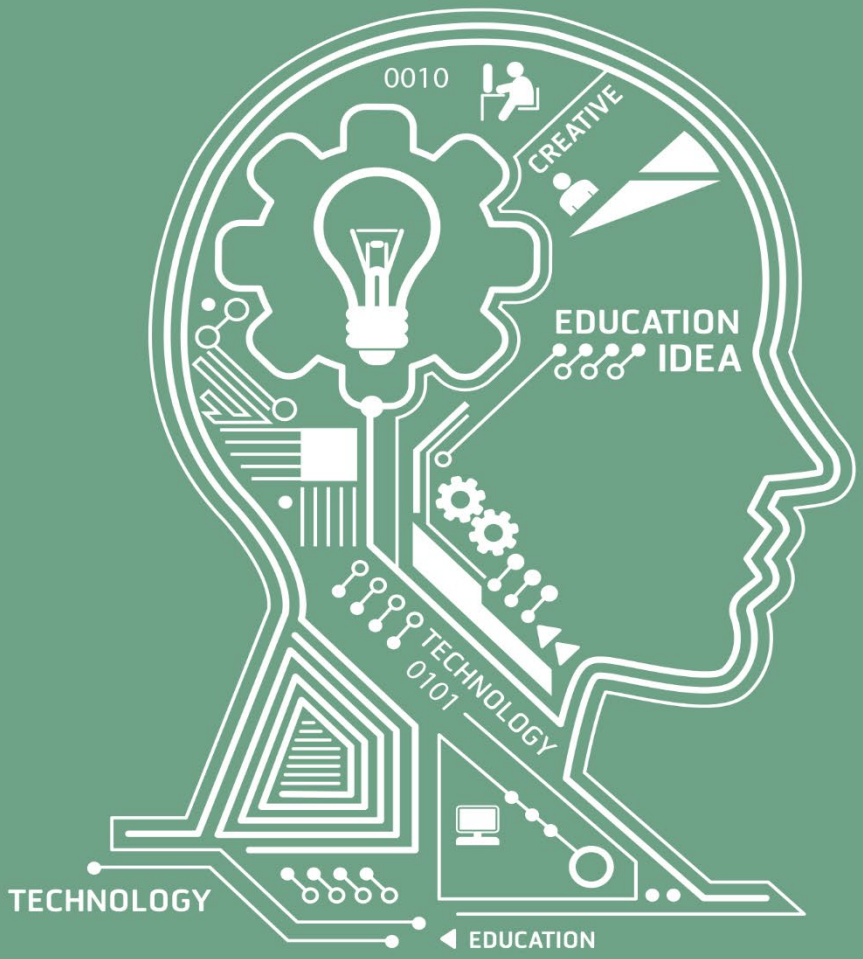
ITU Centres of Excellence for Arab States

Training opportunities 2020



ITUAcademy
Empowering minds

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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.

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/index.php?lang=en.

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

Trainings offered by ITU CoEs for Arab States

In 2019 the ITU Centres of Excellence for Arab States have offered 16 face-to-face training programs. For 2020 there are 28 face-to-face training programs proposed, shown below (in chronological order):

No	Course Title	CoE	Date	Delivery Mode	Fees
1	Applications of Geographic Information System (GIS) in Environmental Management and Resources Protection	CITET	23 - 26 March 2020	Face to Face	400 USD
2	Agile Project Management for ICT Applications & Services	SUDACAD	24 - 26 March 2020	Face to Face	150 USD
3	Basic Cyber Security Training (CompTIA Security)	NAUSS	29 March - 2 April 2020	Face to Face	500 USD
4	Fundamentals of Fiber and Optical Networks	S2T	30 March – 3 April 2020	Face to Face	500 USD
5	Advanced Cyber Security Training (CompTIA Security+)	NAUSS	05 - 09 April 2020	Face to Face	500 USD
6	Optical access networks FTTH	S2T	13 - 17 April 2020	Face to Face	500 USD
7	AM4.1: How to carry out a full Life Cycle Assessment (LCA)	CITET	01 - 04 June 2020	Face to Face	600 USD
8	5G Mobile Networks and Systems	S2T	01 -05 June 2020	Face to Face	500 USD
9	Optical Network Design	S2T	15 - 19 June 2020	Face to Face	500 USD
10	Software Defined Network (SDN)	SUDACAD	23 - 25 June 2020	Face to Face	150 USD
11	Cyber security awareness & forensics	S2T	27 - 30 June 2020	Face to Face	500 USD
12	Big Data	SUDACAD	28 - 30 July 2020	Face to Face	150 USD
13	Cyber security Fundamentals	S2T	03 - 07 August 2020	Face to Face	500 USD

