



**PORTO
SMART**
Certified KNX Training Center

2024

PORT-SAID, EGYPT



**Certified KNX++ Training Center
Smart Home & Building Solutions**

Certified KNX++ TUTOR: Eng. Mahmoud Seada





PRESENTS



**PORTO KNX, WE MAKE LEARNING KNX
FREE, EASY, SIMPLE & ATTRACTIVE**



WE MAKE LEARNING KNX
FREE, EASY, SIMPLE & ATTRACTIVE

OUR VARIUOS RESOURCES FOR LEARNING **KNX** FOR FREE



1

Video Platform
YouTube Channel
@PortoKNX



2

E-Learning Website
Platform
www.portoknx.com



3

Book Platform
Online, Digital
& Hard Copies



4

Educational
& **KNX News**
Posts



5

Installations &
Wiring Of
KNX Devices



6

Availability of
Ready KNX
Projects in ETS6



7

Support of KNX
Graduation Projects
For Students



8

FREE KNX
LIVE Sessions &
Courses



9

Live KNX
Quizzes &
Amazing Prizes



10

Social Groups
For Support all
KNX Trainees



11

Support of KNX
User Club Egypt
Members



12

Reviews about Our
FREE Resources In
Learning KNX





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<<<<< KEY FEATURES >>>>>

KEY FEATURES



  **PORTO SMART** has more than 14 years of experience in the field of designing, implementing and training of smart home and building systems, and here begins the main goal of PORTO SMART, which is to transfer those experiences to our trainees by carrying out multiple tasks in the practical field in order to enable them to enter the field by easy way. So we are happy to announce the Launching of **PORTO KNX**.



KEY FEATURES



🌀 **PORTO KNX is the first FREE KNX E-Learning Platform in Middle East.**

🌟 **PORTO KNX is FREE Educational project dedicated only to KNX Protocol.**

🌟 **it is developed by: Eng. MAHMOUD SEADA “Certified KNX ++ Tutor”,
By Porto Smart “Certified KNX ++ Training Center”**



KEY FEATURES



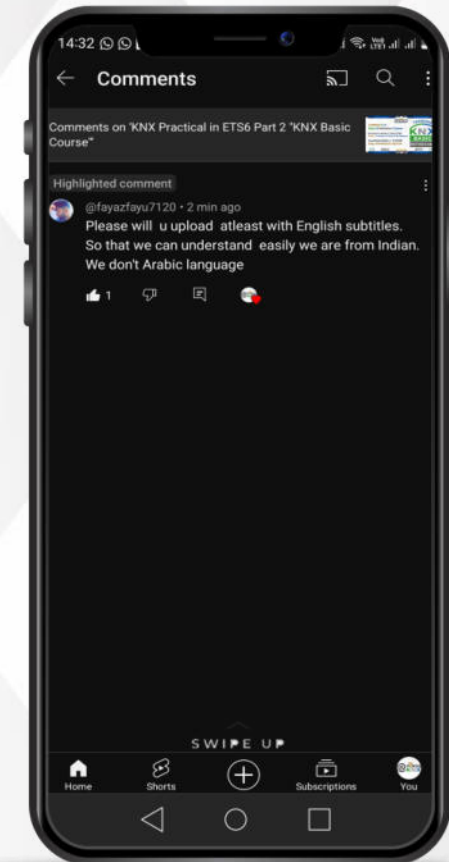
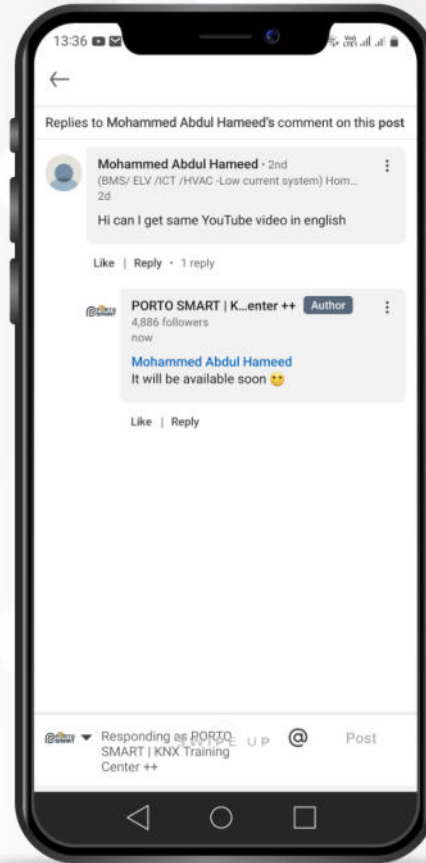
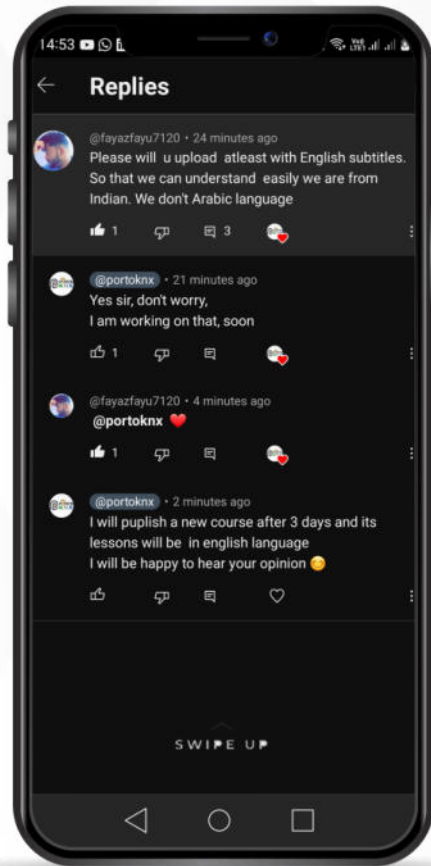
✿ **PORTO KNX** Really is making great efforts to educate students, Technicians and professionals about **KNX** Smart home and building technology.

✿ We understand the challenges that Arabic speakers face when trying to learn **KNX**, as there is a lack of comprehensive content available in Arabic.

✿ That's why we have developed and curated specialized resources and learning materials specifically tailored for Arabic speakers in attractive way to make learning **KNX** more accessible and easier for you.

KEY FEATURES

  However, we have also received feedback from our **English-speaking followers** who expressed their need for content in English. In response to this, we have started producing English content as well.



KEY FEATURES



Our learning program for **KNX** is completely free and offers a wide range of resources.

As an Example We had Produced:

- ❖ hundreds of Free videos Uploaded on Our YouTube Channel.
- ❖ Full **KNX** e-learning website “www.portoknx.com” includes a lot of information about **KNX** Field like Posts, Courses, Events, and more. 🌐
- ❖ FREE Arabic **KNX** Books Which Available in Digital and Hard Copies 📄
- ❖ Host a lot of FREE live sessions for Learning **KNX**.
- ❖ Host a lot of live Quizzes with exciting Prizes using KAHOOT.
- ❖ Use real Equipment to integrate them with **KNX** like, Shutter motors, Lamps, RGB LED strip, Electric valves for controlling floor heating & HVAC Systems, AC Split unit, Alexa, Zwave devices, Conventional Sensors and others.
- ❖ Uploaded ready **KNX** projects in ETS6 and available in our Website for every one.
- ❖ Support Students in their Graduation Projects and Qualify them for the labor market
- ❖ We added a **KNX** Jobs application on our website platform for uploading CVs and we connect this application to interested companies in **KNX** Field



KEY FEATURES



  Our videos cover various topics, including wiring, installation, and programming of **KNX** devices.


  We offer courses that cater to both beginners and advanced learners.

As we Explain all about :

- ❖ **KNX** Basic Course.
- ❖ **KNX** HVAC Specialist Course
- ❖ **KNX** Advanced Course
- ❖ Wiring of **KNX** Devices
- ❖ Tips about **KNX** Field

KEY FEATURES



 Furthermore, we believe that knowledge should be accessible to everyone, regardless of their financial situation, That's why we provide free access to all certified KNX courses for those who cannot afford them.

 We are committed to making the learning experience as inclusive and comprehensive as possible.

 We offer FREE Certified Courses to students by an amazing way like Quizzes and Awards.

 We are arranging numerous field trips to real-life locations for our trainees

 The most important goal for us to spread the KNX Technology in the world Especially in the middle east world and Egypt.

 Spread the practical training by achieving a lot of really practical applications by using a various ways and Certified Devices

 We take the person From Zero Knowledge to Professional in KNX Technology





**PORTO KNX, WE MAKE LEARNING KNX
FREE, EASY, SIMPLE & ATTRACTIVE**

<<<<< OUR VARIOUS RECOURSES >>>>>

ACTIVITIES OF PORTO KNX IN LEARNING KNX FOR FREE



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YouTube Channel
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Installations &
Wiring Of
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Availability of
Ready KNX
Projects in ETS6

ACTIVITIES OF PORTO KNX IN LEARNING KNX FOR FREE



 **7**

**Support of KNX
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**Reviews about Our
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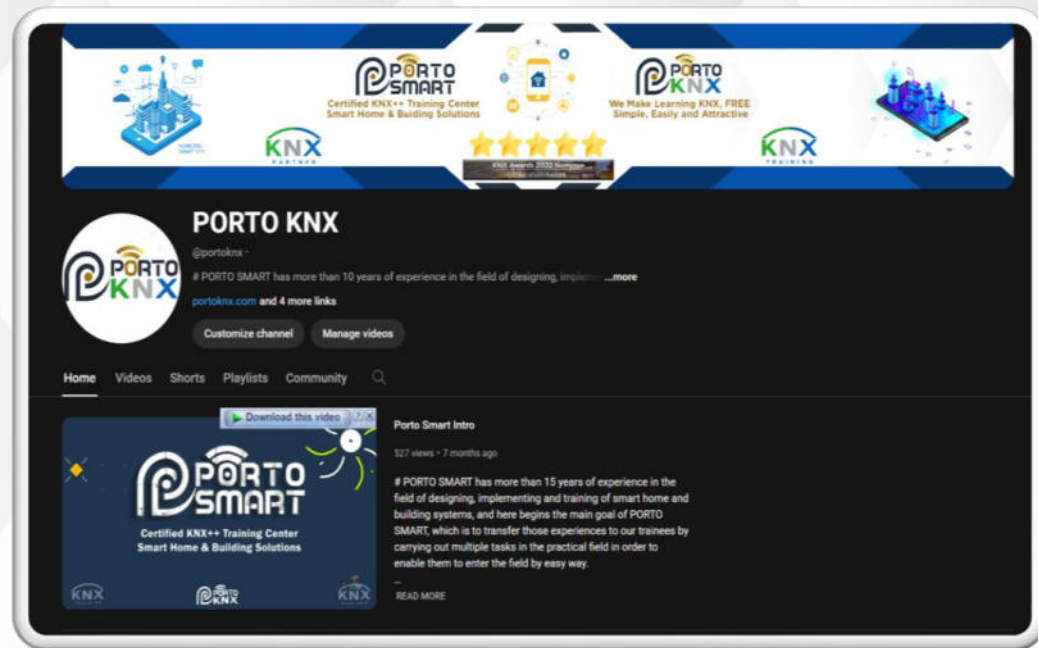
<<<<< 1- VIDEO PLATFORM >>>>>



FREE Exciting news! Our FREE KNX video content offers valuable insights into wiring, installation, and programming of KNX devices.

Starting this project in 2023, we've curated over **150 videos**, all accessible to everyone.

With Thousands of subscribers on YouTube and growing rapidly, our platform has now garnered Thousands of views. Stay tuned for more informative content!





FREE We offer courses that cater to both beginners and advanced learners.

Free We Explain the Certified **KNX** Courses in theoretical & Practical Parts in FULL HD.

