Telecommunication
Development Bureau (BDT)

Ref.: BDT/DKH/CDS/DM/141

Geneva, 7 February 2020

Administrations of ITU Member States,
Ministries, Regulators, ITU-D Sector Members
and Academia members in the Asia and the
Pacific region

Subject: 2020 Training Catalogue of ITU Centres of Excellence for the Asia and the Pacific region

Dear Sir/Madam,

I am pleased to inform you that the **2020 Training Catalogue** of the ITU Centres of Excellence for the Asia and the Pacific region has just been released and is available at the Asia and the Pacific website at https://www.itu.int/itu-d/asp and at the ITU Academy portal https://academy.itu.int/centres-excellence/coe-cycles/coe-cycle-2019-2022/training-catalogues-2020. I hereby would like to request you to share this material within your institution as well as with all stakeholders who might be interested in participating in training courses in the field of information and communication technologies (ICTs).

The catalogue contains 21 courses in six priority areas, i.e. Wireless & Fixed Broadband, Cybersecurity, Internet of Things, Conformance and Interoperability, ICT Applications and Spectrum Management (see Annex). Courses will be delivered face-to-face and online. Participants who will successfully pass the course evaluation will receive an ITU certificate.

Courses are provided by the following six ITU Centres of Excellence in the Asia and the Pacific region:

- Advanced Level Telecoms Training Centre (ALTTC), India
- China Academy of Information and Communications Technology (CAICT), China
- State Radio Monitoring Centre (SRMC), China
- IoT Academy, Iran
- National Information Society Agency (NIA), Republic of Korea
- Wireless Communication Centre, Universiti Teknologi Malayia (UTM), Malaysia

The Centres of Excellence (CoE) programme was launched by ITU in 2000, aiming to support capacity building in the field of ICTs. It was designed to offer continuous education to ICT professionals and executives in the public and private spheres through face-to-face or distance learning programmes. The Centres of Excellence serve as regional focal points for professional development, research, and knowledge sharing as well as provide specialist training services to external clients. With the support from multilateral and regional organizations, CoE networks have been established in all ITU regions. The current network is composed of 29 Centres across the globe, in Africa, the Americas, Arab States, Asia-Pacific, Europe and the CIS regions.

Detailed information on the CoE training activities is available on the ITU Academy portal at https://academy.itu.int/index.php/training-courses/full-catalogue and on the ITU Asia and the Pacific website https://www.itu.int/itu-d/asp.

Deadlines for the registration of courses are available in the catalogue and in the respective course descriptions in the ITU Academy portal. Payment details are specified in the course outlines.

Mr Ashish Narayan, Programme Coordinator, ITU Regional Office for Asia and the Pacific (email: ashish.narayan@itu.int), phone: +66 2 5750055), is at your full disposal should you require any additional information.

I look forward to the active participation of the representatives of your institution in the training courses offered in 2020.

Yours faithfully,

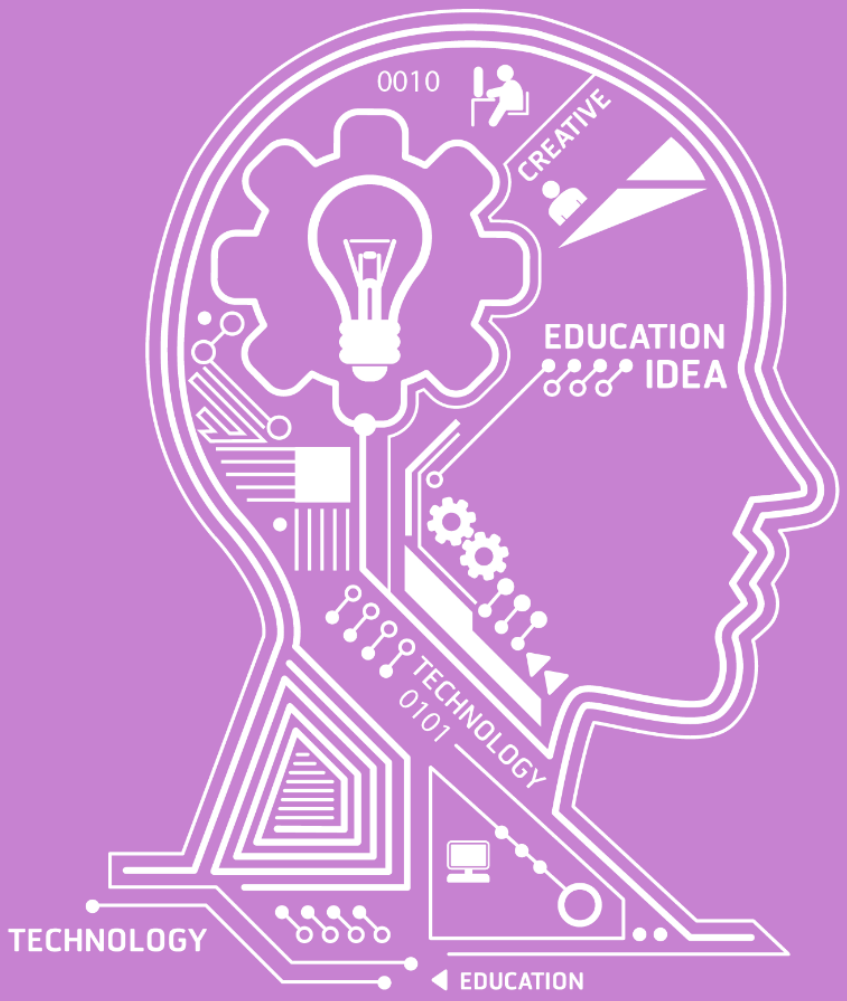
[Original signed]

Doreen Bogdan-Martin
Director

Annex: Training Catalogue

ITU Centres of Excellence for Asia-Pacific

Training opportunities 2020



ITU Academy
Empowering minds

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OVERVIEW OF CoE INITIATIVE

The Centres of Excellence (CoE) programme was launched by the International Telecommunication Union (ITU) in 2000, aiming to support capacity building in the field of information and communication technologies (ICTs). Designed to offer continuous education to ICT professionals and executives in the public and private spheres through face-to-face or distance learning programmes, the Centres serve as regional focal points for professional development, research, and knowledge sharing, as well as provide specialist training services to external clients. With the support from multilateral and regional organizations, CoE networks have been established in all ITU regions. The current network is composed of 29 Centres across the globe, six each in Africa, the Americas, Arab States and Asia-Pacific regions, five in the Europe region and three in the CIS region.