14	Domain Name System Security Extensions (DNSSEC)	S2T	31 August - 4 September 2020	Face to Face	500 USD
15	AM5.4: Smart & Sustainable Cities	CITET	07 - 10 September 2020	Face to Face	600 USD
16	Basic IoT Training	NAUSS	13 - 17 September 2020	Face to Face	500 USD
17	FTTx Outside Plant Design	S2T	14 - 18 September 2020	Face to Face	500 USD
18	Fiber To The Home (FTTH)	SUDACAD	22 - 24 September 2020	Face to Face	150 USD
19	AM5.2: GHG reductions in the Power Sector	CITET	05 - 08 October 2020	Face to Face	400 USD
20	Internet Governance	SUDACAD	27 - 29 October 2020	Face to Face	150 USD
21	Advanced technical overview of DWDM	S2T	02 - 07 November 2020	Face to Face	500 USD
22	Wireless Security	S2T	02 - 06 November 2020	Face to Face	500 USD
23	Application of Geographic Information System (GIS) in Environmental Management and Resources Protection	CITET	09 - 12 November 2020	Face to Face	400 USD
24	Ethical Hacking (CIEH)	NAUSS	15 - 19 November 2020	Face to Face	500 USD
25	Ultra-Microwave Broadband Internet Access	SUDACAD	24 - 26 November 2020	Face to Face	150 USD
26	FM6: E-waste and the Circular Economy	CITET	07 - 10 December 2020	Face to Face	400 USD
27	Optical Transport Networks	S2T	07 - 11 December 2020	Face to Face	500 USD
28	Cloud Computing	SUDACAD	29 - 31 December 2020	Face to Face	150 USD

Course information for trainings as of 1 July 2020 will be updated in the second half of the year

GIS in Environmental Management and Resources Protection

| 23 - 26 March 2020 |

ORGANIZED By

LANGUAGE

English

FEES

400 USD

MODE

Face to Face

DURATION

4 Days

REGISTRATION DEADLINE

10 March 2020

COURSE CODE

20WS24936ARB-E

Description:

- To introduce GIS and Remote Sensing in environmental management
- To expose participants to data capture, input, manipulation and display by GIS
- To expose participants to applications of GIS and remote sensing in environmental management
- Familiarizing with different methods and techniques for Spatial Analysis
- Understanding the role played by technical experts, stakeholders and decision-makers
- To demonstrate to participants, use of GIS in identifying and analyzing potential impacts
- To demonstrate case studies

Audience:

The training targets engineers, technicians, managers in the ministries of Information Technology and Communications (ICT), ministries of environments, ICT regulators and private sector officers working in the environment issues. Other institutions and individuals who are interested in having an overview of Geographic Information Systems (GIS) are also welcomed to participate in this training course.

Trainer:

Mr. Lotfi Lamti

Agile Project Management for ICT Applications & Services

| 24 - 26 March 2020 |

ORGANIZED By

LANGUAGE

English/Arabic

FEES

150 USD

MODE

Face to Face

DURATION

3 Days

REGISTRATION DEADLINE

14 March 2020

COURSE CODE

20WS24411ARB-A

Description:

This training course aims to prepare the participant to excel Agile Project Management concept on ICTs apps and services. By using Agile Manifestos, Domains, Methodologies Workflows, tools and techniques to manage the ICT projects using the agile.

This training course will enable participants to:

- Understand the concepts, benefits and risks of Agile development
- Differentiate between Agile and Lean Management and their applications
- Understand the philosophy, approach and principles of Agile Project Management
- Understand the importance of negotiation and collaboration
- Use their skills to set up and manage an Agile project
- Have a much better insight about team building, project charter, project release, iteration planning, stakeholder management which eventually help you tighten your grip on the project.
- Have a greater understanding of building a ICTs business environment
- Highlight the credibility and level of Professionalism in agile principles, practices, tools, and techniques.

Audience:

ICTs project managers, developers, team members, team leads, project managers, designers and technical architects.