We Explain a lot of Courses in KNX and Organize them in Playlists:

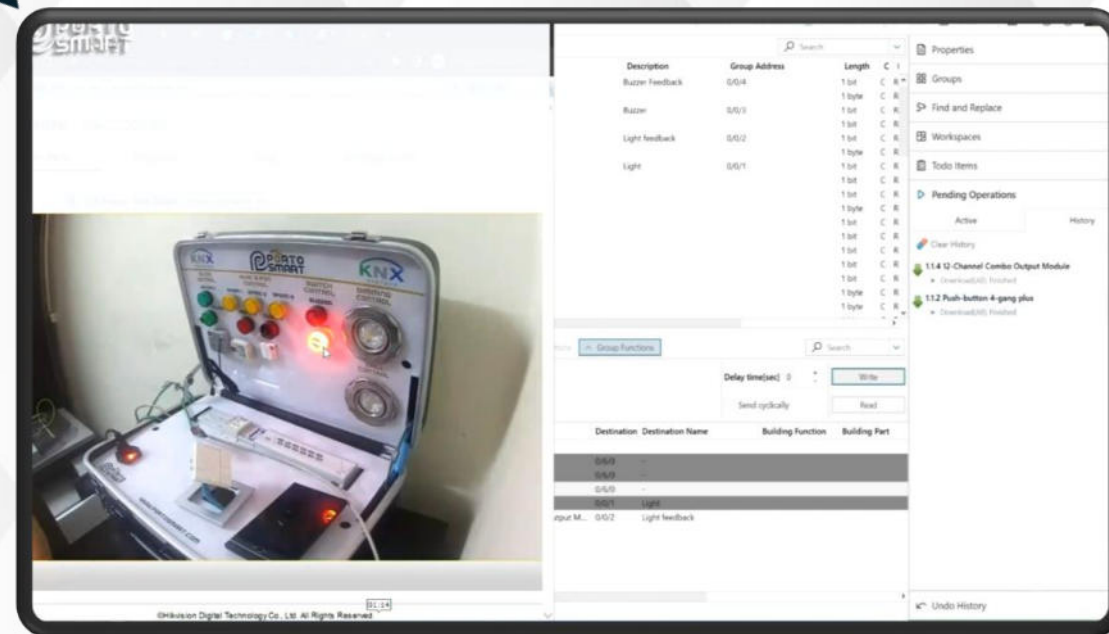
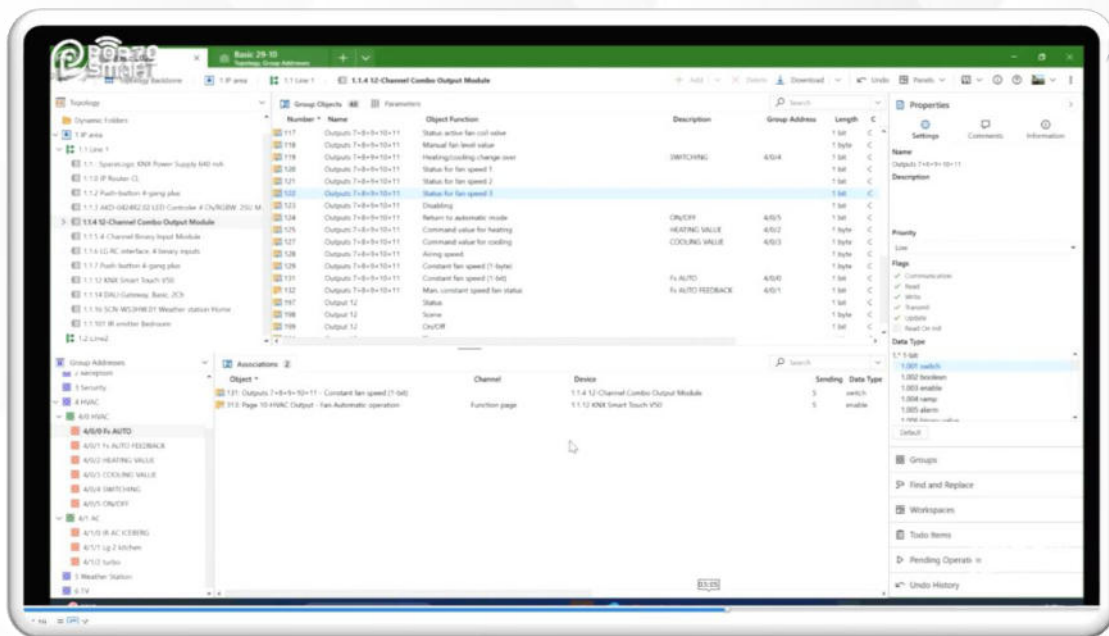
- ❖ **KNX** Basic Course.
- ❖ **KNX** HVAC Specialist Course
- ❖ **KNX** Advanced Course
- ❖ **KNX** Refresher Course
- ❖ Wiring of **KNX** Devices
- ❖ Tips about **KNX** Field

Full HD
1080





- ❖ We provide courses tailored for beginners and advanced learners, covering Certified **KNX** training in both theoretical and practical components.
- ❖ Our approach includes utilizing **IP Cameras** to facilitate the understanding of practical aspects.





- ❖ **Every theoretical part** explained in our certified courses is seamlessly implemented in **ETS6**, making learning easy and engaging.
- ❖ This technology allows us to deliver information to trainees in a **smooth and attractive manner**, ensuring a practical and convincing learning experience.

Switching controller types

	Principle	Example
2-point controllers	<p>The simplest controller:</p> <ul style="list-style-type: none"> - if actual < setpoint: turn on - if actual > setpoint: turn off <ul style="list-style-type: none"> Simple design, fast reaction Low control accuracy, Actual value fluctuates constantly 	Iron, refrigerator, hot water heater, heaters in washing machine/dishwasher
3-point controllers	<p>similar to 2-point controllers but they can work in two directions: Heating and cooling:</p> <ul style="list-style-type: none"> - if actual < setpoint lower limit: Heat - if actual > setpoint upper limit: Cool - between: Heating off/cooling off <ul style="list-style-type: none"> Simple design, fast reaction Better control accuracy than 2-point controller Energy consumption usually higher Risk of "energy waste" (heating and cooling in alternation) if not configured correctly 	Simple room temperature control with heating and cooling

HVAC Ch6-3.mp4

Basic 29-10
1.1.12 KNX Smart Touch VSD

Page 10 - PID Heat&Cool control

Page 10: PID Heat&Cool control

Page 11: PID Heat&Cool control

Page 12: PID Heat&Cool control

Page 13: PID Heat&Cool control

Page 14: PID Heat&Cool control

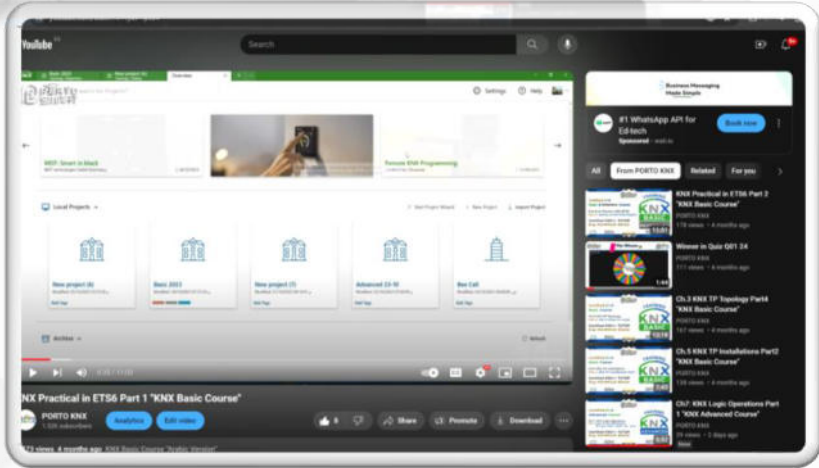
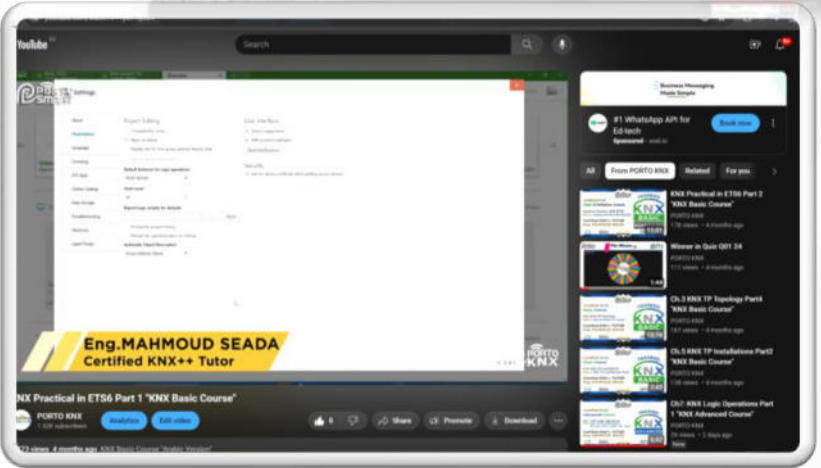
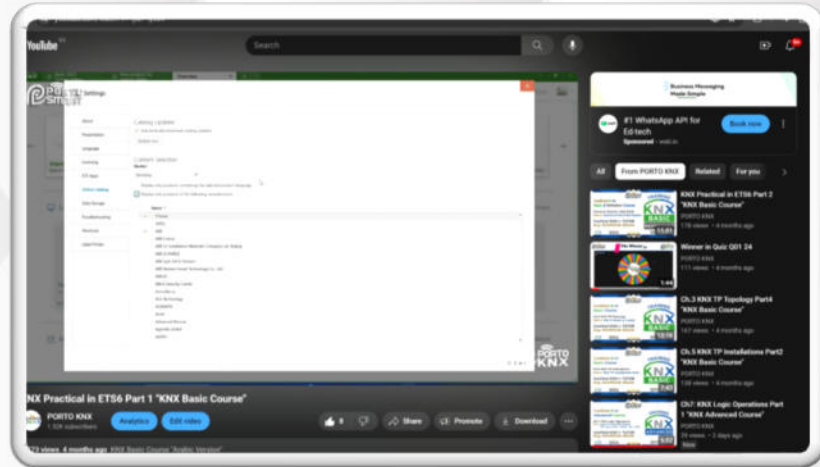
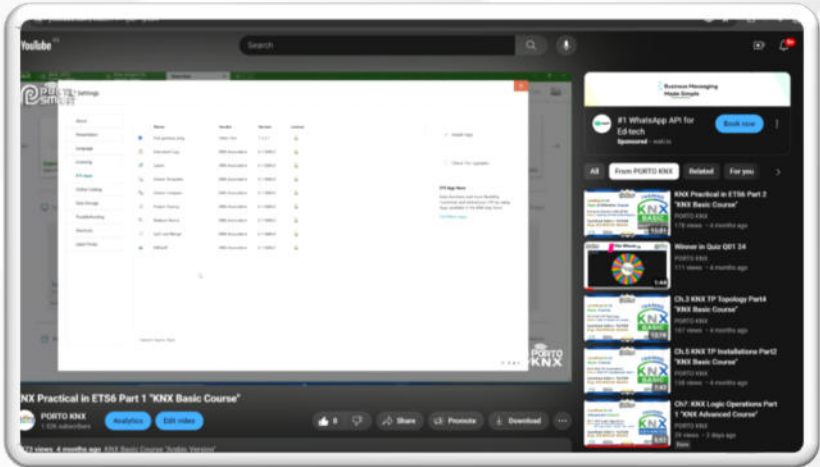
Page 15: PID Heat&Cool control

Time function: Critically send control value(2.15)

Associations:

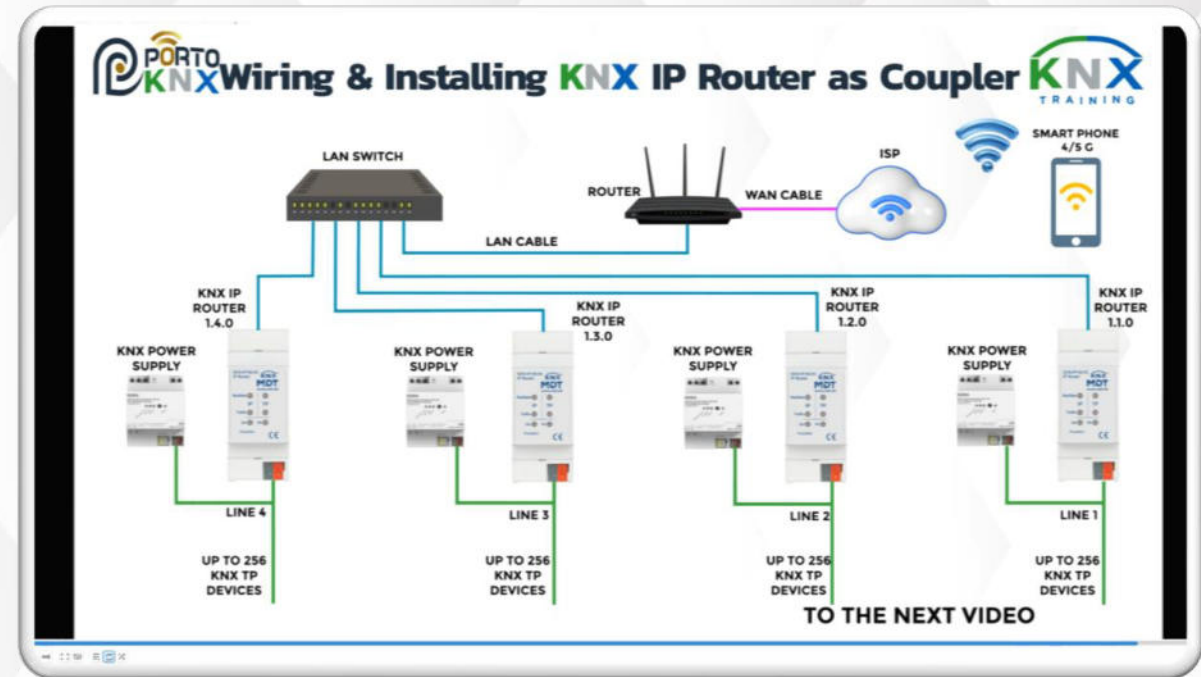
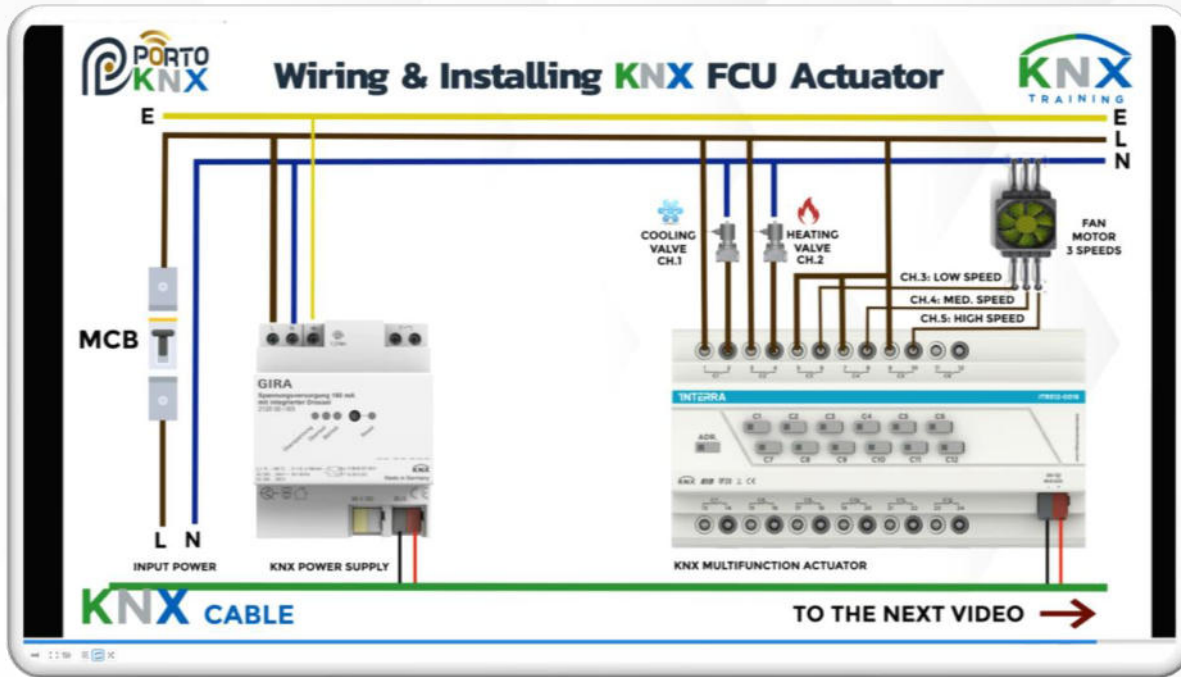
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1.1.12 KNX Smart Touch VSD	1.1.12 KNX Smart Touch VSD	1.1.12 KNX Smart Touch VSD	5	switch

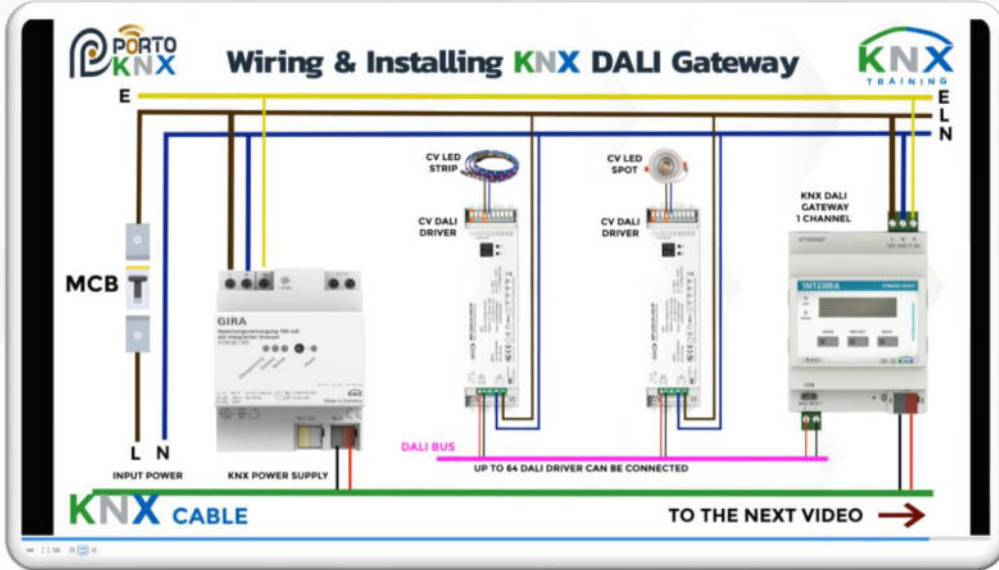
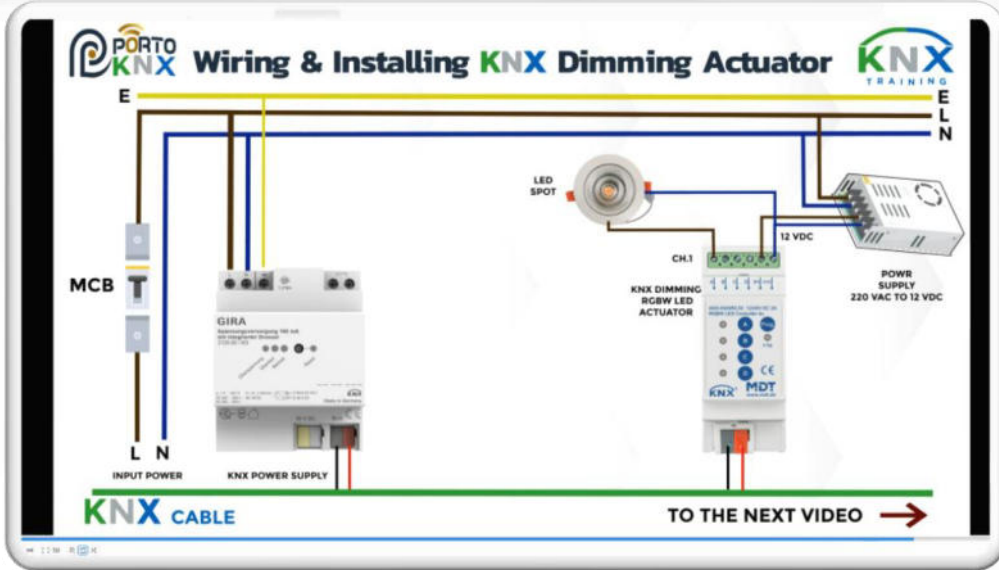
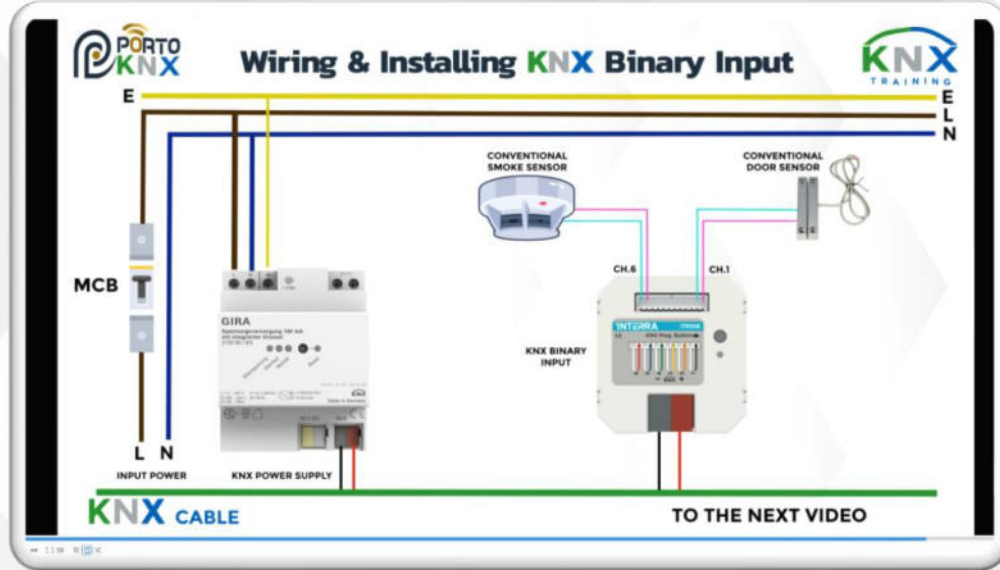
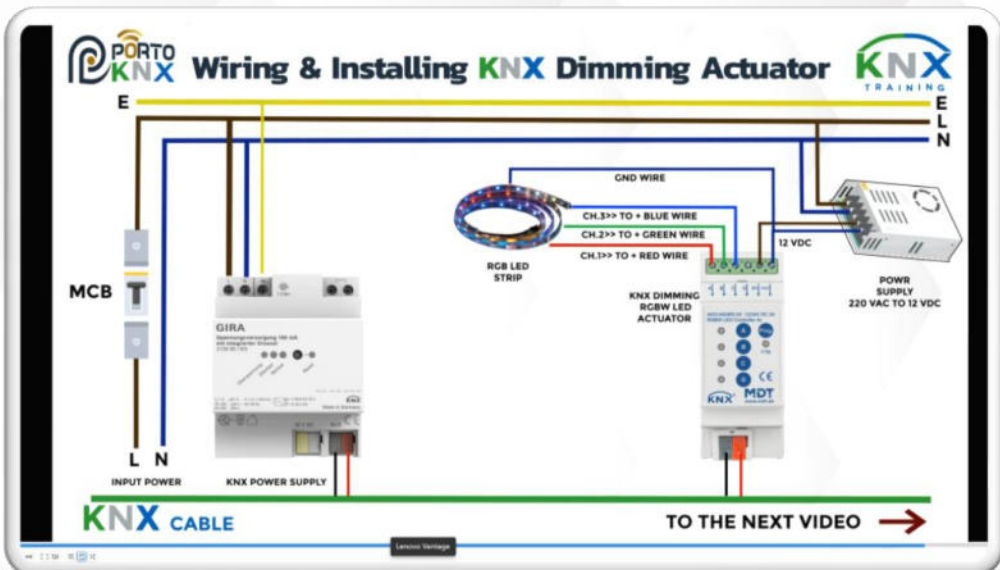
❖ We use the latest Updates from **KNX** in our Explanation, also we used **ETS 6** in programming our real devices in our Videos.





❖ We use the Best Graphic Solutions to generate videos in high quality and in attractive show to facilitate learning KNX.