ITU CENTRES OF EXCELLENCE FOR ASIA-PACIFIC REGION

The second cycle of the new Centre 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 Asia-Pacific to provide trainings in particular six priority areas.

	Name of institution	Country	Priority areas
ALTTC एल्ट सेंटर	**Advanced Level Telecom Training Centre (ALTTC)**	India	Wireless and Fixed Broadband Internet of Things Cybersecurity
CAICT 中国信息通信研究院	**China Academy of Information and Communications Technology (CAICT)**	China	Conformance & Interoperability ICT Applications
IoT Academy	**IoT Academy**	Iran	Internet of Things
NIA NATIONAL INFORMATION SOCIETY AGENCY	**National Information Society Agency (NIA)**	Republic of Korea	ICT Applications
国家无线电监测中心 The State Radio Monitoring Center	**State Radio Monitoring Center / State Radio Spectrum Management Center (SRMC)**	China	Spectrum Management
UTM UNIVERSITI TEKNOLOGI MALAYSIA	**Wireless Communication Centre, Universiti Teknologi Malaysia (UTM)**	Malaysia	Wireless and Fixed Broadband

SCOPE

This catalogue has been produced by the ITU Regional Office for Asia-Pacific in collaboration with six ITU Centres of Excellence in Asia-Pacific to share information on the capacity building courses provided by the centres in 2020. While participation is open to participants from all countries, stakeholders from the Member States of the Asia-Pacific region (as defined at ITU) are primarily encouraged to participate in the courses.

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

- Wireless & fixed broadband
- Conformance & Interoperability
- Cybersecurity
- Internet of things
- ICT applications
- Spectrum management

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).

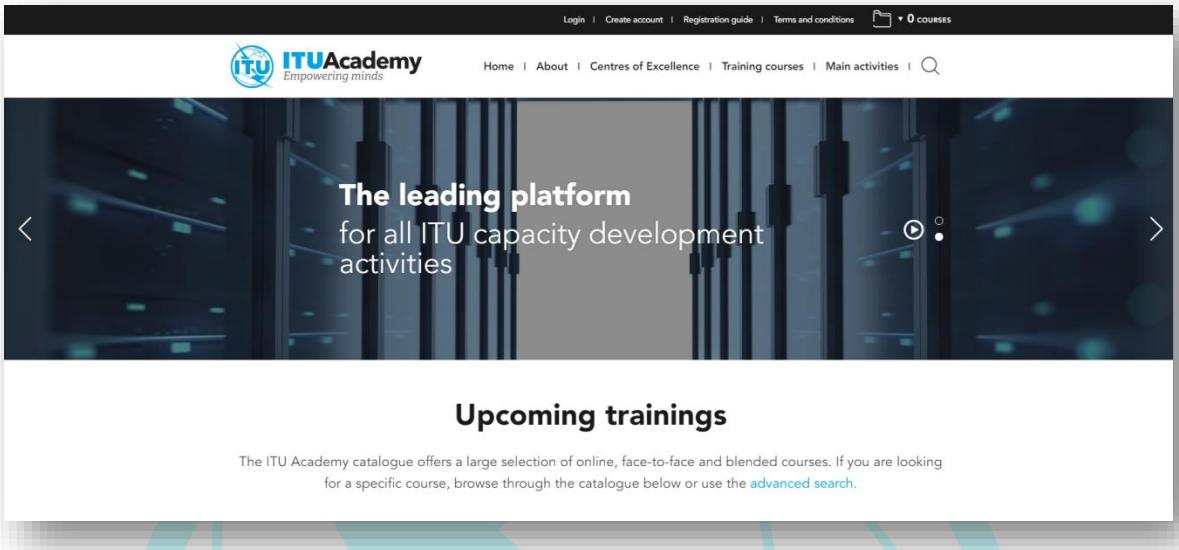
Information on the registration process and payment methods can be found on the ITU Academy website: academy.itu.int

Changes in course dates may occur and are reflected on the ITU Academy website: www.academy.itu.int

AN OVERVIEW OF ITU ASIA-PACIFIC COE TRAININGS IN 2019

In 2019, the ITU Centres of Excellence for Asia-Pacific built the capacity of more than 800 participants in high priority areas through 22 high-quality trainings. These trainings, which were also supported by a number of partners, were designed to address the existing needs of ITU Members.