Trainer:

Dr. Ahmed Alageed

Basic Cyber Security Training (CompTIA Security)

| 29 March - 2 April 2020 |

ORGANIZED By

LANGUAGE

English/Arabic

FEES

500 USD

MODE

Face to Face

DURATION

5 Days

REGISTRATION DEADLINE

23 March 2020

COURSE CODE

20WS24270ARB-A

Description:

- Understand the principles of organizational security and the elements of effectives security policies.
- Know the technologies and uses of cryptographic standards and products.
- Install and configure network- and host-based security technologies.
- Describe the standards and products used to enforce security on web and communication technologies.
- Describe how wireless and remote access security is enforced.
- Summarize application and coding vulnerabilities and identify development and deployment method designed to mitigate them.

Audience:

This training targets the professionals' beginners in the cyber security field, audit, risk, compliance, information security, government and legal affairs who want to learn about basic concepts of the technologies and Information systems and the cyber security, as well as those who want to understand the language and principles of the cyber security and its implication on their roles.

Trainer:

Eng. Mosa Sarkhi

Fundamentals of Fiber and Optical Networks

| 30 March – 03 April 2020 |

ORGANIZED By

LANGUAGE

English/Arabic/French

FEES

500 USD

MODE

Face to Face

DURATION

5 Days

REGISTRATION DEADLINE

16 March 2020

COURSE CODE

20WS24932ARB-A

Description:

This training will focus on fundamentals of fiber and optical networks. In addition, the training will cover the followings:

- Understand the technical concepts of a fiber optic network.
- Have a working methodology for installers on preparation, connection and control.
- Explain the terminology and principles of technical bases connections and measures used on optical networks.
- Acquire knowledge to be able to connect, monitor, analyze and interpret the results of measurements on fiber optic networks.

Audience:

This training course is designed to Optical Fiber Network manufacturers, designers, installers, infrastructure operators, Internet service providers, content and services providers, local authorities and any person involved in a project around the receipt of fiber optical among enterprises, data centers, individuals, local authorities.

Trainer:

Prof. Mourad Menif

Advanced Cyber Security Training (CompTIA Security+)

| 05 - 09 April 2020 |

ORGANIZED By

LANGUAGE

English/Arabic

FEES

500 USD

MODE

Face to Face

DURATION

5 Days

REGISTRATION DEADLINE

20 March 2020

COURSE CODE

20WS24271ARB-A

Description:

- Learning advanced principles of organizational security and the elements of effective's security policies.
- Know the advanced technologies and uses of cryptographic standards and products.
- Learning advanced installation and configuration of network- and host-based security technologies.
- Describe advanced standards and products used to enforce security on web and communication technologies.
- Describe advanced wireless and remote access security enforcement.
- Summarize advanced application and coding vulnerabilities and identify development and deployment method designed to mitigate them.

Audience:

The course is targeted at the cyber security specialists, audit, risk, compliance, information security, government and legal professionals with a familiarity of fundamentals of cyber security. In addition to the Network Engineers, Cyber Security Stuff and IT Administrators.

Trainer:

Eng. Mosa Sarkhi

Optical Access Networks FTTH

| 13 - 17 April 2020 |

ORGANIZED By

LANGUAGE

English

FEES

500 USD

MODE

Face to Face

DURATION

5 Days

REGISTRATION DEADLINE

03 April 2020

COURSE CODE

20XX24252TBD-E

Description:

The main purpose of this training is to:

- 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
- Testing FTTx Networks.

Audience:

Manufacturers, installers, infrastructure operators, Internet service providers, content and services providers, local authorities and any person involved in a project around the receipt of fiber optical among enterprises, data centers, individuals, local authorities.

Trainer:

Prof. Mourad Menif

AM4.1: How to carry out a full Life Cycle Assessment (LCA)

| 01 - 04 June 2020 |

ORGANIZED By

LANGUAGE

English

FEES

600 USD

MODE

Face to Face

DURATION

4 Days

REGISTRATION DEADLINE

20 May 2020

COURSE CODE

20XX24938TBD-E

Description:

On completion of this module, participants should be able to:

- demonstrate an understanding of how to carry out an LCA, using appropriate assumptions and approximations where necessary,
- understand how to carry out a full environmental assessment including the full set of environmental loads, although this is a specialized area and it will not be possible to go deep enough in the time available for the students to become fully qualified in this area,
- be assessed via their background project and how to complete the LCA is.

Audience:

The course targets engineers, technicians, 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 welcomed to participate in this training program.

