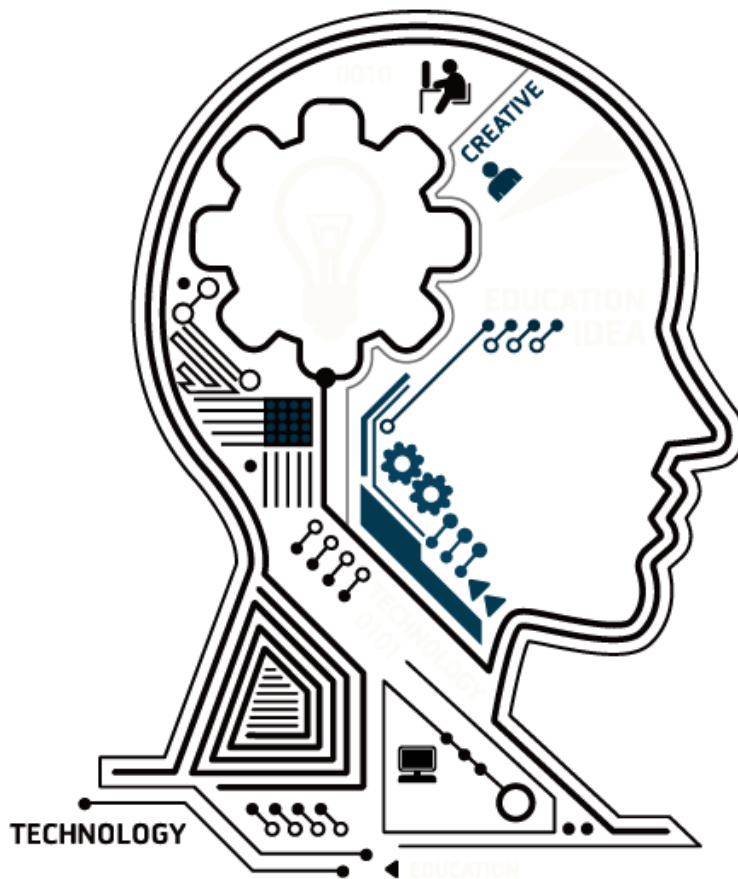


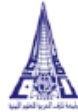
# ITU Centres of Excellence for Arab States

# Training opportunities

2021



جامعة نايف العربية للعلوم الأمنية  
Taif Arab University for Security Sciences



S2T  
Smart Tunisia Technoparks  
تونس لأقطاب التكنولوجيا الذكية

sudacad سوداكاند  
أكاديمية السودان للاتصالات  
SUDATEL TELECOMMUNICATIONS ACADEMY

**ITU Academy**  
Empowering minds



## Table of Contents

Overview of CoE Initiatives.....	3
Centres of Excellence for Arab States.....	4
Scope.....	5
Trainings offered by ITU CoEs for Arab States.....	6
Domain Name System Security Extensions (DNSSEC) .....	7
Cloud Computing .....	8
Ransomware Analysis: file encryption and decryption mechanism .....	9
Infrastructure Solutions for Broadband Applications .....	10
Applications of Geographic Information System (GIS) in Environmental Management and Resources Protection -Level 1.....	11
Agile Project Management for ICT Applications & Services .....	12
How to assess your products foot print .....	13
Risk Management for ICT Applications & Services .....	14

## Overview of CoE Initiatives

The Centres of Excellence (CoE) programme was launched by ITU at the turn of the millennium, with the aim to support capacity development in the field of information and communication technologies (ICTs) by offering continuous education to ICT professionals and executives in the public and private spheres through face-to-face, online or blended learning.

The CoE initiative evolved over the years to become one of the ITU's key training delivery mechanisms. With the support from multilateral and regional organizations, CoE networks have been established in a number of regions including Africa, the Americas, Arab States, Asia-Pacific, Commonwealth of Independent States (CIS) and Europe. Under the umbrella of the ITU Academy, these regional networks are brought together into a single global network sharing expertise, resources and capacity-building know-how in telecommunications and ICT training/education.







جامعة الزيتونة العربية الإسلامية  
Yahf Arab University for Security Sciences



## Centres of Excellence for Arab States



The second cycle of the new Centres of Excellence programme started in January 2019 and will end in December 2022. A total of 29 institutions were selected to operate as Centres of Excellence during this period. The following institutions were selected in Arab States to provide trainings in five distinct priority areas.

Logo	Institution	Country	Priority Areas
	Smart Tunisian Technoparks (S2T)	Tunisia	Wireless and Fixed Broadband Cybersecurity
	Centre International des Technologies de l'Environnement de Tunis (CITET)	Tunisia	ICTs & the Environment
	Naif Arab University for Security Sciences (NAUSS)	Saudi Arabia (regional entity)	Cybersecurity Internet of Things
	Sudatel Telecommunications Academy (SUDACAD)	Sudan	ICT Applications Wireless and Fixed Broadband



## Scope

This catalogue has been produced by the ITU Office for Arab States in collaboration with four ITU Centres of Excellence in Arab region to highlight and promote the capacity building courses provided by the centres.