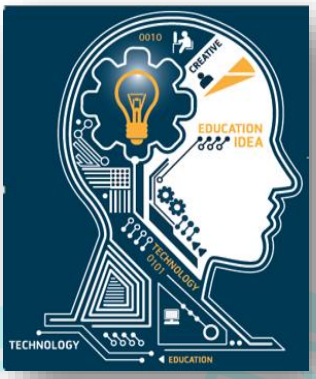
	Training topics (face to face)	CoE	Dates	Venue	Training fees
1	Evolution and Emerging Trends of Broadband Access Technologies	ALTTC	20-24 May	Ghaziabad, India	275
2	Information Security Internal Audit	ALTTC	27-31 May	Ghaziabad, India	275
3	Spectrum management and IMT 2020 Radio technology application	SRMC	17-21 June	Harbin, China	Free
4	Smart Sustainable Cities, ICT Applications And E-Government: Incorporating Data, Network And AI Technologies Towards More Efficient Cities	NIA	15-18 July	Busan, Rep. of Korea	Free
5	Broadband Network Security: Issues & Challenges	ALTTC	26-30 Aug	Ghaziabad, India	275
6	Artificial Intelligence Overview and Applications	NIA	16-19 Sep	Bangkok, Thailand	Free
7	Conformity and Interoperability relating to Smart City	CAICT	18-21 Sep	China	Free
8	ICT Application relating to Smart City	CAICT	21-24 Sep	China	Free
9	Traffic engineering and advanced wireless network planning	UTM	30 Sep-3 Oct	Bangkok, Thailand	Free
10	Cyber Security for Enterprises	ALTTC	10-15 Oct	Ghaziabad, India	275
11	Fifth Generation (5G) Technology, Opportunities and Challenges	UTM	15-17 Oct	Kuala Lumpur, Malaysia	550
12	Human Exposure to Radio Frequency Electromagnetic Fields	UTM	3-5 Dec	Johor Bahru, Malaysia	550
13	IoT applications and IoT Security Aspects (report awaited)	ALTTC	9-13 Dec	Ghaziabad, India	275
14	Cyber Network Defense and Cyber Laws	ALTTC	16-20 Dec	Ghaziabad, India	275
	Online Trainings	CoE	Dates		Training fees
1	5G and C&I	CAICT	15 Apr-11 May	ITU Academy	Free
2	IOT Security Challenges and Solutions	IOT Academy	26 Aug-6 Sep	ITU Academy	125
3	Spectrum Engineering and IMT2020	SRMC	1-19 July	ITU Academy	Free
4	5G and ICT Application	CAICT	17 June -19 July	ITU Academy	Free
5	Digital Transformation and Digital Government (report awaited)	NIA	4-29 Nov	ITU Academy	Free
6	Next Generation Broadband Network: Design, Implementation and Applications	ALTTC	25 Nov - 20 Dec	ITU Academy	100
7	IOT: Technologies aspects and implementation	ALTTC	16-27 Dec	ITU Academy	100
8	Building IOT Solutions for Energy and Water Resource Management	IOT Academy	16-27 Dec	ITU Academy	125



2020 TRAINING PLAN

No	Face to face trainings	CoE	Dates	Venue	Training fees	Partners
1	Human Exposure to Radio Frequency Electromagnetic Fields	UTM	14-16 April	Johor Baru	600	
2	IoT Advanced Applications & Industry 4.0	ALTTC	20-24 April	Ghaziabad	275	
3	Future Network Security, Conformity & Interoperability	CAICT	11-14 May	Shenzen	Free	
4	Fifth Generation (5G) Radio Access Network Planning and Coexistence	UTM	21-23 July	Kuala Lumpur	600	
5	Data Protection Framework with Security Policy & Audit	ALTTC	21-25 July	Ghaziabad	275	
6	Building IoT Solutions for Smart Sustainable Cities	IOT ACADEMY	15-19 August	Tehran	500	
7	Digital infrastructure planning	ALTTC	24-28 August	Ghaziabad	500	ITRC
8	Data-driven Governance	NIA	24-28 August	Seoul	Free	
9	Spectrum pricing, auction and allocation	SRMC	7-10 September	Bangkok	Free	NBTC
10	Cyber Security and Critical Infrastructure Protection	ALTTC	8- 12 September	Ghaziabad	275	
11	Digital Platform with Emerging Technologies	NIA	21-24 September	Bangkok	Free	NBTC
12	Spectrum Monitoring Technologies and Practice	SRMC	21-25 September	Chengdu	Free	
13	5G Technology and Applications in practice	CAICT	19-23 October	Shanghai	Free	ITRC
14	Human Exposure to Radio Frequency Electromagnetic Fields	UTM	November	Iran	Free	

	Online Trainings	CoE	Dates	Venue	Training fees	Partners
1	Advanced Broadband Network QoS and Applications	ALTTC	23 March-10 April	ITU Academy	100	
2	Conformity and interoperability relating to Smart City	CAICT	6-24 April	ITU Academy	Free	
3	Digital Transformation: Enhancing IoT-Driven Accessibility	IOT ACADEMY	11-17 April	ITU Academy	Free	ITRC
4	ICT applications relating to smart cities and communities	CAICT	13-31 July	ITU Academy	Free	
5	Developing IoT System	IOT ACADEMY	19-30 October	ITU Academy	150	
6	IoT Sensors and Network for Disaster Communication	ALTTC	2-13 November	ITU Academy	100	
7	Government Innovation based on Emerging Tech	NIA	4-29 November	ITU Academy	Free	



Centres of Excellence

2020

FACE-TO-FACE TRAINING

HUMAN EXPOSURE TO RADIO FREQUENCY ELECTROMAGNETIC FIELDS

| 14-16 APRIL 2020 |

Johor Baru, Malaysia

ORGANISED BY

UTM WCC WIRELESS COMMUNICATION CENTRE

LANGUAGE

English

FEES

600 USD

MODE

Face-to-face

DURATION

3 days

REGISTRATION DEADLINE

24 March 2020

VENUE

Amari Hotel, Johor Bahru (Malaysia)

COURSE CODE

20WS24867ASP-E

Description:

Smart devices utilize radio technologies to transmit data to the network. This training course aims to equip participants with an understanding of the effect of human exposure to radiofrequency electromagnetic field (EMF) to body tissue dielectric parameters and radiofrequency. Training resources include recommendations, policies as well as recent studies, including case studies on the effect of human exposure to radio EMF.

Learning outcomes:

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

- understand the effect of human exposure to radiofrequency electromagnetic field (EMF) and its impact on body tissue dielectric parameters and frequency based on recent findings;
- identify and relate to different policies on human exposure to EMF;
- understand the effect of wearable technology on humans based on recent studies on the impact of EMF exposure on wearable technology;
- compare different type of public education related to EMF exposure.

Audience:

Executives, managers, officials, engineers, employees from the ministry, regulator, government agencies, telecom operators, vertical industries, telecom investment companies, researchers and academia.

Trainers:

- Prof. Dr. Tharek Abd Rahman
- Prof. Dr. Jafri Din
- Assoc. Prof. Dr. Norhudah Seman
- Mr Chua Tien Han from UTM
- Speakers from ITU and industry.

