <https://academy.itu.int/training-courses/full-catalogue/internet-things-iot-security>

2. Payment by bank transfer

Where it is not possible to make payment via the online system, select the option for offline payment to generate an invoice using the same link as above. Download the invoice to make a bank transfer to the ITU bank account shown below. Then send the proof of payment/copy of bank transfer slip and the invoice copy to Hcbmail@itu.int and copy the course coordinator. All bank transaction fees must be borne by the payer.

Failure to submit the above documents may result in the applicant not being registered for the training.

3. Group payment

Institutional Contacts are users that represent an organization. Any student can request to be an institutional contact or to belong to any existing organization.

To do this, head to your profile page by clicking on the **“My account”** button in the user menu. At the bottom of this page you should see two buttons:

- a. If you want to **become an institutional contact**, click on the **“Apply to be an Institutional Contact”** button. This will redirect you to a small form that will ask for the organization name. After you fill the name of the organization you want to represent, click on **“continue”** and a request will be created. An ITU Academy manager will manually review this request and accept or deny it accordingly.
- b. If you want to **belong to an existing organization**, click on the **“Request to belong to an Institutional Contact”** button. This will redirect you to a small form that will ask you to select the organization you want to join from an organization list. After you select the correct organization, click on **“continue”**, a request will then be created. The Institutional Contact that represents that organization will manually accept or deny your request to join the organization.

ITU BANK ACCOUNT DETAILS:

Name and Address of Bank:	UBS Switzerland AG Case postale 2600 CH 1211 Geneva 2 Switzerland
Beneficiary:	Union Internationale des Télécommunications
Account number:	240-C8108252.2 (USD)
Swift:	UBSWCHZH80A
IBAN	CH54 0024 0240 C810 8252 2
Amount:	USD 500
Payment Reference:	CoE-ARB 24273 -WBS No. P.40592.1.09

4. Other method of payment

If due to national regulations, there are restrictions that do not allow the payment to be made using options 1 & 2 above, please contact the ITU Coordinator for further assistance.