While participation is open to participants from all countries, stakeholders from the Member States of the Arab region (as defined at ITU) are primarily encouraged to participate in the courses. These countries are Algeria, Bahrain, Comoros, Djibouti, Egypt, Jordan, Iraq, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, United Arab Emirates and Yemen.

The courses aim to increase participants' understanding, knowledge and awareness in the following areas:

- Wireless & fixed broadband
- ICT Applications
- Cybersecurity
- ICTs & the Environment
- Internet of things

Courses are provided either face to face or online – via the ITU Academy e-learning platform.

All courses have a test component. A certificate of achievement is given to candidates who successfully complete the end-of-course assessment(s).

Information on the registration process and payment methods can be found on the ITU Academy website: <https://academy.itu.int/>

Changes in course dates, trainers may occur will be reflected on the ITU Academy website mentioned above.



جامعة الزيتونة العالمية للإلكترونيات  
Yahf Arab University for Security Sciences



## Trainings offered by ITU CoEs for Arab States

In 2020, the ITU Centres of Excellence for Arab States had planned 28 face-to-face/online training programs out of them 6 online and 4 face-to-face courses were implemented and 18 cancelled. For 2021, there will be 17 online and 11 face-to-face training programs proposed, shown below (in chronological order):

No	Course Title	CoE	Date	Delivery Mode	Fees
1	Domain Name System Security Extensions (DNSSEC)	S2T	8-14 March 2021	Online	150 USD
2	Cloud Computing	SUDACAD	16-18 March 2021	Online	75 USD
3	Ransomware Analysis: file encryption and decryption mechanism	NAUSS	7-8 April 2021	Online	200 USD
4	Infrastructure Solutions for Broadband Applications	S2T	24-30 May 2021	Online	150 USD
5	Applications of Geographic Information System (GIS) in Environmental Management and Resources Protection -Level 1	CITET	7-11 June 2021	Online	120 USD
6	Agile Project Management for ICT Applications & Services	SUDACAD	11-20 June 2021	Online	75 USD
7	How to assess your products foot print	CITET	14-17 June 2021	Online	120 USD
8	Risk Management for ICT Applications & Services	SUDACAD	21-30 June 2021	Online	75 USD

**Dates are subject to change due to COVID-19.**



## TRAININGS OFFERED BY ITU COEs FOR ARAB STATES FOR 2021

### Domain Name System Security Extensions (DNSSEC)

| 8 – 14 March 2021 |

#### ITU Academy

#### ORGANIZED By



#### LANGUAGE

English

#### FEES

150 USD

#### MODE

Online

#### DURATION

7 Days

#### REGISTRATION DEADLINE

28 Feb. 2021

#### COURSE CODE

21OI26421ARB-E

#### Description:

This course aims to focus on Domain Name System Security Extensions (DNSSEC) and different key topics related to this field.

#### Learning Outcomes:

Upon completion of this training course, participants will be able to:

- Understand the basic concepts of DNS security.
- Know how to configure a DNSSEC-enabled resolver for your network.
- Know how to configure basic DNSSEC for your domains.
- Know how to configure reverse DNSSEC records for your networks.
- Be familiar with DNSSEC-related tools and procedures.
- Know how to troubleshoot basic DNSSEC problems.

#### Audience:

Engineers, systems and network administrators, and technical personnel in domain name registries and registrants. It also targets decision-makers, project managers, and strategists as well as consultants and security professionals who need a deeper understanding of how Domain Name System Security and its extensions (DNSSEC) works, as well as individuals interested in building their Cyber security capabilities.

#### Trainer:

Dr. Ryma Abassi



جامعة الزيتونة العالمية للعلوم الأمنية  
Zitoune Arab University for Security Sciences



## Cloud Computing

| 16 – 18 March 2021 |

### ITU Academy

#### ORGANIZED By



---

#### LANGUAGE

English/Arabic

---

#### FEES

75 USD

---

#### MODE

Online

---

#### DURATION

3 Days

---

#### REGISTRATION DEADLINE

10 March 2021

---

#### COURSE CODE

210I26475ARB-A

#### Description:

This course aims to provide participants with basic concepts of cloud computing, and its contributions in changing the ICT landscape.

#### Learning Outcomes:

Upon completion of this training course, participants will be able to:

- Concepts and technologies of cloud computing.
- How does cloud computing change the ICT landscape.
- The technologies used in cloud computing, such as micro-services and configuration management.
- The architectures and the lifecycle of a cloud computing deployment.
- Have hands-on experience with a cloud platform.