IoT Advanced Applications & Industry 4.0

| 20-24 APRIL 2020 |

Ghaziabad (Near Delhi), India

ORGANISED BY

ALTTC
एल्ट सेंटर

LANGUAGE

English

FEES

275 USD

MODE

Face-to-face

DURATION

8 days

REGISTRATION DEADLINE

3 April 2020

VENUE

Ghaziabad (India)

COURSE CODE

20WS24870ASP-E

Description:

Smart devices are designed to connect to the network to help provide vital and real-time data to improve the quality of life. This course aims to introduce participants of the role of automation and digitization using IoT advanced applications for digital transformation is enabling the development of smart city and Industry 4.0. This training will provide a good foundation for participants to understand the relationship between IoT technology, Industry 4.0 and digital transformation.

Learning outcomes:

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

- relate to IoT concepts and planning;
- identify the different ideas of advanced applications of IoT in areas such as Smart Grid, Smart City and Industry 4.0; and
- understand the use of blockchain technology in IoT applications.

Audience:

Executives, managers, engineers and technical staff from regulators, policymakers, telecom operators and academia and Government Organization

Trainers:

- Shri M.K.Seth, CGM, ALTTC
- Shri Subhash Chand, PGM ALTTC
- Smt Suresh Devi DGM (IT), ALTTC
- Shri Anand Prakash, Ex VP M/S HCL Technologies
- Ms. Nilufer Yasmin, Astt.Prof. AKTU
- Experts from TRAI, TEC, DOT, and well known experts from Industries.

FUTURE NETWORK SECURITY, CONFORMITY & INTEROPERABILITY

| 11-14 May 2020 |

Shenzhen, China

ORGANISED BY

CAICT 中国信息通信研究院 China Academy of Information and Communications Technology

LANGUAGE

English

FEES

Free

MODE

Face-to-face

DURATION

4 days

REGISTRATION DEADLINE

24 April 2020

VENUE

Shenzhen

COURSE CODE

20WS24871ASP-E

Description:

As industries begin to converge through the advancement of ICT, the area of Conformance and Interoperability (C&I) becomes critical in digital transformation. This course aims to equip participants with the knowledge of C&I in ICT by discussing the fundamental principles of C&I, by exposing students with the C&I technology standards, the importance of ICT network security issues as well as assessment and evaluations methods.

Learning outcomes:

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

- develop and implement conformity assessment programs; and
- use the C&I framework, through definitions and methodologies, to ensure ICT network security.

Audience:

ICT professionals and engineers, decision-makers, managers, equipment suppliers, operators etc. that are involved in ICT network security, with at least a Bachelor degree and three years working experience in this field.

Trainers:

- Expert from ITU
- Experts from CAICT
- Experts from other partners

FIFTH GENERATION (5G) RADIO ACCESS NETWORK PLANNING AND COEXISTENCE

| 21-23 July 2020 |

Kuala Lumpur, Malaysia

ORGANISED BY

UTM WCC WIRELESS COMMUNICATION CENTRE

PARTNER (S)

LANGUAGE

English

FEES

600 USD

MODE

Face-to-face

DURATION

3 days

REGISTRATION DEADLINE

7 July 2020

VENUE

The Royal Widad Residence @ UTM KL, Kuala Lumpur (Malaysia)

COURSE CODE

20WS24866ASP-E

Description:

As countries prepare to embrace the 5G technology as part of digital transformation, this course aims to equip participants with advanced knowledge of planning and implementation of 5G network, by focussing on critical components for 5G deployment such as New Radio (NR) specifications, radio access network planning and technology coexistence.

Learning outcomes:

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

- describe and explain the 5G requirements and network architectures;
- understand what NR Air Interface, Physical Layer, Radio Protocols are;
- understand 5G C-RAN architecture, including its expected requirements and performance;
- differentiate the requirement of 5G RAN planning and optimization in comparison to legacy technologies; and
- identify interference issues related radiofrequencies between 5G and other technologies and apply available mitigation approaches.

Audience:

Executives, managers, engineers, employees from the ministry, regulators, government organisation, telecom operators, semiconductor industry, vertical industries, academia involved in the planning and implementation of 5G network and services.

Trainers:

- Prof. Dr. Tharek Abd Rahman
- Assoc. Prof. Dr. Chee Yen (Bruce) Leow
- Mr. Tien Han Chua from UTM,
- Dr. Marwan Hadri Azmi from UTM
- Speakers from industry.

DATA PROTECTION FRAMEWORK, SECURITY POLICY & AUDIT

| 21-25 July 2020 |

Ghaziabad (Near Delhi), India

ORGANISED BY

ALTTC
एल्ट सेंटर

LANGUAGE

English

FEES

275 USD

MODE

Face-to-face

DURATION

8 days

REGISTRATION DEADLINE

6 July 2020

VENUE

Ghaziabad (India)

COURSE CODE

20WS24872ASP-E

Description:

As our world becomes more connected data security and privacy becomes critical. This course aims to equip the participant with the knowledge on data security, cyber hygiene and protection of the personal data . Participants will also learn the advantages and challenges of complying with available international data privacy laws and regulations like standards of ISO 27001 and EU's GDPR.

Learning outcomes:

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

- understand the concept of data security and personal data protection;
- perform an audit according to ISO 27001 and GDPR standards;
- understand the security concept of blockchain technology related to the economics and its architecture; and
- understand the aspect of cybersecurity.

Audience:

Executives, managers, engineers and technical staff from regulators, policymakers, telecom operators and academia and Government Organization.

Trainers:

- Shri M.K.Seth, CGM, ALTTC
- Shri Subhash Chand, PGM ALTTC
- Smt Suresh Devi DGM (IT), ALTTC
- Shri Anand Prakash, Ex VP M/S HCL Technologies
- Ms. Nilufer Yasmin, Astt. Prof. AKTU
- Experts from TRAI, TEC, DOT, and well known experts from Industries.