Trainer:

Mr. Wassim Mansour

5G Mobile Networks and Systems

| 01 - 05 June 2020 |

ORGANIZED By

LANGUAGE

English

FEES

500 USD

MODE

Face to Face

DURATION

5 Days

REGISTRATION DEADLINE

14 May 2020

COURSE CODE

20XX24934TBD-E

Description:

LTE-Advanced is now widely deployed in the world. This 4G network enables higher speed mobile access and many applications for the subscribers as well as for operators. This course aims at examining the fundamentals of this mobile radio generation and the evolution of their architectures and techniques toward 5G. More precisely, it includes the air interface, protocols and architecture of 4G as well as the new technologies that will be candidates for 5G systems.

Audience:

Engineers who want to learn wireless communication networks and professional staff working on 4G/5G systems, staff from ICTs regulators, policy makers, telecom operators, industry and academia. Other institutions and individuals who are interested in building their capacity in 4G/5G system

Trainer:

Prof. Soumaya Ben Hammouda

Optical Network Design

| 15 - 19 June 2020 |

ORGANIZED By

LANGUAGE

English

FEES

500 USD

MODE

Face to Face

DURATION

5 Days

REGISTRATION DEADLINE

05 June 2020

COURSE CODE

20WW24939TBD-E

Description:

The course aims to:

- Describe the function module and network structure of WDM system.
- Characterize the typical building blocks of a WDM network (amplifier, DCM, OADM, OXC, transponder).
- Illustrate the main factors involved in WDM network planning, such as power budget, dispersion compensation, OSNR calculation and nonlinearity.
- Outline the design process of WDM network.

Audience:

Manufacturers, installers, infrastructure operators, Internet service providers, content and services providers, local authorities and any person involved in a project around the receipt of fiber optical among enterprises, data centers, individuals, local authorities

Trainer:

Prof. Mourad Menif

Software Defined Network (SDN)

| 23 - 25 June 2020 |

ORGANIZED By

LANGUAGE

English

FEES

150 USD

MODE

Face to Face

DURATION

3 Days

REGISTRATION DEADLINE

16 June 2020

COURSE CODE

20XX24940TBD-E

Description:

Software Defined Networks are emerging as the most exciting development in networking in years. It is new approach to designing, building and managing networks. SDN allows network administrators to quickly and easily manage network services from a centralize location without having to manually configure each individual network element (switch/router). This is done through abstraction of lower layers functionality.

Audience:

Strategic planners, network architects, network managers, systems engineers, network administrator, service planners and carrier operation staff who are responsible for planning.

Trainer:

Dr. Ahmed Abdelaziz Abdullatif Osman

Cyber Security Awareness & Forensics

| 27 - 30 June 2020 |

ORGANIZED By

LANGUAGE

English/Arabic

FEES

500 USD

MODE

Face to Face

DURATION

4 Days

REGISTRATION DEADLINE

16 January 2020

COURSE CODE

20XX24279TBD-E

Description:

This course aims to:

- Explain the core information assurance (IA) principles
- Identify the key components of cybersecurity network architecture
- Apply cybersecurity architecture principles
- Describe risk management processes and practices
- Identify security tools and hardening techniques
- Distinguish system and application security threats and vulnerabilities
- Describe different classes of attacks
- Define types of incidents including categories, responses and timelines for response
- Describe new and emerging IT and IS technologies
- Analyse threats and risks within context of the cybersecurity architecture
- Appraise cybersecurity incidents to apply appropriate response
- Evaluate decision making outcomes of cybersecurity scenarios
- Access additional external resources to supplement knowledge of cybersecurity

Audience:

City project, regulators, policy makers, telecom operators, industry, and academia. Other institutions and individuals who are interested in building their capacity in the field of cybersecurity are also welcomed to participate in this training program.

Trainer:

Prof. Ryma Abassi

CoE Contacts

	Name of institution	Country	Contact
	Centre International des Technologies de l'Environnement de Tunis (CITET)	Tunisia	Mr. Jawhar Abdelkrim, CITET Email: financement@citet.nat.tn
	Smart Tunisian Technoparks (S2T)	Tunisia	Mrs. Houda Jarraya, S2T Email: houda.jarraya@gmail.com houda.jarraya@s2t.tn
	Naif Arab University for Security Sciences (NAUSS)	Saudi Arabia (regional entity)	Mr. Raed Al-Rashidi, NAUSS Email: RAlrashidi@nauss.edu.sa
	Sudatel Telecommunications Academy (SUDACAD)	Sudan	Eng. Mohaned Abdalla Suleiman, SUDACAD Email: mohanedas@sudatel.sd

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