#### Audience:

ICT infrastructure professionals in the Ministries of Communications and Information Technology (ICT), ICT regulators, ICT centers, operators and providers of ICT services. Other institutions and individuals who are interested in having an overview of Cloud Computing are also welcome to participate in this training course.

#### Trainer:

Mr. Mohammed Sedig Alameen Adam



جامعة الزيتونة العربية الإسلامية  
Zitoun Arab University for Security Sciences





## Ransomware Analysis: file encryption and decryption mechanism

| 7 – 8 April 2021 |

### ITU Academy

#### ORGANIZED By



---

#### LANGUAGE

English

---

#### FEES

200 USD

---

#### MODE

Online

---

#### DURATION

2 Days

---

#### REGISTRATION DEADLINE

30 March 2021

---

#### COURSE CODE

21OI26550ARB-E

#### Description:

The objective of this course is to understand Ransomware that is one of the most widely used by cyber attackers nowadays, and to understand encryption and decryption mechanism through analysis Ransomware operating process.

#### Learning Outcomes:

Upon completion of this training course, participants will be able to:

- Knowledge of Ransomware definition and objective.
- Knowledge of types and trends of Ransomware.
- Knowledge of encryption and decryption mechanism used by Ransomware.
- Knowledge of Windows file format.
- Skills to conduct of encryption and decryption.
- Skills in compare between Ransom file and common file with hex view tool.
- Skills in using virtual machine.

#### Audience:

This training is providing a great value for security managers, engineers, technical staff, telecom operators, administrators from government organizations, industry companies and academia, as well as individuals who are interested in Ransomware cyber-attacks.

#### Trainer:

Prof. Kyounggon Kim



جامعة الزيتونة العربية الإسلامية  
Yaf Arab University for Security Sciences



# Infrastructure Solutions for Broadband Applications

| 24 – 30 May 2021 |

## ITU Academy

### ORGANIZED By



### LANGUAGE

English

### FEES

150 USD

### MODE

Online

### DURATION

7 Days

### REGISTRATION DEADLINE

17 May 2021

### COURSE CODE

210I26428ARB-E

### Description:

This course helps the auditors to understand the ever-increasing market for FTTx networks, PON and HFC transmission and the infrastructure components involved. It looks at fiber types, connectors, apparatus, termination, design, losses, installation, planning, inspection and testing, to provide a broad education on all areas of Broadband Access and FTTx infrastructures.

### Learning Outcomes:

Upon completion of this training course, participants will be able to:

- Understand the infrastructure solutions that support Broadband Access.
- Understand PON architecture and his possible implementation
- Identify the different varieties of PON architectures
- Determine the differences between BPON, GPON and EPON
- Specify the required components that facilitate FTTx installations
- Calculate the optical loss budget for a FTTx network

### Audience:

Any person involved in design, installation and project management of infrastructures for Broadband Access, HFC, FTTx and PON solutions.

### Trainer:

Dr. Mourad Menif



جامعة الزيتونة العالمية للإدارة  
Yaf Arab University for Security Sciences



# Applications of GIS in Environment Management and Resources Protection – Level 1

| 7 – 11 June 2021 |

## ITU Academy

### ORGANIZED BY



---

### LANGUAGE

Arabic/English

---

### FEES

120 USD

---

### MODE

Online

---

### DURATION

5 Days

---

### REGISTRATION DEADLINE

27 March 2021

---

### COURSE CODE

210I26439ARB-A

### Description:

This training aims to give a new way for monitoring environment change, mitigating and adapting to its effects by new innovative solutions that can ensure a sustainable future.

### Learning Outcomes:

Upon completion of this training course, participants will be able to:

- Understand fundamental concepts and practices of Geographic Information Systems (GIS)
- Apply basic GIS functionalities.
- Demonstrate organizational skills in file and database management.
- Apply GIS analysis to address geospatial problems and/or research.
- Demonstrate proficiency in the use of GIS tools to create maps.
- Demonstrate confidence in undertaking new analysis using GIS
- Give examples of interdisciplinary applications of Geospatial Information in relation with Environment.

### Audience:

Engineers, technicians, projects managers in the Ministries of Information Technology and Communications (ICT), Ministries of Environments, ICT regulators, private sector working in the environment issues. Other institutions and individuals who are interested in having an overview of Environmental Management System (EMS) are also welcome to participate in this training program.

### Trainer:

Mr. Lotfi Lamti



جامعة الزيتونة العالمية  
Yahya Arab University for Security Sciences



# Agile Project Management for ICT Applications & Services

| 11 – 20 June 2021 |

## ITU Academy

### ORGANIZED By



---

### LANGUAGE

English/Arabic

---

### FEES

75 USD

---

### MODE

Online

---

### DURATION

10 Days

---

### REGISTRATION DEADLINE

5 May 2021

---

### COURSE CODE

21OI26432ARB-A

### Description:

This course aims to prepare participants to train on the concept of agile projects management in ICT applications and services, using agile data in areas, workflow methodologies, tools and technologies to manage ICT projects in a more agile manner.