BUILDING IOT SOLUTIONS FOR SMART SUSTAINABLE CITIES

| 15-19 August 2020 |

Tehran, Iran

ORGANISED BY

IoT Academy

LANGUAGE

English

FEES

500 USD

MODE

Face-to-face

DURATION

5 days

REGISTRATION DEADLINE

31 July 2020

COURSE CODE

20WS24873ASP-E

Description:

Smart and sustainable cities to support the Sustainable Development Goals is a priority agenda for governments. This course aims to introduce participants to the concept and pillars of Internet of Things taking into account the work of ITU in the areas of Smart Sustainable City. Participants will be introduced to concepts, goals and frameworks to key aspects and KPIs of IoT based on different IoT solutions and use cases for smart sustainable city.

Learning outcomes:

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

- identify different IoT Concept, Pillars and Trend and the different IoT Verticals related to Smart Cities;
- understand concepts, goals and frameworks related to smart sustainable city, including key aspects and KPIs required to develop smart sustainable cities;
- identify different IoT Solutions in areas such as Smart Energy, Smart Building, Smart Water, Smart Waste, Smart Transportation and Smart Healthcare for Smart Sustainable City; and
- relate to various case studies in the area of smart sustainable cities.

Audience:

Municipals, Organizations, Industries, ICT Experts, Policymakers, Regulators, Service & Solution Providers and Academia that are involved in the Internet of Things

Trainers:

Experts from the IoT Academy and other invited experts

DIGITAL INFRASTRUCTURE PLANNING

| 24-28 August 2020|

Ghaziabad (Near Delhi), INDIA

ORGANISED BY

ALTTC
एल्ट सेंटर

PARTNER (S)

ITRC

LANGUAGE

English

FEES

500 USD

MODE

Face-to-face

DURATION

5 days

REGISTRATION DEADLINE

7 August 2020

COURSE CODE

20WS24874ASP-E

Description:

As the world enters into the next industrial revolution, the Industry 4.0, governments and private sectors look to undergo digital transformation to participate in the digital economy effectively. At the national level, it requires holistic planning of digital infrastructure to ensure national development and inclusion. This course aims to equip participants with the knowledge and skills to undertake digital infrastructure planning in the digital economy.

Learning outcomes:

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

- identify key components of digital infrastructure that enables the digital economy including telecom networks, digital governments, smart cities, industry verticals, platforms, and devices;
- identify key policy and regulatory ecosystem that is necessary to support national digital infrastructure planning and implementation;
- relate to successful case studies and practical experiences.

Audience:

Executives, managers, engineers, technical staff, policymakers, telecom operators, Industry and academia.

Trainers:

It will be conducted by ALTTC trainers along with industry experts in collaboration with ITRC Iran.

DATA-DRIVEN GOVERNANCE

| 24-28 August 2020 |

Seoul, Republic of Korea

ORGANISED BY

NIA NATIONAL INFORMATION SOCIETY AGENCY

LANGUAGE

English

FEES

Free

MODE

Face-to-face

DURATION

5 days

REGISTRATION DEADLINE

7 August 2020

COURSE CODE

20WS24875ASP-E

Description:

Governments recognize the importance of big data analytics to develop impactful citizen-centric policies. This program aims to equip participants with an understanding of evidence-based decision-making processes and enhance competency to develop citizen-centric policies.

Learning outcomes:

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

- explain the concept of open data and evidence-based policymaking;
- apply skills on data analytics in the context of the public sector ;
- practice available best practices of open data portal from major countries;
- relate to various issues on open data in the area of privacy and cybersecurity as possible solutions; and
- developed competencies in developing a data ecosystem.

Audience:

Senior officials of the ITU members, who are interested in open data and scientific decision making.- Executives, managers, engineers, technical staff, policymakers, telecom operators, industry and academia.

Trainers:

Experts from National Information Society Agency

SPECTRUM PRICING, AUCTION AND ALLOCATION

| 7-10 September 2020 |

Bangkok, Thailand

ORGANISED BY

国家无线电监测中心
The State Radio Monitoring Center

PARTNER (S)

LANGUAGE

English

FEES

Free

MODE

Face-to-face

DURATION

4 days

REGISTRATION DEADLINE

21 August 2020

COURSE CODE

20WS24877ASP-E

Description:

Allocating spectrum in a timely and efficient manner is key to support digital infrastructure. This program aims to equip participants with knowledge and skills on spectrum pricing, auction and allocations processes through sharing international practices and experiences.

Learning outcomes:

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

- apply key technical and economic concepts behind spectrum allocation and pricing;
- consider various options and methodologies for allocating and assigning spectrum as well as pricing it;
- apply practical skills on designing spectrum pricing and allocation plans; and
- relate to different country experiences and emerging practices relevant to their work.

Audience:

Policymakers, regulators, industry and academia with interest in spectrum pricing and allocation.

Trainers:

Experts from ITU, SRMC and national entities

CYBER SECURITY AND CRITICAL INFRASTRUCTURE PROTECTION

| 8-12 September 2020 |

Ghaziabad (Near Delhi), INDIA

ORGANISED BY

ALTTC
एल्टसेंटर

LANGUAGE

English

FEES

275 USD

MODE

Face-to-face

DURATION

5 days

REGISTRATION DEADLINE

18 August 2020

COURSE CODE

20WS24876ASP-E

Description:

Vulnerabilities that exists from connecting to the network increases as more people and devices become connected and smarter. This program aims to equip participants with the necessary knowledge and skills to counter the threats from cybersecurity and protect critical infrastructures.

Learning outcomes:

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

- understand the impact of cybersecurity threats and the importance of critical infrastructure protection;
- apply national cybersecurity strategies frameworks;
- identify different critical infrastructures and its vulnerabilities as well as threat mitigation techniques; and
- apply these cybersecurity concepts in the context of various applications such as smart grid, smart city and for Industry 4.0.