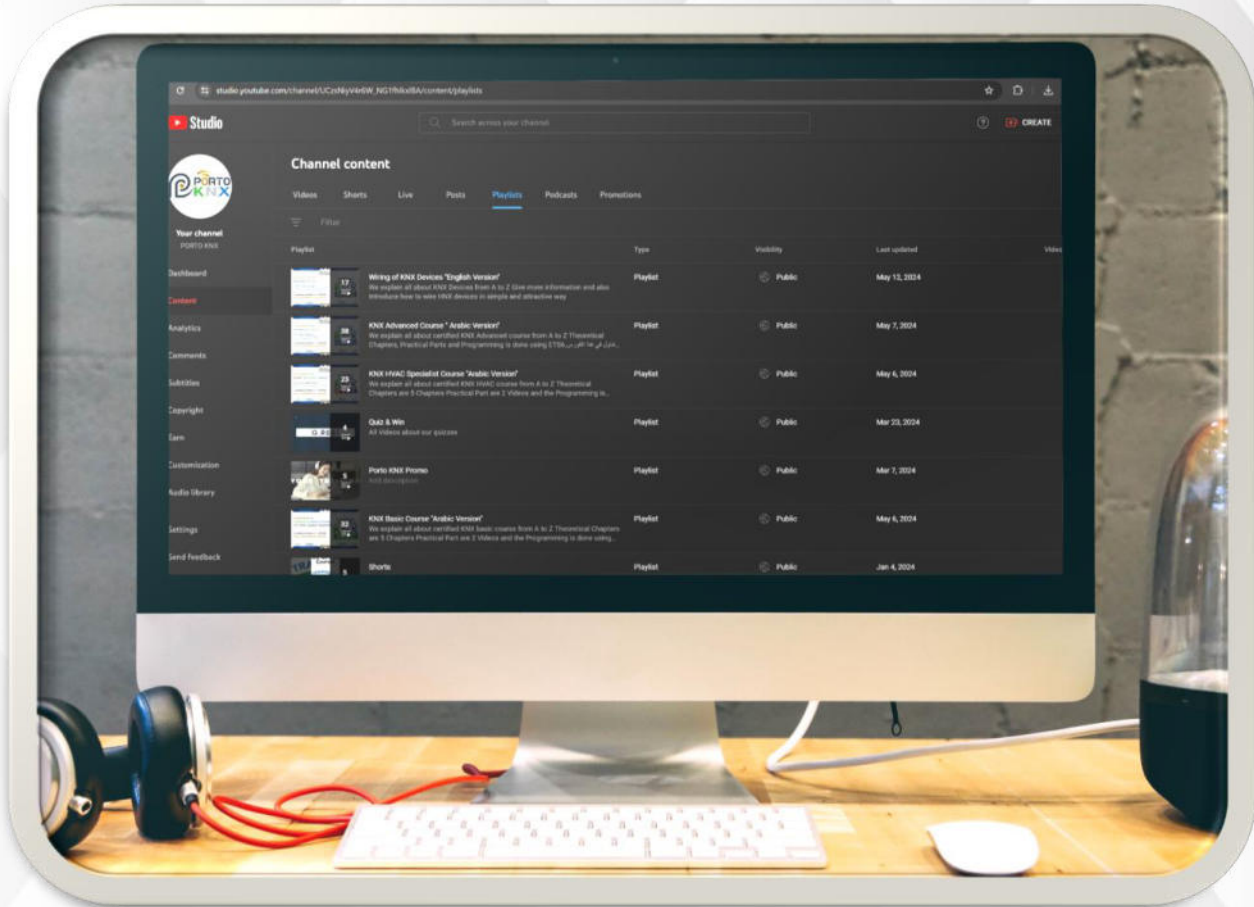




FREE 💡 You will find tutorials in real projects for a closer understanding of the KNX field.

FREE 💡 Our Videos are organized in Courses, Chapters, and Playlists, allowing comfortable viewing from anywhere.

FREE 💡 You can Start Learning **KNX** in series with the KNX Basic Course, followed by the HVAC and Advanced Course.





FREE 💡 We designed videos showcasing the latest news and updates from **KNX**.

FREE 💡 For instance, we covered all aspects of **KNX Experience 2023**, including the sessions at the fair and joining competitions.



1

Video Platform @ YouTube Channel @PortoKNX



Playlist	Chapter	Description
KNX Basic Course	Ch1: KNX System Arguments	Ch1: KNX System Arguments
KNX Basic Course	Ch2: KNX System Overview	Ch.2 System Overview Part1
KNX Basic Course	Ch2: KNX System Overview	Ch.2 System Overview Part2
KNX Basic Course	Ch2: KNX System Overview	Ch.2 System Overview Part3
KNX Basic Course	Ch2: KNX System Overview	Ch.2 System Overview Part4
KNX Basic Course	Ch2: KNX System Overview	Ch.2 System Overview Part5
KNX Basic Course	Ch2: KNX System Overview	Ch.2 System Overview Part6
KNX Basic Course	Ch2: KNX System Overview	Ch.2 System Overview Part7
KNX Basic Course	Ch3: KNX TP Topology	Ch3: KNX TP Topology Part1
KNX Basic Course	Ch3: KNX TP Topology	Ch3: KNX TP Topology Part2
KNX Basic Course	Ch3: KNX TP Topology	Ch3: KNX TP Topology Part3
KNX Basic Course	Ch3: KNX TP Topology	Ch3: KNX TP Topology Part4
KNX Basic Course	Ch4: KNX Bus Devices	Ch4: KNX Bus Devices Part1
KNX Basic Course	Ch4: KNX Bus Devices	Ch4: KNX Bus Devices Part2
KNX Basic Course	Ch4: KNX Bus Devices	Ch4: KNX Bus Devices Part3





Playlist	Chapter	Description
KNX Basic Course	Ch4: KNX Bus Devices	Ch4: KNX Bus Devices Part4
KNX Basic Course	Ch4: KNX Bus Devices	Ch4: KNX Bus Devices Part5
KNX Basic Course	Ch4: KNX Bus Devices	Ch4: KNX Bus Devices Part6
KNX Basic Course	Ch5: KNX TP Installations	Ch5: KNX TP Installations Part1
KNX Basic Course	Ch5: KNX TP Installations	Ch5: KNX TP Installations Part2
KNX Basic Course	Ch5: KNX TP Installations	Ch5: KNX TP Installations Part3
KNX Basic Course	Ch6: KNX ETS6 "Practical"	Ch6: KNX ETS6 "Practical" Part1
KNX Basic Course	Ch6: KNX ETS6 "Practical"	Ch6: KNX ETS6 "Practical" Part2
KNX Basic Course	Ch6: KNX ETS6 "Practical"	Ch6: KNX ETS6 "Practical" Part3
KNX Basic Course	Ch6: KNX ETS6 "Practical"	Ch6: KNX ETS6 "Practical" Part4
KNX Basic Course	Ch6: KNX ETS6 "Practical"	Ch6: KNX ETS6 "Practical" Part5
KNX Basic Course	Ch6: KNX ETS6 "Practical"	Ch6: KNX ETS6 "Practical" Part6
KNX Basic Course	Ch6: KNX ETS6 "Practical"	Ch6: KNX ETS6 "Practical" Part7
KNX Basic Course	Ch6: KNX ETS6 "Practical"	Ch6: KNX ETS6 "Practical" Part8
KNX Basic Course	Ch6: KNX ETS6 "Practical"	Ch6: KNX ETS6 "Practical" Part9



Playlist	Chapter	Description
KNX Basic Course	Ch6: KNX ETS6 "Practical"	Ch6: KNX ETS6 "Practical" Part10
KNX Basic Course	Ch6: KNX ETS6 "Practical"	Ch6: KNX ETS6 "Practical" Part11
KNX Basic Course	Ch6: KNX ETS6 "Practical"	Ch6: KNX ETS6 "Practical" Part12
KNX HVAC Course	Ch0: Introduction	Ch5: KNX TP Installations Part1
KNX HVAC Course	Ch0: Introduction	Ch5: KNX TP Installations Part2
KNX HVAC Course	Ch1: Basic Know-How	Ch1: Basic Know-How Part1
KNX HVAC Course	Ch1: Basic Know-How	Ch1: Basic Know-How Part2
KNX HVAC Course	Ch1: Basic Know-How	Ch1: Basic Know-How Part3
KNX HVAC Course	Ch1: Basic Know-How	Ch1: Basic Know-How Part4
KNX HVAC Course	Ch2: Heat Distribution Systems	Ch2: Heat Distribution Systems P1
KNX HVAC Course	Ch2: Heat Distribution Systems	Ch2: Heat Distribution Systems P2
KNX HVAC Course	Ch2: Heat Distribution Systems	Ch2: Heat Distribution Systems P3
KNX HVAC Course	Ch3: Heat Generators	Ch3: Heat Generators Part1
KNX HVAC Course	Ch3: Heat Generators	Ch3: Heat Generators Part2
KNX HVAC Course	Ch4: Drinking Water	Ch4: Drinking Water



Playlist	Chapter	Description
KNX HVAC Course	Ch5: Legal Framework	Ch5: Legal Framework
KNX HVAC Course	Ch6: Steering & Adjustment	Ch6: Steering & Adjustment Part1
KNX HVAC Course	Ch6: Steering & Adjustment	Ch6: Steering & Adjustment Part2
KNX HVAC Course	Ch6: Steering & Adjustment	Ch6: Steering & Adjustment Part3
KNX HVAC Course	Ch7: KNX Room Temperature Control	Ch7: KNX Room Temperature Control Part1
KNX HVAC Course	Ch7: KNX Room Temperature Control	Ch7: KNX Room Temperature Control Part2
KNX HVAC Course	Ch7: KNX Room Temperature Control	Ch7: KNX Room Temperature Control Part3
KNX HVAC Course	Ch7: KNX Room Temperature Control	Ch7: KNX Room Temperature Control Part4
KNX HVAC Course	Ch7: KNX Room Temperature Control	Ch7: KNX Room Temperature Control Part5
KNX HVAC Course	Ch8: KNX Environmental Sensors	Ch8: P1 KNX Environmental Sensors
KNX HVAC Course	Ch9: Types of HVAC	Ch9: Types of HVAC
KNX Advanced Course	Ch1: KNX Telegrams	Ch1: KNX Telegrams Part1
KNX Advanced Course	Ch1: KNX Telegrams	Ch1: KNX Telegrams Part2
KNX Advanced Course	Ch1: KNX Telegrams	Ch1: KNX Telegrams Part3
KNX Advanced Course	Ch1: KNX Telegrams	Ch1: KNX Telegrams Part4





Playlist	Chapter	Description
KNX Advanced Course	Ch1: KNX Telegrams	Ch1: KNX Telegrams Part5
KNX Advanced Course	Ch1: KNX Telegrams	Ch1: KNX Telegrams Part6
KNX Advanced Course	Ch2: KNX ETS Flags	Ch2: KNX ETS Flags Part1
KNX Advanced Course	Ch2: KNX ETS Flags	Ch2: KNX ETS Flags Part2
KNX Advanced Course	Ch3: KNX Interworking	Ch3: KNX Interworking Part1
KNX Advanced Course	Ch3: KNX Interworking	Ch3: KNX Interworking Part2
KNX Advanced Course	Ch3: KNX Interworking	Ch3: KNX Interworking Part3
KNX Advanced Course	Ch3: KNX Interworking	Ch3: KNX Interworking Part4
KNX Advanced Course	Ch4: KNX ETS Apps	Ch4: KNX ETS Apps Part1
KNX Advanced Course	Ch4: KNX ETS Apps	Ch4: KNX ETS Apps Part2
KNX Advanced Course	Ch4: KNX ETS Apps	Ch4: KNX ETS Apps Part3
KNX Advanced Course	Ch4: KNX ETS Apps	Ch4: KNX ETS Apps Part4
KNX Advanced Course	Ch5: KNX Visualization	Ch5: KNX Visualization Part1
KNX Advanced Course	Ch5: KNX Visualization	Ch5: KNX Visualization Part2
KNX Advanced Course	Ch5: KNX Visualization	Ch5: KNX Visualization Part3