### Learning Outcomes:

Upon completion of this training course, participants will be able to:

- Have a much better insight about team building, project charter, project release, iteration planning, stakeholder management which can help tighten their grip on the project.
- A greater understanding of building a business environment
- It gives you a platform to showcase your credibility and level of professionalism in agile principles, practices, tools, and techniques.

### Audience:

Managers, Developers, Team members, Team leads, Designers, Technical Architects and Project Managers

### Trainer:

Dr. Ahmed Alageed



جامعة الزيتونة العربية الإسلامية  
Zitoune Arab University for Security Sciences



## How to assess your products foot print

| 14 – 17 June 2021 |

### ITU Academy

#### ORGANIZED By



---

#### LANGUAGE

Arabic/French

---

#### FEES

120 USD

---

#### MODE

Online

---

#### DURATION

4 Days

---

#### REGISTRATION DEADLINE

4 June 2021

---

#### COURSE CODE

21OI26443ARB-A

#### Description:

#### Learning Outcomes:

Upon completion of this training course, participants will be able to:

- Understand the drivers and mechanisms of climate change and the sources of greenhouse gases.
- Have a broad overview of the current status and developments relating to carbon foot printing, covering the key concepts and the main international standards.
- Be familiarized with the methodology for the quantification and reporting of the carbon footprint of a product (CFP) in accordance with ISO 14067.
- Calculate a product carbon footprint.
- Interpret the results of a carbon footprint, design an action plan and integrate it into a continuous improvement environmental process.

#### Audience:

Energy managers in industrial companies, bodies under the supervision of the ministries in charge of the environment and energy, local communities, Consultants.

#### Trainer:

Mr. Kamel Saidi



جامعة الزيتونة العربية الإسلامية  
Zitoune Arab University for Security Sciences



## Risk Management for ICT Applications & Services

| 21 – 30 June 2021 |

### ITU Academy

#### ORGANIZED By



#### LANGUAGE

English/Arabic

#### FEES

75 USD

#### MODE

Online

#### DURATION

7 Days

#### REGISTRATION DEADLINE

15 June 2021

#### COURSE CODE

21OI26433ARB-A

#### Description:

This course aims to raise basic awareness of risk management concepts and mechanisms, to enable participants to identify and manage risks in their own units and to strengthen project management through adequate forward planning of potential risks.

#### Learning Outcomes:

Upon completion of this training course, participants will be able to:

- To understand the need for risk management and ICT-Specific risks.
- To identify ICT project and business risks
- To carry analysis for the identified risks
- To plan for proper risk response

#### Audience:

Staff who are responsible for managing ICT projects, planning ICT projects and businesses, ICT regulators and analysts, fraud Management executives, appropriate for a broader audience who wish to gain insight into the risk management process

#### Trainer:





Mr. Osman Elhassan



جامعة الزيتونة العربية الإسلامية  
Zitoun Arab University for Security Sciences



## CoE Contacts

	Name of institution	Country	Contact
	Centre International des Technologies de l'Environnement de Tunis (CITET)	Tunisia	Mr. Jawhar Abdelkrim, CITET Email: <a href="mailto:financement@citet.nat.tn">financement@citet.nat.tn</a>
	Smart Tunisian Technoparks (S2T)	Tunisia	Mrs. Houda Jarraya, S2T Email: <a href="mailto:houda.jarraya@gmail.com">houda.jarraya@gmail.com</a> <a href="mailto:houda.jarraya@s2t.tn">houda.jarraya@s2t.tn</a>
	Naif Arab University for Security Sciences (NAUSS)	Saudi Arabia (regional entity)	Dr. Abdulrazaq Al-Morjan, NAUSS Email: <a href="mailto:T-AAlmargan@nauss.edu.sa">T-AAlmargan@nauss.edu.sa</a>
	Sudatel Telecommunications Academy (SUDACAD)	Sudan	Eng. Mohaned Abdalla Suleiman, SUDACAD Email: <a href="mailto:mohanedas@sudatel.sd">mohanedas@sudatel.sd</a>

### ITU Regional Office for Arab States

Arab Regional Office • Smart Village • Building 147 – 3rd Floor • 6th October, Giza, Egypt

Tel: +202 35 37 1777 • Fax: +202 35 37 1888

E-mail: [ITU-RO-ArabStates@itu.int](mailto:ITU-RO-ArabStates@itu.int)

Contact: Eng. Mustafa Al Mahdi, Programme Officer, [mustafa.almahdi@itu.int](mailto:mustafa.almahdi@itu.int)

