ITU Asia-Pacific Centres of Excellence

IoT Academy
Online Training Course on

"IoT Security Challenges and Solutions "

26 August – 6 September, 2019

COURSE DESCRIPTION

Title	Online training course on "**IoT Security Challenges and Solutions**" for the Asia-Pacific Region
Course Description	This course will focus on Security Issues for Internet of Things from IoT main Pillars aspects to IoT Integrated Systems and Services. Also covers IoT Security Challenges and Solutions for some important IoT Verticals.
Date	26 August to 6 September, 2019
Duration	2 weeks
Registration Deadline	16 August 2019
Training fees	USD 125
Course Code	19OI24393ASP-E

LEARNING OUTCOMES

This online training course aims to introduce participants to Internet of Things (IoT) Security topics as well as the fundamental building blocks of IoT. It will focus on topics that address security considerations for IoT embedded system design and development, IoT network engineering, IoT platform, IoT applications development and integrated IoT system. This online course also provides examples on IoT security challenges and solutions for some IoT Verticals such as Smart healthcare, Smart Agriculture and Smart City.

TARGET POPULATION

The course is targeted at organizations, industries, IT professionals managers, ICT engineers, policy makers, regulators, service & solution providers and academia, who are interested in understanding the security issues relating to the Internet of Things.

TUTORS/INSTRUCTORS

ITU Experts and IoT Academy Instructors.

METHOD OF TEACHING

Training material will be made available each week. These will constitute the main source of material for the Course. Each week discussion topics will be provided and a discussion forum opened for participants to participate to exchange views and share information. All participants are expected to participate in the discussion forum.

Online chat sessions with the Tutor will take place every Wednesday from 11.00– 12.00 Hrs. IRAN Time (GMT+3.30). All participants are expected to join the chat sessions as they will be graded. Online tests will be held every week during the course.

Important:
During the course, participants are expected to check their mailboxes for new messages on a daily basis.

EVALUATION

Besides the tests and their assignment score, participants will be evaluated according to their substantive posts on the discussion forum, active participation in the online chat sessions and other course activities, reflecting both the quantity and quality of time spent on the course. The evaluation details and criteria for certificates is as follows.

Quiz #1:	30%
Quiz #2	30%
Individual Assignment:	20%
2 Chat Sessions (5% per session)	10%
2 Discussion Forum (5% per forum)	10%
Total Evaluation:	**100%**

IMPORTANT: A PASSING MARK OF 60% IS REQUIRED FOR OBTAINING A COMPLETION CERTIFICATE.

TRAINING SCHEDULE AND CONTENTS

WEEK	MODULE TITLE	TOPICS
1	Module 1: Understanding IoT & Security Issues for Embedded System and Network	▪ Internet of Things Concept, Trend and Market ▪ Internet of Things Architecture and Main Components ▪ Security Risks of Internet of Things ▪ IoT Main Components Security Challenges and Solutions ▪ Security Considerations for IoT Embedded System Design and Development ▪ IoT Network Engineering, Security Issues and Solutions

		Discussion / Forum	
		Chat Session, QUIZ 1	
2	Module 2: Understanding IoT Security Issues for Platform, Applications and Integration	- Security Challenges and Consideration for IoT Platform Development - IoT Mobile Applications Security Challenges and Solutions - IoT Desktop Applications Security Challenges and Solutions - IoT Web Applications Security Challenges and Solutions - Integrated Security Challenges for Internet of Things Total Solutions - IoT & Health Care, Security Challenges & Solutions - Smart City, Security Challenges & Solutions	
		Assignment	
		Chat Session, QUIZ 2	

COURSE COORDINATION

Mr. Ashish Narayan (ashish.narayan@itu.int) from the ITU and Mr. Naghizadeh (Edu@IoTAcademy.ir) from the IoT AcademyI ares at your full disposal should you require any additional information.

REGISTRATION AND PAYMENT

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.

Course registration

Course 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/iot-security-challenges-and-solutions

You can also register by finding your desired course in our training catalogue https://academy.itu.int/index.php/training-courses/full-catalogue.

*Please note that online registration should be done **before 16 August 2019**.*

Payment

1. On-line payment
A training fee of USD 125 per participant is applied for this training. Payment should be made via the online system using the link mentioned above for training registration at https://academy.itu.int/training-courses/full-catalogue/iot-security-challenges-and-solutions.

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 <u>borne by the payer</u>**.
Failure to submit the above documents may result in the applicant not being registered for the training.

3. Group payment

Should you wish to pay for more than one participant using bank transfer and need one invoice for all of them, create an account as **Institutional Contact. 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.

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 125
Payment Reference:	CoE-ASP 19OI24393ASP-E-P.40593.1.08

4. Other method of payment

For local participants, who would like to pay in local currency, please contact Mr. Naghizadeh (Edu@IoTAcademy.ir) the IoT Academy coordinator for further assistance.