Playlist	Chapter	Description
KNX Advanced Course	Ch6: KNX Lighting Control	Ch6: KNX Lighting Control Part1
KNX Advanced Course	Ch6: KNX Lighting Control	Ch6: KNX Lighting Control Part2
KNX Advanced Course	Ch6: KNX Lighting Control	Ch6: KNX Lighting Control Part3
KNX Advanced Course	Ch6: KNX Lighting Control	Ch6: KNX Lighting Control Part4
KNX Advanced Course	Ch6: KNX Lighting Control	Ch6: KNX Lighting Control Part5
KNX Advanced Course	Ch7: KNX Logic Operations	Ch7: KNX Logic Operations Part1
KNX Advanced Course	Ch7: KNX Logic Operations	Ch7: KNX Logic Operations Part2
KNX Advanced Course	Ch8: IP Communications	Ch8: IP Communications Part1
KNX Advanced Course	Ch8: IP Communications	Ch8: IP Communications Part2
KNX Advanced Course	Ch8: IP Communications	Ch8: IP Communications Part3
KNX Advanced Course	Ch9: KNX Couplers	Ch9: KNX Couplers Part1
KNX Advanced Course	Ch9: KNX Couplers	Ch9: KNX Couplers Part2
KNX Advanced Course	Ch10: Energy Management	Ch10: Energy Management Part1
KNX Advanced Course	Ch10: Energy Management	Ch10: Energy Management Part2
KNX Advanced Course	Ch10: Energy Management	Ch10: Energy Management Part3



Playlist	Chapter	Description
KNX Advanced Course	Ch10: Energy Management	Ch1: KNX Telegrams Part5
KNX Advanced Course	Ch11: KNX Secure	Ch11: KNX Secure Part1
KNX Advanced Course	Ch11: KNX Secure	Ch11: KNX Secure Part1
KNX Advanced Course	Ch11: KNX Secure	Ch11: KNX Secure Part1
KNX Refresher Course	Ch1: KNX TP Topology	Ch1: KNX TP Topology Part1
KNX Refresher Course	Ch1: KNX TP Topology	Ch1: KNX TP Topology Part2
KNX Refresher Course	Ch1: KNX TP Topology	Ch1: KNX TP Topology Part3
KNX Refresher Course	Ch1: KNX TP Topology	Ch1: KNX TP Topology Part4
KNX Refresher Course	Ch2: KNX ETS6 "Practical"	Ch2: KNX ETS6 "Practical" Part1
KNX Refresher Course	Ch2: KNX ETS6 "Practical"	Ch2: KNX ETS6 "Practical" Part2
KNX Refresher Course	Ch2: KNX ETS6 "Practical"	Ch2: KNX ETS6 "Practical" Part3
KNX Refresher Course	Ch2: KNX ETS6 "Practical"	Ch2: KNX ETS6 "Practical" Part4
KNX Refresher Course	Ch2: KNX ETS6 "Practical"	Ch2: KNX ETS6 "Practical" Part5
KNX Refresher Course	Ch2: KNX ETS6 "Practical"	Ch2: KNX ETS6 "Practical" Part6
KNX Refresher Course	Ch2: KNX ETS6 "Practical"	Ch2: KNX ETS6 "Practical" Part7



Playlist	Chapter	Description
KNX Refresher Course	Ch2: KNX ETS6 "Practical"	Ch2: KNX ETS6 "Practical" Part8
KNX Refresher Course	Ch2: KNX ETS6 "Practical"	Ch2: KNX ETS6 "Practical" Part9
KNX Refresher Course	Ch2: KNX ETS6 "Practical"	Ch2: KNX ETS6 "Practical" Part10
KNX Refresher Course	Ch2: KNX ETS6 "Practical"	Ch2: KNX ETS6 "Practical" Part11
KNX Refresher Course	Ch2: KNX ETS6 "Practical"	Ch2: KNX ETS6 "Practical" Part12
Wiring of KNX Devices	Wiring of KNX Devices	0- Introduction
Wiring of KNX Devices	Wiring of KNX Devices	1- Information and wiring of KNX power Supply
Wiring of KNX Devices	Wiring of KNX Devices	2- Information about KNX Connectors & Cables
Wiring of KNX Devices	Wiring of KNX Devices	3- Information and wiring of KNX USB Interface
Wiring of KNX Devices	Wiring of KNX Devices	4- Information and wiring of KNX Actuator as Switching Function
Wiring of KNX Devices	Wiring of KNX Devices	5- Information and wiring of KNX Actuator as Shutter function
Wiring of KNX Devices	Wiring of KNX Devices	6- Information about HVAC System
Wiring of KNX Devices	Wiring of KNX Devices	7-Information and wiring of KNX Actuator as FCU function
Wiring of KNX Devices	Wiring of KNX Devices	8- Information and wiring of JNX IR Emitter
Wiring of KNX Devices	Wiring of KNX Devices	9- Information about different types of Dimming



Video Platform @ YouTube Channel @PortoKNX



Playlist	Chapter	Description
Wiring of KNX Devices	Wiring of KNX Devices	10- Information and wiring of KNX Universal dimmer actuator
Wiring of KNX Devices	Wiring of KNX Devices	11- Information and wiring of KNX LED dimmer actuator
Wiring of KNX Devices	Wiring of KNX Devices	12- Information and wiring of KNX LED RGB dimmer actuator
Wiring of KNX Devices	Wiring of KNX Devices	13- Information and wiring of DALI Gateway
Wiring of KNX Devices	Wiring of KNX Devices	14- Information and wiring of KNX Push Button & Touch Screens
Wiring of KNX Devices	Wiring of KNX Devices	15- Information and wiring of KNX Binary Input
Wiring of KNX Devices	Wiring of KNX Devices	16- Information about Difference between KNX IP Router & Interface P1
Wiring of KNX Devices	Wiring of KNX Devices	16- Information and wiring of KNX Ip Interface P2
Wiring of KNX Devices	Wiring of KNX Devices	17- Information and wiring of KNX IP Router as Coupler
Wiring of KNX Devices	Wiring of KNX Devices	18- Information and wiring of KNX Weather Station
Wiring of KNX Devices	Wiring of KNX Devices	19- Information About KNX RF Devices
Wiring of KNX Devices	Wiring of KNX Devices	20- Information and wiring of KNX RF Devices
Porto KNX Promo	Porto KNX Promo	Different Videos about FREE Quizzes
Porto KNX Promo	Porto KNX Promo	Different Videos about Supporting Graduation Projects
Porto KNX Promo	Porto KNX Promo	Different Videos about Porto KNX



1

Video Platform @ YouTube Channel @PortoKNX



Playlist	Chapter	Description
KNX News	KNX News	New Advanced & Tutor Logos
KNX News	KNX News	KNX Fair 2023
KNX News	KNX News	New KNX Inside Logo
KNX News	KNX News	New Marketing Tool
KNX News	KNX News	Advantages of KNX Standard
KNX News	KNX News	KNX Advent Calendar Game 2023
KNX Tips	Certified Courses	Information about Certified KNX Basic Course
KNX Tips	Certified Courses	Information about Certified KNX Advanced Course
KNX Tips	Certified Courses	Information about Certified KNX HVAC Course
KNX Tips	Certified Courses	Information about Certified KNX Refresher Course
KNX Tips	Certified Courses	Information about Certified KNX Tutor Course
KNX Tips	Certified Courses	Information about KNX Courses





Playlist	Chapter	Description
KNX HVAC Course	Practical Part	What is VRF & VRV and Difference between Them
KNX HVAC Course	Practical Part	What is VRF & VRV
KNX HVAC Course	Practical Part	What is HVAC system
KNX HVAC Course	Practical Part	What is KNX Devices we need to Control HVAC?
KNX HVAC Course	Practical Part	Wiring of KNX Devices to control HVAC
KNX HVAC Course	Practical Part	Start New project in ETS for Controlling HVAC System
KNX HVAC Course	Practical Part	Program KNX Devices Controlling HVAC System P2
KNX HVAC Course	Practical Part	Program KNX Devices Controlling HVAC System P3
KNX HVAC Course	Practical Part	Program KNX Devices Controlling HVAC System P4
KNX HVAC Course	Practical Part	Questions & Answers from Live Session

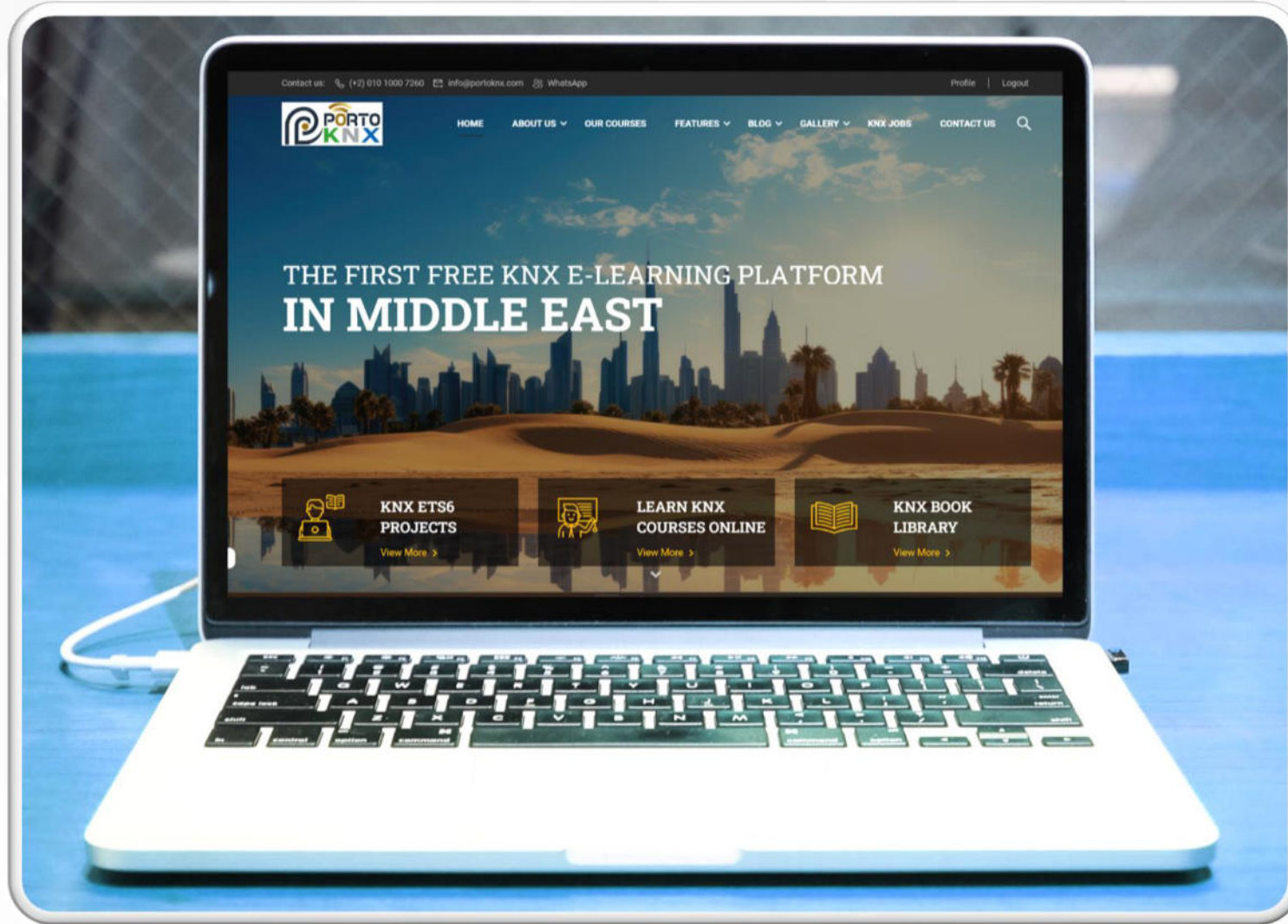


**PORTO KNX, WE MAKE LEARNING KNX
FREE, EASY, SIMPLE & ATTRACTIVE**

<<<<< 2- E-LEARNING WEB PLATFORM >>>>>



❖ We created the first FREE KNX E-Learning Platform in middle east .