Audience:

Executives, managers, engineers and technical staff from regulators, policymakers, telecom operators and academia and government organization

Trainers:

- Shri M.K.Seth, CGM, ALTTC
- Shri Subhash Chand, PGM ALTTC
- Smt Suresh Devi DGM (IT), ALTTC
- Shri Anand Prakash, Ex VP M/S HCL Technologies
- Ms. Nilufer Yasmin, Astt. Prof. AKTU
- Experts from TRAI, TEC, DOT, and well-known experts from Industries.

DIGITAL PLATFORM WITH EMERGING TECHNOLOGIES

| 21-24 September 2020 |

Bangkok, Thailand

ORGANISED BY

NIA NATIONAL INFORMATION SOCIETY AGENCY

PARTNER (S)

LANGUAGE

English

FEES

Free

MODE

Face-to-face

DURATION

4 days

REGISTRATION DEADLINE

4 September 2020

COURSE CODE

20WS24879ASP-E

Description:

In digital economy, ICT is fast becoming a common platform for delivery of services for all the sectors. Emerging technologies such as artificial intelligence (AI), big data, cloud computing, Internet of Things, mobile broadband, digtal platforms and their business models inter-alia are creating great innovation opportunities while creating new regulatory paradigms. This program aims to develop policy competencies of designing digital platforms and recognize the importance of emerging technologies in the era of digitalization.

Learning outcomes:

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

- apply the concept of a digital platform and emerging technologies such as data, network, AI;
- relate to major countries' digital platform policies;
- compare best practices of a digital platform from major countries by the type of governments' services (G2G, G2B, G2C);
- identify related issues on open data in the aspects of personal information, cybersecurity;
- understand issues impacting digital platforms in the context of policy and regulation; and
- apply people-centric policy development through citizen-participation and trust-building.

Audience:

Senior officials of the ITU members, who are interested in digital platforms and emerging technologies.

Trainers:

National Information Society Agency

SPECTRUM MONITORING TECHNOLOGIES AND PRACTICE

| 21-25 September 2020 |

Chengdu, China

ORGANISED BY

国家无线电监测中心
The State Radio Monitoring Center

LANGUAGE

English

FEES

Free

MODE

Face-to-face

DURATION

5 days

REGISTRATION DEADLINE

31 August 2020

COURSE CODE

20WS24878ASP-E

Description:

Spectrum is a valuable commodity in this interconnected world. Operators rely on governments to ensure that the allocated spectrum is managed and assigned responsibly. This course aims to equip participants with the understanding and knowledge of the core functions of spectrum monitoring.

Learning outcomes:

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

- apply international and national spectrum management framework; and
- use the information on the modern technologies and applications to establish and operate national spectrum monitoring network, including special cases on 5G and UAV.

Audience:

Middle to senior-level professionals and technical staff and managers from national spectrum monitoring and spectrum management agencies responsible for the implementation and operation of spectrum monitoring systems.

Trainers:

Experts from the State Radio Monitoring Center and other invited experts from spectrum monitoring manufactories

5G TECHNOLOGY AND APPLICATIONS IN PRACTICE

| 19-23 October 2020 |

Shanghai, China

ORGANISED BY

CAICT 中国信息通信研究院

PARTNER (S)

ITRC

LANGUAGE

English

FEES

Free

MODE

Face-to-face

DURATION

5 days

REGISTRATION DEADLINE

2 October 2020

COURSE CODE

20WS24880ASP-E

Description:

IMT 2020 (5G) technology is predicted to become a catalyst for socio-economic growth in the next decade. This course aims to equip participants with the knowledge of application scenarios, network architecture and development trends on 5G.

Learning outcomes:

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

- understand the IMT2020 (5G) technology and application;
- build knowledge about key technology and applications in 5G;
- use the combination of theory, use cases and field trips to acquire knowledge on practical 5G deployments; and
- increase the opportunities for international cooperation.

Audience:

ICT professionals and engineers, decision-makers, managers, equipment suppliers, operators etc. who are interested in ICT applications of 5G

Trainers:

- Expert from ITU
- Experts from CAICT
- Experts from HUAWEI
- Experts from ITRC
- Experts from other partners

HUMAN EXPOSURE TO RADIO FREQUENCY ELECTROMAGNETIC FIELDS

| November 2020 |
Tehran, Iran

ORGANISED BY

UTM WCC WIRELESS COMMUNICATION CENTRE

PARTNER (S)

ITRC

LANGUAGE

English

FEES

Free

MODE

Face-to-face

DURATION

TBC

REGISTRATION DEADLINE

TBC

COURSE CODE

20WS24867ASP-E

Description:

Smart devices utilize radio technologies to transmit data to the network. This training course aims to equip participants with an understanding of the effect of human exposure to radiofrequency electromagnetic field (EMF) to body tissue dielectric parameters and radiofrequency. Training resources include recommendations, policies as well as recent studies, including case studies on the effect of human exposure to radio EMF.

Learning outcomes:

