



# ITU Centres of Excellence Network for Asia-Pacific Region

# Advanced Level Telecom Training Centre

Online Training Course on

# "Internet of Things & Artificial Intelligence: How IoT and AI can support independent living of persons with specific needs?"

ITU Academy

18<sup>th</sup> – 29<sup>th</sup> October 2021

# TRAINING COURSE OUTLINE

# **COURSE DESCRIPTION**

Title	Online training course on "Internet of Things & Artificial Intelligence: How IoT and AI can support independent living of persons with specific needs?"
Objectives	To develop an understanding on how disruptive technologies like IoT & AI can support Persons with Disabilities (PWD) or Older Persons to have a better quality of life, particularly those who with visual, hearing impairment and cognitive disabilities.
Dates	18 <sup>th</sup> – 29 <sup>th</sup> October 2021
Duration	Two Weeks
Registration deadline	17 <sup>th</sup> October 2021
Training fees	@USD 100 per participant
Course code	210I26618ASP-E

## **DESCRIPTION OF THE TRAINING COURSE**

The focus of this course is to develop an understanding on how IoT devices and AI that connects the real world can support Persons with Disabilities (PWDs). The course aims to bridge the communication gap between PWDs, Older Persons and the society.

The course is designed with keeping in mind the available emerging technologies, such as **IoT** network and **artificial intelligence**, the changing health care trends and as we are moving towards society 5.0, and how these technologies can play a vital role in supporting independent living of persons with specific needs.

## **LEARNING OUTCOMES**

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

- Persons with Disabilities group: Their Need & Analysis
- Older Persons care and need Analysis
- IoT solutions to support the need for Older Persons
- Moving Towards Society 5.0 & Humanity 2.0
- Applications for diagnosing mental illness and intellectual disabilities
- IoT & AI for treatment of Depression & Autism
- AI for Spécial Education

## TARGET AUDIENCE

This training is primarily targeted at policy and decision managers, engineers, technical staff as well as advocates in the topic of digital inclusion from the Ministries, Regulatory Agencies, telecom operators and civil societies involved in policy, strategies and research work related to digital inclusion of persons with specific needs willing to strengthen their knowledge and learn about possible solutions and guidelines to support local, national and regional implementation of independing living of persons with specific needs and thus enable their equal and equitable participation in the digital economy. for PWD.

#### **ENTRY REQUIREMENTS**

No Specific Qualification needed to join this course, participants who have prior knowledge or awareness on PWDs will be helpful.

# TUTORS/INSTRUCTORS

S.No.	NAME OF TUTOR(S)/ INSTRUCTOR(S)	Position	CONTACT DETAILS
1.	Sh. Arun Kumar Sharma	Chief General Manager, ALTTC, BSNL, Ghaziabad, India	cgm_alttc@bsnl.co.in cgmalttc@gmail.com + 911202755121
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# TRAINING COURSE SCHEDULE

Week / Session	Торіс	Exercises and interactions
Week 1 & 2	ICT Accessibility: the Key to Inclusive Communication	Participants are encouraged to undertake a self- paced course on <u>ICT Accessibility: the Key to</u> <u>Inclusive Communication</u> to develope a better understanding of ICT accessibility, on overview of relevant ICT accessibility standards, regulation and policy and practical advice on the public procurement of accessible ICTs. The successful validation of the knowledge achieved as a result of this course completion lead to an ITU certificate on this topic.
Week 1	<ul> <li>Digital accessibility as a key element to ensure digital inclusuion for all people regardless of age, gender, ability or location</li> <li>Persons with Disabilities group : Needs and requirements: Analysis from digital inclusion perspective</li> <li>Older persons Needs and requirements : Analysis from digital inclusion perspective</li> <li>Older persons Needs and requirements : Analysis from digital inclusion perspective</li> <li>IoT solutions to support the need for Older Persons</li> <li>Applications for diagnosing mental illness and intellectual disabilities</li> <li>Chat session#1</li> </ul>	<ul> <li>This week, each participant has to:</li> <li>Presentation/explanation of the fundamentals of digital accessibility</li> <li>Read of the PPT slides/PDF Document uploaded in the course page for week 1</li> <li>Respond to posts made by Experts other participants in the forum at the latest by Thursday of each week</li> <li>Attend a live zoom session scheduled for Friday - 11:30hrs-13:00hrs</li> <li>Complete a self-test quiz1 by Sunday - 18:00hrs</li> <li>Assignment of Course will be opened for Participants from Saturday 18:00 Hrs</li> </ul>
Week 2	<ul> <li>Artificial Intelligence : Role &amp; Concept</li> <li>Society 5.0: Society For All</li> </ul>	<ul> <li>This week, each participant has to:</li> <li>Read of the PPT slides/PDF Document uploaded in the course page for week 2</li> </ul>

IoT& AI for Treatment     of Depression &     Autism	<ul> <li>Respond to posts made by Experts other participants in the forum at the latest by Thursday of each week</li> </ul>
• 5G technology in Healthcare	<ul> <li>Attend a live zoom session scheduled for</li> <li>Friday - 11:30hrs-13:00hrs</li> </ul>
	<ul> <li>Complete a self-test quiz2 by Sunday - 18:00hrs</li> </ul>
	Assignment of Course will be Closed for Participants on Sunday 23:30 Hrs

# **METHODOLOGY (Didactic approach)**

PDF documents 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 Friday from 11:30 – 13:00 Hrs. Indian Standard Time (IST). All participants are expected to join the chat sessions, as they will be graded.

Review Quizzes will be held twice during the course. Each quiz will have 15 (fifteen) multiple choice questions.

One individual assignment will be assigned to each participant.

#### Important:

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

#### **EVALUATION AND GRADING**

The assessment of the participants shall be based on the time spent on the training and the following parameters:

Besides the weekly quiz 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. Below are the evaluation schemes:

Quiz #1	30%
Quiz #2	30%
Individual Assignment:	20%
2 Chat Sessions (10% per session)	20%

Total Evaluation:	100%

## TRAINING COURSE COORDINATION

Institute Head:	Training coordinators:	ITU coordinator:
Sh. Arun Kumar Sharma	Mr. Ashok Kumar Sharma	Mr. Sean S. Doral
Chief General Manager	DGM(CFA &BB), Room No. 721,	Program Officer-ITU,
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(Email)	+91 120 275 5147 (Works)	
+91-120-2704638 (Works)	+91 941 273 9319 (Mobile)	
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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/user/register

#### **Training course registration**

When you have an existing account or created a new account, you can register for the course online at the following link: <u>https://academy.itu.int/training-courses/full-catalogue/internet-things-artificial-intelligence-how-iot-and-ai-can-support-independent-living-persons</u>

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

#### Payment

#### 1. Online payment

A training fee of USD 100 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/internet-things-artificial-intelligence-how-iot-and-ai-can-support-independent-living-persons

## 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 <u>Hcbmail@itu.int</u> 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.
- 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 100
Payment Reference:	CoE-ASP-210I26618ASP-E-P.40593.1.04

## **11.4 Other method of payment**

If due to national regulations, there are restrictions that do not allow for payment to be made using options 1 & 2 above, please contact the ITU coordinator indicated in the section 10 for further assistance.