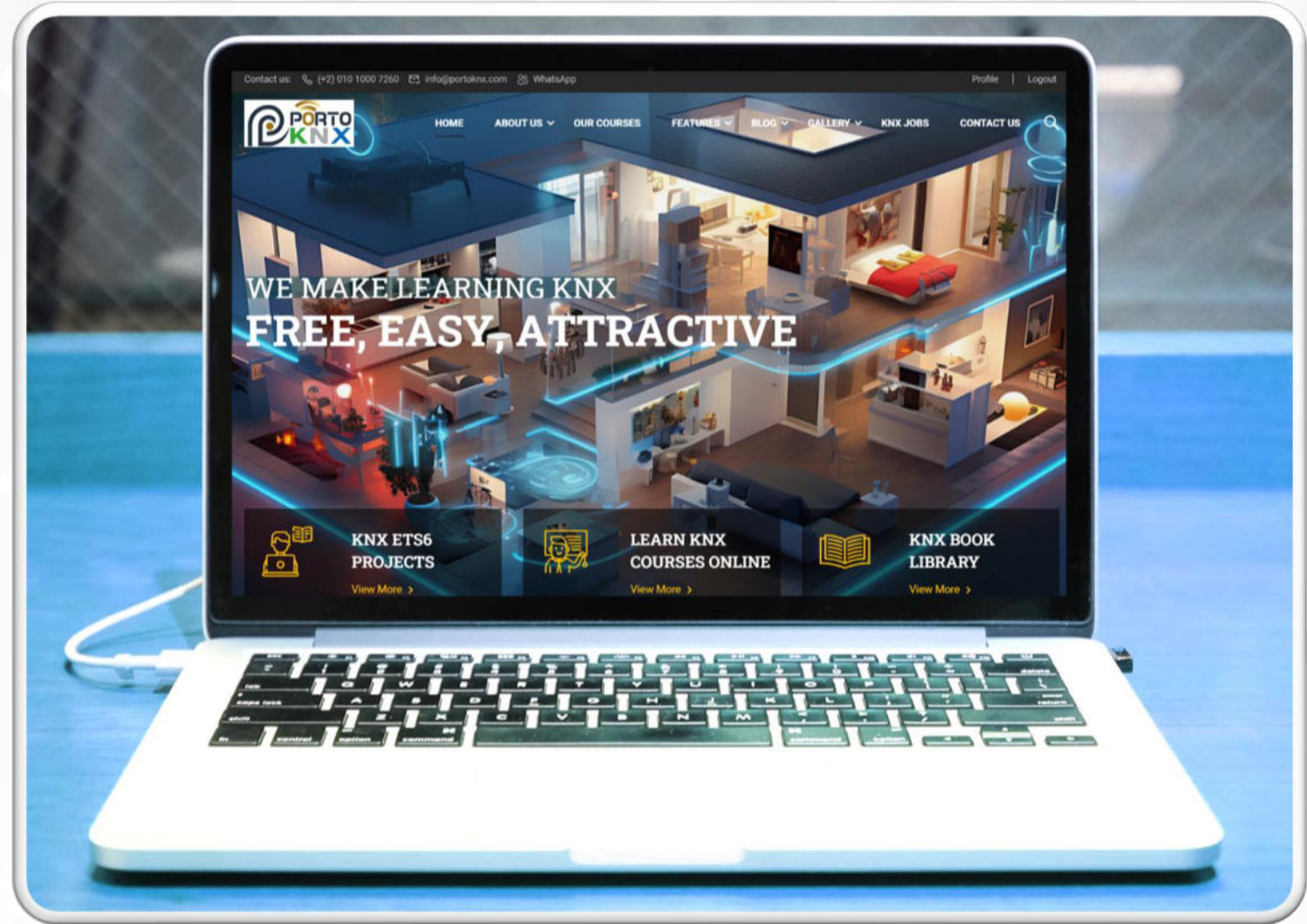
2



E-Learning Website Platform, www.portoknx.com

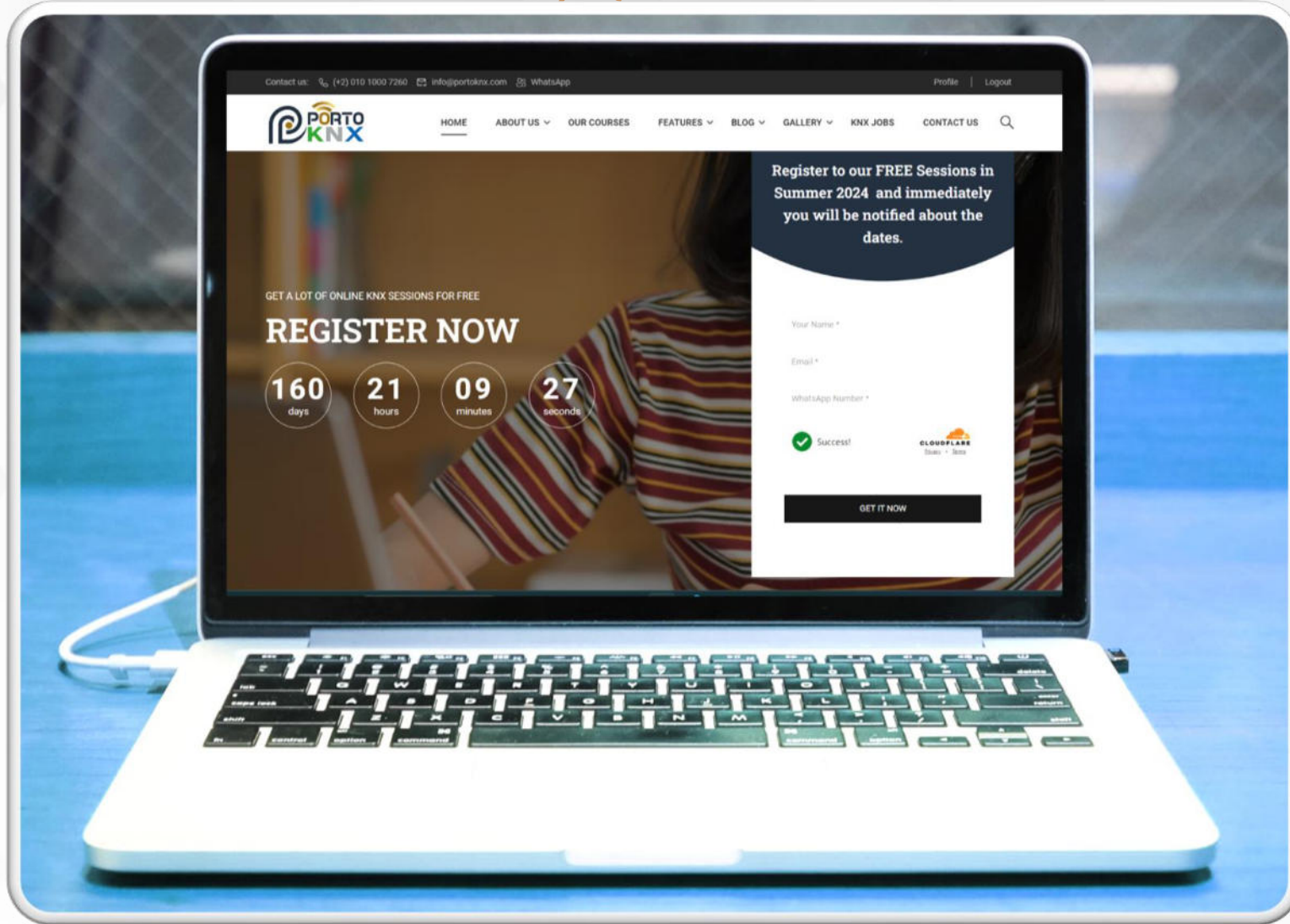


❖ Our Slogan is, We make Learning **KNX Free**, Easy, Simple & Attractive.





❖ We Announce all of our FREE Sessions, Quizzes and Courses on our Web Platform.





❖ Our web platform contains a lot of FREE courses and information about KNX Field.





- ❖ Each Course offers the following benefits:
- ❖ Each Course is structured into Chapters, with each chapter further broken down into lessons to aid in the learning process of **KNX** course for our students.

The screenshot displays the website's navigation menu with tabs for Overview, Curriculum, Instructor, and Reviews. The main content area is divided into two columns. The left column shows a course structure with expandable chapters: CH0: KNX HVAC COURSE INTRODUCTION (2 lectures), CH1: BASIC KNOW-HOW (4 lectures and 1 quiz), and CH2: HEAT DISTRIBUTION SYSTEMS (2 lectures). The right column features 'ALL COURSES' and 'LATEST COURSES' sections. Under 'LATEST COURSES', three video courses are listed: 'Wiring of KNX Devices' (Free), 'KNX Advanced Course' (Free), and 'KNX HVAC Specialist COURSE' (Free). A promotional banner at the bottom right encourages users to subscribe to the channel for free videos, with a 'SUBSCRIBE' button and a 'START NOW' button.



❖ All lessons are currently locked, and the trainee can only unlock the next lesson under one condition: completing the previous lesson. This ensures that the student progresses through the lessons in a sequential manner..

The screenshot shows a web browser interface for a course on Portoknx.com. The URL is <https://portoknx.com/courses/knx-hvac-specialist-course/lessons/part1-aggregate-state-heat-quantity-thermal-energy-units-of-energy/>. The page features a search bar and a progress indicator showing '2 of 30 items'. A table of contents on the left lists lessons with their completion status:

Lesson ID	Lesson Title	Status
CH0: KNX HVAC COURSE INTRODUCTION 2/2		
1.1	Part1: introduction about KNX HVAC Course	Completed (Green checkmark)
1.2	Part2: introduction about KNX HVAC Course	Completed (Green checkmark)
CH1: BASIC KNOW-HOW 0/5		
2.1	Part1: Aggregate state & Heat Quantity & Thermal energy & Units of Energy	Completed (Green checkmark)
2.2	Part2: Units of Energy & Heaters & Temperature Sensors	Locked (Lock icon)
2.3	Part3: Humidity & Relative Humidity	Locked (Lock icon)
2.4	Part4: What is the Comfort mean & Operating Temperature	Locked (Lock icon)
2.5	Chapter 1: Basic Know-How	10 questions 10 minutes Locked (Lock icon)
CH2: HEAT DISTRIBUTION SYSTEMS 0/4		
3.1	Part1: What is the distribution systems of Heating & Single and two Pipe System?	Locked (Lock icon)
3.2	Part2: Valves & Types of surface Heating & Radiators	Locked (Lock icon)

The main content area displays a video player for 'Part1: Aggregate state & Heat Quantity & Thermal energy & Units of Energy'. The video player includes a title, a 'Watch later' button, and a 'Share' button. Below the video player, there is a promotional banner for the 'Certified KNX HVAC Specialist Course' by 'Eng: MAHMOUD SEADA'. The banner features the 'KNX TRAINING' logo and a 'Watch on YouTube' button. At the bottom of the page, there are navigation links for 'Prev' and 'Next', and a 'Subscribe to our Youtube C' link.



❖ Following each chapter, there is a brief quiz to ensure that the student comprehends the lessons thoroughly.

Search for course content

- CH1: BASIC KNOW-HOW 5
 - 2.5 Chapter 1: Basic Know-How 10 questions 10 minutes
- CH2: HEAT DISTRIBUTION SYSTEMS 4
 - 3.1 Part1: What is the distribution systems of Heating & Single and two Pipe System?
 - 3.2 Part2: Valves & Types of surface Heating & Radiators
 - 3.3 Part3: Heat Radiators & Floor Heating & Surface Heating
 - 3.4 Chapter 2: Heat Distribution Systems 7 questions 6 minutes
- CH3: HEAT GENERATORS 3
 - 4.1 Part1: Types of Heat Generators
 - 4.2 Part2: Types of Heat Generators & Solar Heating
- Chapter 3: Heat Generators Contact us 11 questions 7 minutes

Chapter 1: Basic Know-How

Quiz on Chapter 1: Basic Know-How

Important notes before starting:

1st: You must answer the questions within the time limit "10 minutes".

2nd: You will have only one retake for the quiz, so be careful.

3rd: The next lesson will not open to you unless you pass this quiz.

4th: Please open the lessons videos more one time before starting the quiz and be sure that you understand all information in the lesson for passing the quiz and going to the next lesson.

5th: The passing score is 75%.

Good Luck.

★ Questions: 10 ⌚ Duration: 00:10:00 📊 Passing grade: 75%

START

Subscribe to our Y

Prev Next



❖ Additionally, each chapter includes PDF materials that can be downloaded to enhance the student's knowledge.