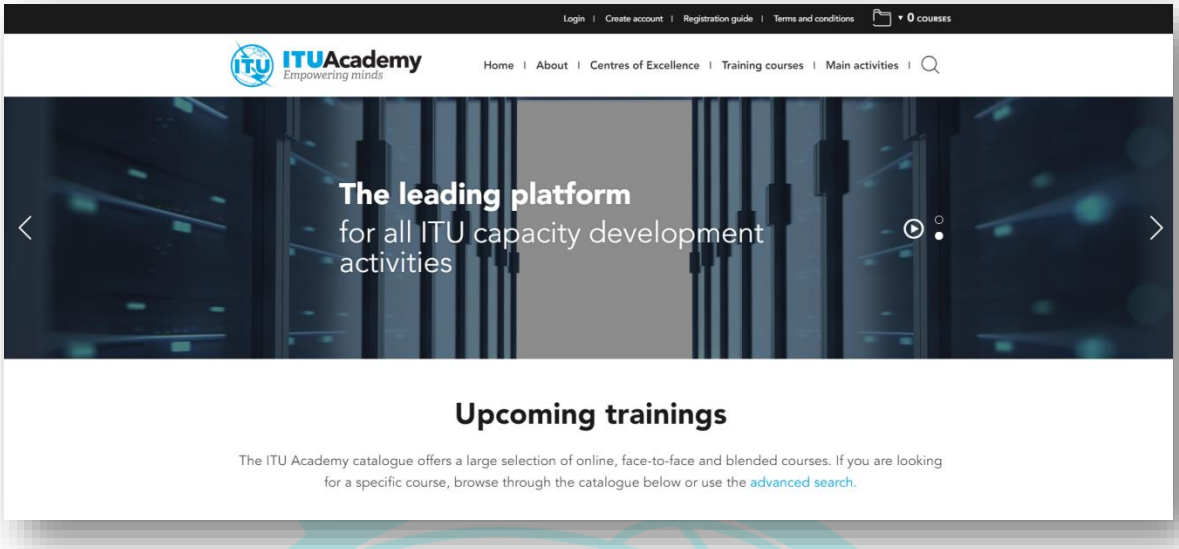
- understand the effect of human exposure to radiofrequency electromagnetic field (EMF) and its impact on body tissue dielectric parameters and frequency based on recent findings;
- identify and relate to different policies on human exposure to EMF;
- understand the effect of wearable technology on humans based on recent studies on the impact of EMF exposure on wearable technology;
- compare different type of public education related to EMF exposure.

Audience:

Executives, managers, officials, engineers, employees from the ministry, regulator, government agencies, telecom operators, vertical industries, telecom investment companies, researchers and academia.

Trainers:

- Prof. Dr. Tharek Abd Rahman
- Prof. Dr. Jafri Din
- Assoc. Prof. Dr. Norhudah Seman
- Mr Chua Tien Han from UTM
- Speakers from industry



2020

ONLINE TRAINING

ADVANCED BROADBAND NETWORK QOS AND APPLICATIONS

| 23 March-10 April 2020|

ITU Academy

ORGANISED BY

ALTTC
एल्ट सेंटर

LANGUAGE

English

FEES

100 USD

MODE

Online

DURATION

18 days

REGISTRATION DEADLINE

2 March 2020

COURSE CODE

20OI24882ASP-E

Description:

Network operators have begun to roll out advanced broadband network to support the function of the digital economy. Ensuring the uality of Service (QoS) is crucial to ensure the public's trust and protect consumers. This course aims to equip participants with the understanding of QoS policies and regulatory aspects relating to advanced access technologies and emergent architecture of wireless and fixed broadband.

Learning outcomes:

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

- apply the concepts and technical aspects of wireless and wireline broadband technologies;
- apply the concepts of QoS and QoE;
- apply the methodologies for monitoring and measurements of broadband services from an end-user perspective;
- apply the standards and international regulatory practices on QoS and QoE; and
- enhance their skills on developing a comprehensive regulatory framework.

Audience:

Executives, Managers, Engineers, technical staff, policymakers, telecom operators, Industry and academia.

Trainers:

This course will be conducted by ALTTC trainers in collaboration with industry experts.

CONFORMANCE & INTEROPERABILITY RELATING TO SMART CITY

| 6-24 April 2020 |

ITU Academy

ORGANISED BY

CAICT 中国信息通信研究院

LANGUAGE

English

FEES

Free

MODE

Online

DURATION

18 days

REGISTRATION DEADLINE

20 March 2020

COURSE CODE

20OI24883ASP-E

Description:

To facilitate effective usage of ICT devices and services, ICT devices and services should follow relevant international standards, regulations and other specifications. This course aims to equip participants with an understanding of ITU's work in the area of conformity and interoperability (C&I) as well as conformity assessment principles including policy, supervision, the requirement concerning development trends related to smart cities taking into account standardization progress, latest technologies and security related issues.

Learning outcomes:

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

- develop and implement conformity assessment programmes;
- understand the basic concept of C&I framework for ICT technology; and
- develop and apply available practices in areas such as infrastructures, application technology and conformity assessment methods related to smart city.

Audience:

Managers, engineers and employees from regulators, government organisations, telecommunication companies and academia, who are interested in understanding the implementation of conformity and interoperability including technologies, standardization, regulation and content.

Trainers:

- Mr. S. Ismail Shah,ITU
- Ms. WU Jingwen, CAICT
- Ms. Han Siqi, CAICT
- Mr. LU Xu, CAICT
- Ms. WEI Jin, CAICT
- Mr. LIU Tai, CAICT;
- Mr. WANG Ruochen, CAICT;
- Mr. FU Kai, CAICT;
- Mr. HU Yanpu, CAICT

DIGITAL TRANSFORMATION: ENHANCING IOT-DRIVEN ACCESSIBILITY

| 11-17 April |

ITU Academy

ORGANISED BY

IoT Academy

PARTNER (S)

ITRC

LANGUAGE

English

FEES

Free

MODE

Online

DURATION

7 days

REGISTRATION DEADLINE

8 April 2020

COURSE CODE

20OI24869ASP-E

Description:

Digital transformation is intended to empower all people by providing opportunities offered by ICTs, such as IoT, to create a more inclusive digital society. This course aims to equip participants with the knowledge on the role of digital transformation in realizing IoT-driven accessibilities for Persons with Disabilities (PWD) through the use of enabling technologies and assistive tools.

Learning outcomes:

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

- apply the concept of "Digital Transformation" and its role in enhancing IoT- driven accessibilities from fundamentals to frontier digital technologies;
- discuss important fundamentals of accessibility for PWD and how accessible ICTs can provide opportunities for this community;
- identify the potential of IoT-driven enabling technologies as well as assistive tools for the public and persons with disabilities and specific needs in detail; and
- apply some practical use cases and appropriate assistive tools for PWD.