The screenshot shows a web browser interface for a course on 'Aggregate state heat quantity thermal energy units of energy'. The page is divided into two main sections: 'CH1: BASIC KNOW-HOW' (0/5) and 'CH2: HEAT DISTRIBUTION SYSTEMS' (0/4). The 'CH1' section lists four parts (2.1 to 2.4) and a chapter summary (2.5). The 'CH2' section lists three parts (3.1 to 3.3). A 'COMPLETE' button is visible above a table of PDF materials. The table has columns for Name, Type, Size, and Download. The first row shows 'Chapter1: Basic Know-How' as a pdf file of 4.11MB with a download icon.

Name	Type	Size	Download
Chapter1: Basic Know-How	pdf	4.11MB	



- ❖ Every lesson features a video where we explain the content in an engaging manner.
- ❖ We focus on the hands-on aspects in our videos.

The screenshot shows a web browser interface for the Portoknx website. The address bar displays the URL: <https://portoknx.com/courses/knx-hvac-specialist-course/lessons/part1-aggregate-state-heat-quantity-thermal-energy-units-of-energy/>. The page title is "Part1: Aggregate state & Heat Quantity & Thermal energy & Units of Energy".

On the left side, there is a navigation menu with the following items:

- CH0: KNX HVAC COURSE INTRODUCTION (2/2)
 - 1.1 Part1: introduction about KNX HVAC Course (checked)
 - 1.2 Part2: introduction about KNX HVAC Course (checked)
- CH1: BASIC KNOW-HOW (0/5)
 - 2.1 Part1: Aggregate state & Heat Quantity & Thermal energy & Units of Energy (checked)
 - 2.2 Part2: Units of Energy & Heaters & Temperature Sensors (locked)
 - 2.3 Part3: Humidity & Relative Humidity (locked)
 - 2.4 Part4: What is the Comfort mean & Operating Temperature (locked)
 - 2.5 Chapter 1: Basic Know-How (10 questions, 10 minutes, locked)
- CH2: HEAT DISTRIBUTION SYSTEMS (0/4)
 - 3.1 Part1: What is the distribution systems of Heating & Single and two Pipe System? (locked)
 - 3.2 Part2: Valves & Types of surface Heating & Radiators (locked)

At the bottom of the menu, there is a "Contact us" button.

The main content area features a video player with the following details:

- Video Title: Ch1: KNX HVAC Know-How Part 1: KNX HVAC Sp...
- Channel: Certified KNX HVAC Specialist Course
- Instructor: Eng: MAHMOUD SEADA
- Course Level: Certified KNX++ TUTOR
- Video Description: Ch.1: KNX HVAC Know-How Part 1: KNX HVAC Basics Part 1
- Platform: Watch on YouTube
- Portoknx Smart logo and 5-star rating are also visible.

Navigation buttons for "Prev" and "Next" are located at the bottom of the video player area.

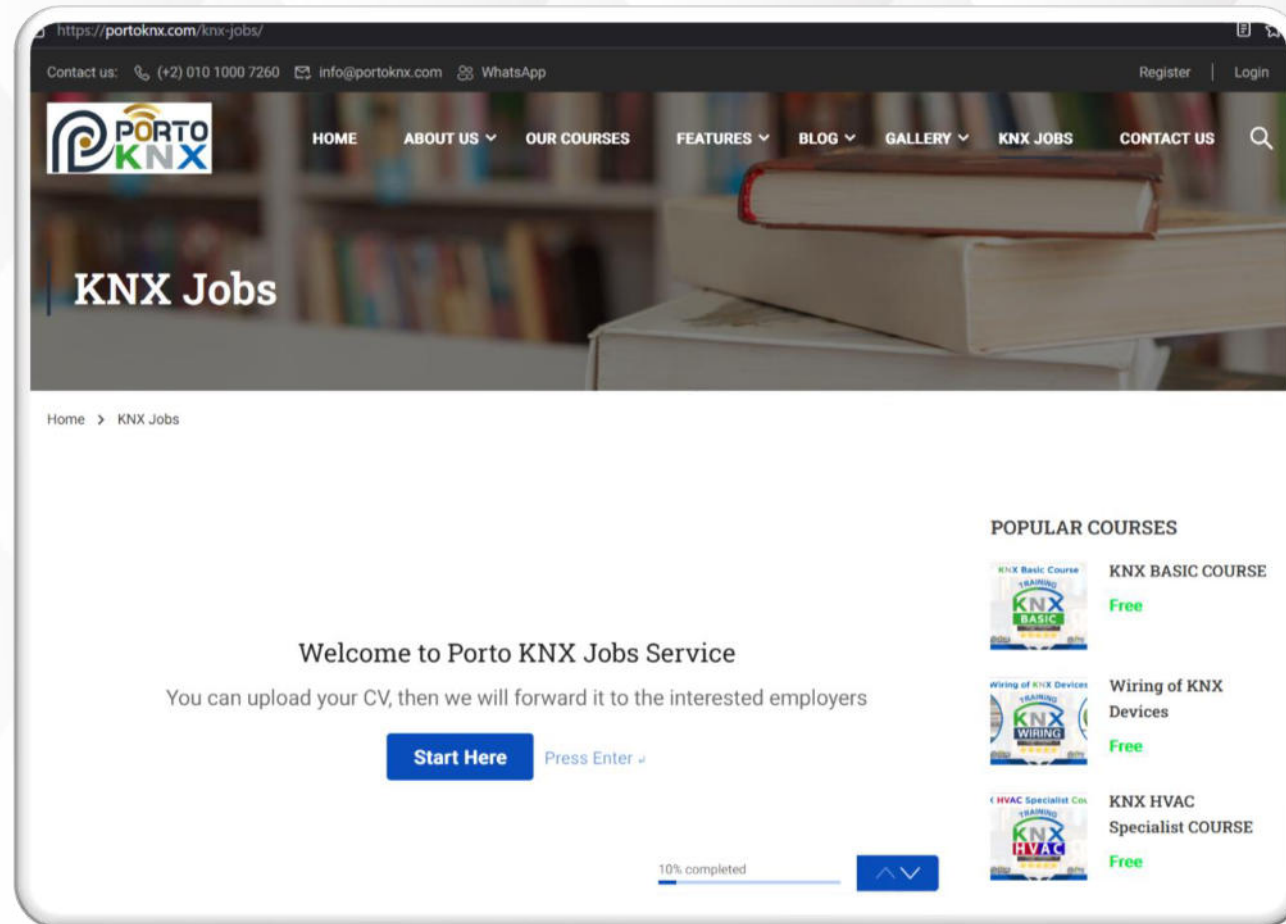


❖ Upon completion of the chapters and successfully passing the quizzes, the student can obtain an online certificate for their participation.





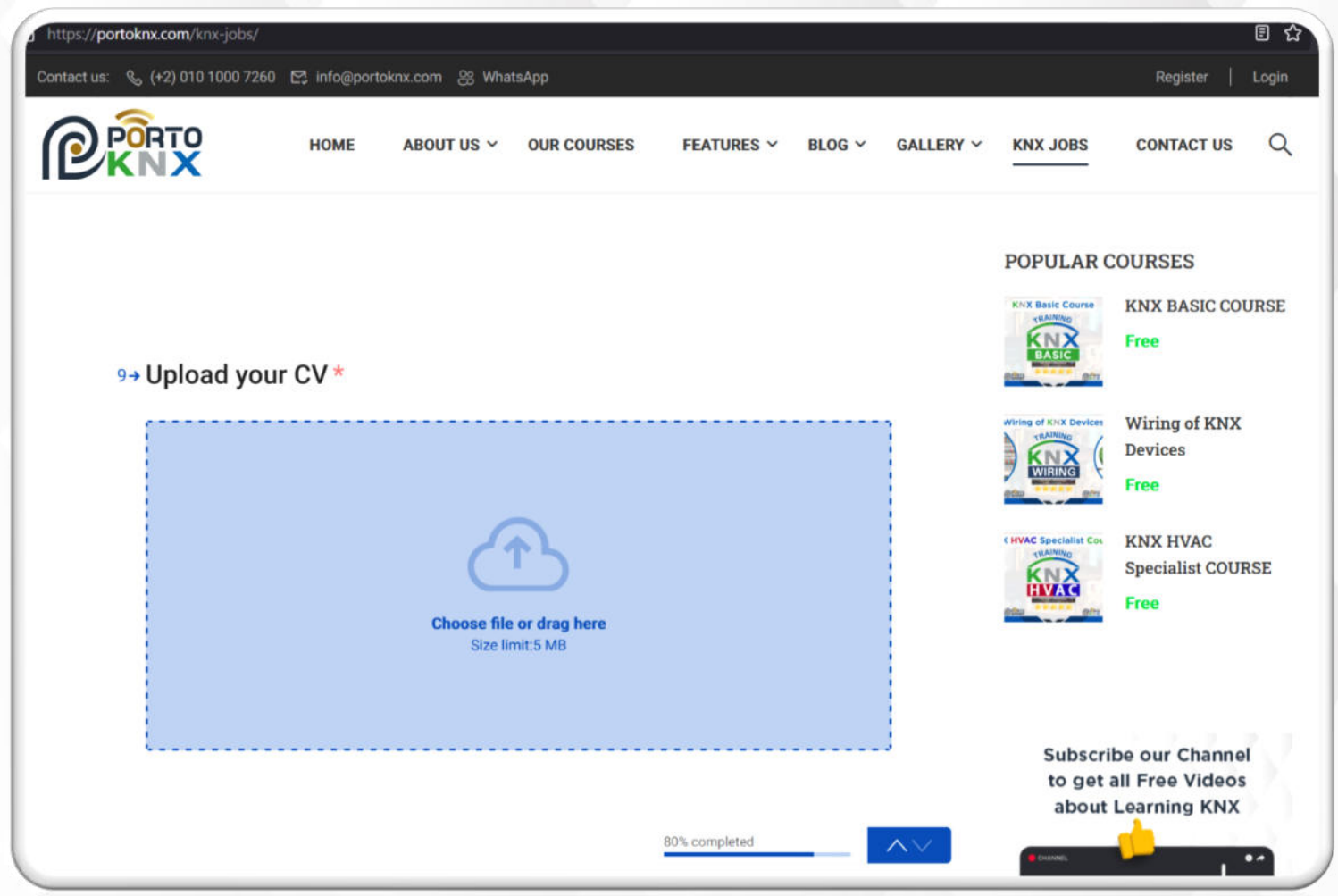
- ❖ We have introduced a new job page to serve as a bridge between our trainees and companies in the **KNX** field.
- ❖ Our goal is to help our trainees find job opportunities quickly and easily.



2



❖ Trainees can simply upload their CV on our website, and we will then share these CVs with companies in the **KNX** field who are interested.





❖ We gather essential information from the trainees that companies typically look for during the hiring process.

PORTOKNX HOME ABOUT US OUR COURSES FEATURES BLOG GALLERY KNX JOBS CONTACT US

POPULAR COURSES

- KNX BASIC COURSE Free
- Wiring of KNX Devices Free
- KNX HVAC Specialist COURSE Free

8 → Certified KNX Courses you have, *

- Certified KNX Basic Course
- Certified KNX Advanced Course
- Certified KNX HVAC Course
- Certified KNX Tutor Course

Choose as many as you like

Press Enter

Subscribe our Channel to get all Free Videos about Learning KNX

80% completed

Contact us: (+2) 010 1000 7260 info@portoknx.com WhatsApp Register Login

PORTOKNX HOME ABOUT US OUR COURSES FEATURES BLOG GALLERY KNX JOBS CONTACT US

POPULAR COURSES

- KNX BASIC COURSE Free
- Wiring of KNX Devices Free
- KNX HVAC Specialist COURSE Free

7 → Your KNX Experience Years *

9

Press Enter

70% completed



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<<<<< 3- KNX BOOKS IN DIGITAL & HARD >>>>>



- ❖ Translating engineering Topics into Arabic is a difficult task. In 2023 we started to translate **KNX** Basic, HVAC, and Advanced books and it took more than 1 year to finish the Materials.