Audience:

Researchers, Organizations, Policymakers, Experts, Engineers, Students in fields of IT, IoT and ICT in Academia, Organizations and Industries

Trainers:

Experts from the IoT Academy and other invited experts

ICT Applications Relating to Smart Cities and Communities

| 13-31 July 2020 |

ITU Academy

ORGANISED BY

CAICT 中国信息通信研究院

LANGUAGE

English

FEES

Free

MODE

Online

DURATION

18 Day

REGISTRATION DEADLINE

10 July 2020

COURSE CODE

20OI24884ASP-E

Description:

ICT applications and digital innovations promise to bring impact on development agendas. When applied in the context of developing a smart city, ICT has the potential to improve quality of life, the efficiency of urban operation and services, and competitiveness, meeting the needs of present and future generations on economic, social, environmental as well as cultural aspects. This course aims to equip participants with knowledge on smart city development trends and the latest technology and applications in smart city.

Learning outcomes:

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

- relate to current smart city development trends;
- apply the concept of smart city infrastructure, use of 5G in smart city, smart city IoT applications; and
- apply ICT applications in different components of smart city such as smart agriculture, smart government, smart traffic, smart education, smart security etc.

Audience:

ICT professionals and engineers, decision-makers, managers, equipment suppliers and operators interested in learning about ICT applications in smart city.

Trainers:

- Mr. S. Ismail Shah,ITU
- Ms. Wang Subin, CAICT
- Ms. Lu Huimin, ZSOFT
- Mr. Cao Wei, ZTE
- Mr. Wu Zhonghui, Yoonop
- Ms. Wang Mengdi, CAICT
- Mr. Li Huan, Haige BeiDou
- Mr. Li Wei, XRAI Tech

DEVELOPING IOT ECOSYSTEM

| 19-30 Oct 2020 |

ITU Academy

ORGANISED BY

IoT Academy

LANGUAGE

English

FEES

150 USD

MODE

Online

DURATION

12 days

REGISTRATION DEADLINE

16 October 2020

COURSE CODE

20OI24887ASP-E

Description:

Internet of Things will form a key component that will enable the 4th industrial revolution. This online training course aims to introduce participants to Internet of Things ecosystem and its key components including acquisition (Sensors & Actuators, mbedded Systems, Gateways), network (Device Connectivity), IoT platform (Analytics, Dashboards & Tools, Services), and business (IoT Applications and Services, IoT Verticals, Marketplaces). The training will take into account policies and regulations related to Internet of Things and theits security aspects. It will specifically focus on some IoT verticals and cover all elements described above for them.

Learning outcomes:

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

- understand the concept of IoT ecosystem;
- familiarise with the key players of IoT ecosystem includes acquisition, network, IoT platform and business and their components;
- understand IoT policies and regulations and their considerations;
- familiarise with security consideration of Internet of Things in IoT ecosystem; and
- present IoT ecosystem for some IoT verticals as use case and describe all elements described above for them.

Audience:

Organizations, Industries, ICT Experts, Policy makers, Regulators, Service & Solution Providers and Academia involved in Internet of Things

Trainers:

Experts from the IoT Academy and other invited experts

IoT Sensors and Network for Disaster Communication

| 2-13 November 2020 |

ITU Academy

ORGANISED BY

ALTTC
एल्ट सेंटर

LANGUAGE

English

FEES

100 USD

MODE

Online

DURATION

11 days

REGISTRATION DEADLINE

16 October 2020

COURSE CODE

20OI24886ASP-E

Description:

IoT technologies & sensor-based communication can provide a solution for disaster preparedness, such as prediction and early warning systems to compensate for inadequate infrastructure that places developing and emerging countries in a, particularly vulnerable position. This course aims to equip participants with the knowledge of mitigating the risks and effects of natural disasters due to high population density, poor evacuation infrastructure and exposure to severe weather events through the use of IoT sensors.

Learning outcomes:

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

- apply the concept of advanced deployment of IoT applications in disaster management; and
- be aware of the development taking place on advanced applications of IoT like Smart Grid, IoT applications to mitigate the effect and risks of different kinds of disaster.

Audience:

Executives, managers, engineers and technical staff from regulators, policymakers, telecom operators and academia and Government Organization

Trainers:

- Shri M.K.Seth, CGM, ALTTC
- Shri Subhash Chand, PGM ALTTC
- Smt Suresh Devi DGM (IT), ALTTC
- Shri Anand Prakash, Ex VP M/S HCL Technologies
- Ms. Nilufer Yasmin, Astt. Prof. AKTU
- Experts from TRAI, TEC, DOT, and well-known experts from Industries.

GOVERNMENT INNOVATION BASED ON EMERGING TECHNOLOGY

| 4-29 November 2020 |

ITU Academy

ORGANISED BY

NIA NATIONAL INFORMATION SOCIETY AGENCY

LANGUAGE

English

FEES

Free

MODE

Online

DURATION

25 days

REGISTRATION DEADLINE

20 October 2020

COURSE CODE

20OI24885ASP-E

Description:

Telecommunication and ICT networks and services can enable the government to expand access to its government services, health care, education, agricultural services, financial and banking services, and market information to the public. This course aims to equip participants with the skills to improve the quality of public service through government innovation using emerging technologies and recognize the importance of building a trustworthy government.

Learning outcomes:

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

- apply the concept of government innovation and change management;
- understand the different emerging technologies such as cloud, blockchain, AI and data;
- discuss the many best practices of major countries' government innovation using emerging technologies; and
- understand relevant issue related to government innovation and change management.

Audience:

Senior officials of the ITU members, who are interested in government innovation and emerging technologies

Trainers:

National Information Society Agency

CoE Contacts

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Advanced Level Telecom Training Centre (ALTTC)	India	Mr. Subhash Chand Email:subhash.iitr83@gmail.com
China Academy of Information and Communications Technology (CAICT)	China	Ms. WANG Ying Email: wangying@caict.ac.cn
IoT Academy	Iran	Mr. Naghizadeh Email: Edu@IOTACI.com
National Information Society Agency (NIA)	Republic of Korea	Ms. Jiyoung Seol Email: seolji0@nia.or.kr
State Radio Monitoring Center / State Radio Spectrum Management Center (SRMC)	China	Ms. Li Jianxin Email: lijianxin@srrc.org.cn
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