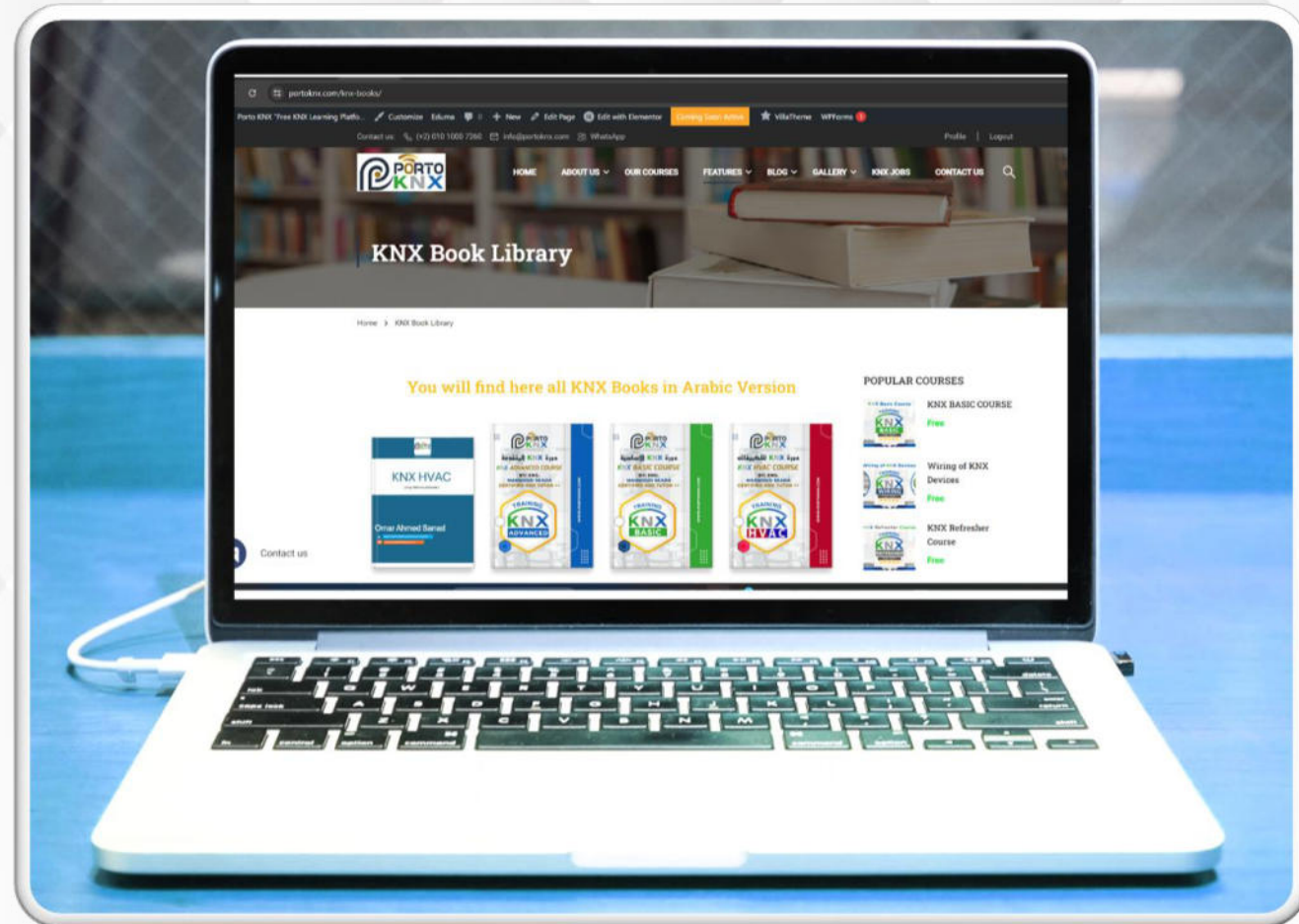




- ❖ According to the latest updates by the **KNX** We including ALL Basic, HVAC, and Advanced chapters in Arabic.
- ❖ The new updates belong to ETS6, Topology, IP Communications, **KNX** Secure, Energy Management, and Visualization chapters. It took a lot of hours to out an amazing data.
- ❖ We are very Proud to spread **KNX** knowledge in the middle east and provide the opportunity for those people who cannot study **KNX** training materials in English and now they can read and learn standard materials in the Arabic language.



- ❖ We offer a Digital Copy available online on our website platform. Additionally, we provide hard copies of our books, giving our trainees the freedom to choose their preferred format.



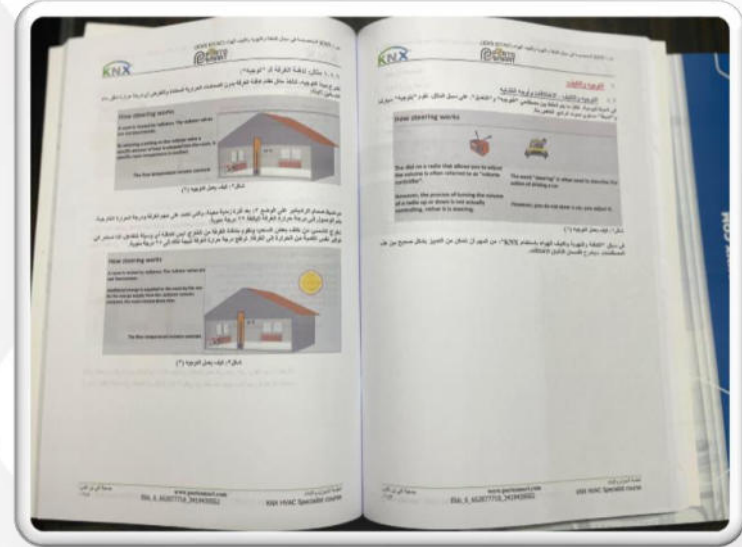
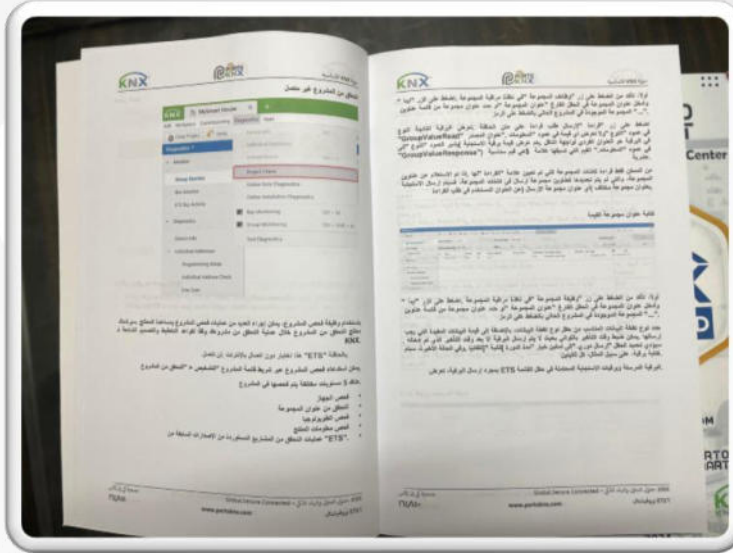
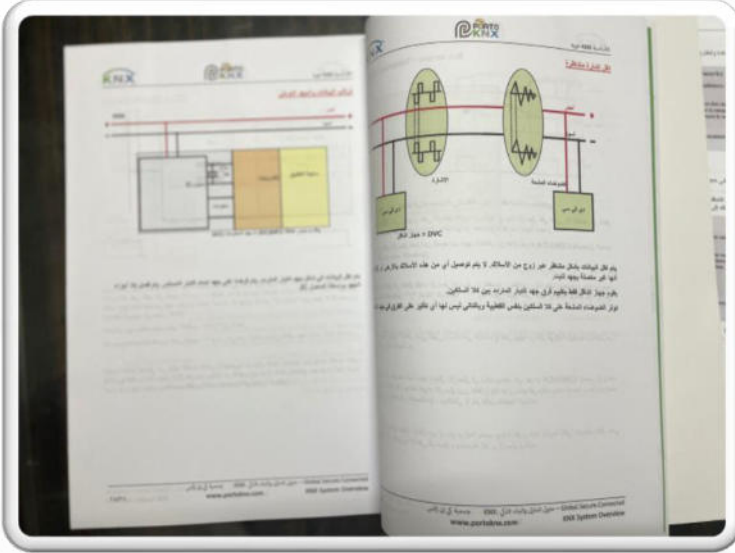


- ❖ In addition to the online availability of the Digital Copy on our website platform, we also offer physical copies of our books.
- ❖ This allows our trainees the flexibility to select their preferred format..





Book Platform, Online & Digital, Hard Copies





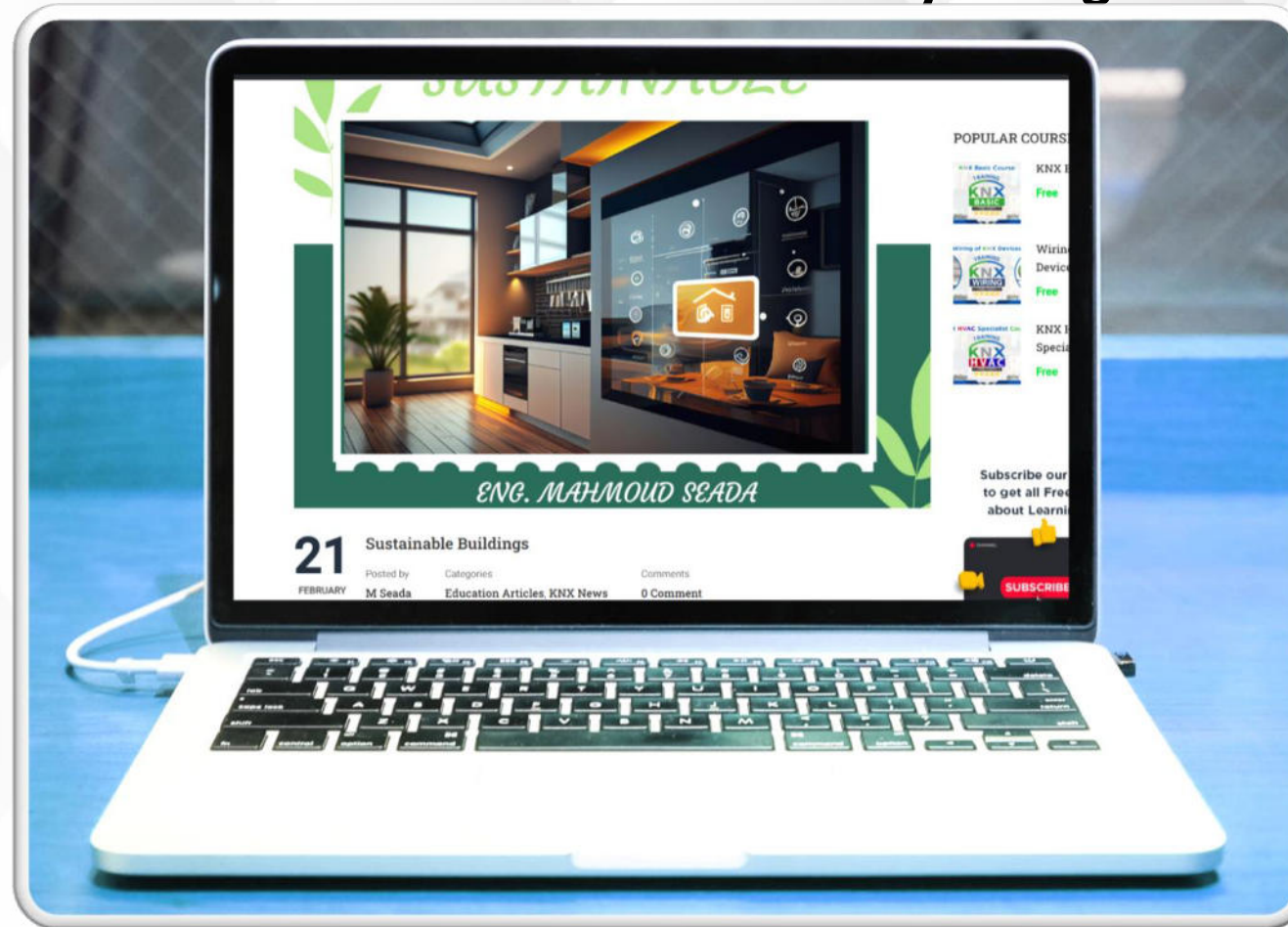
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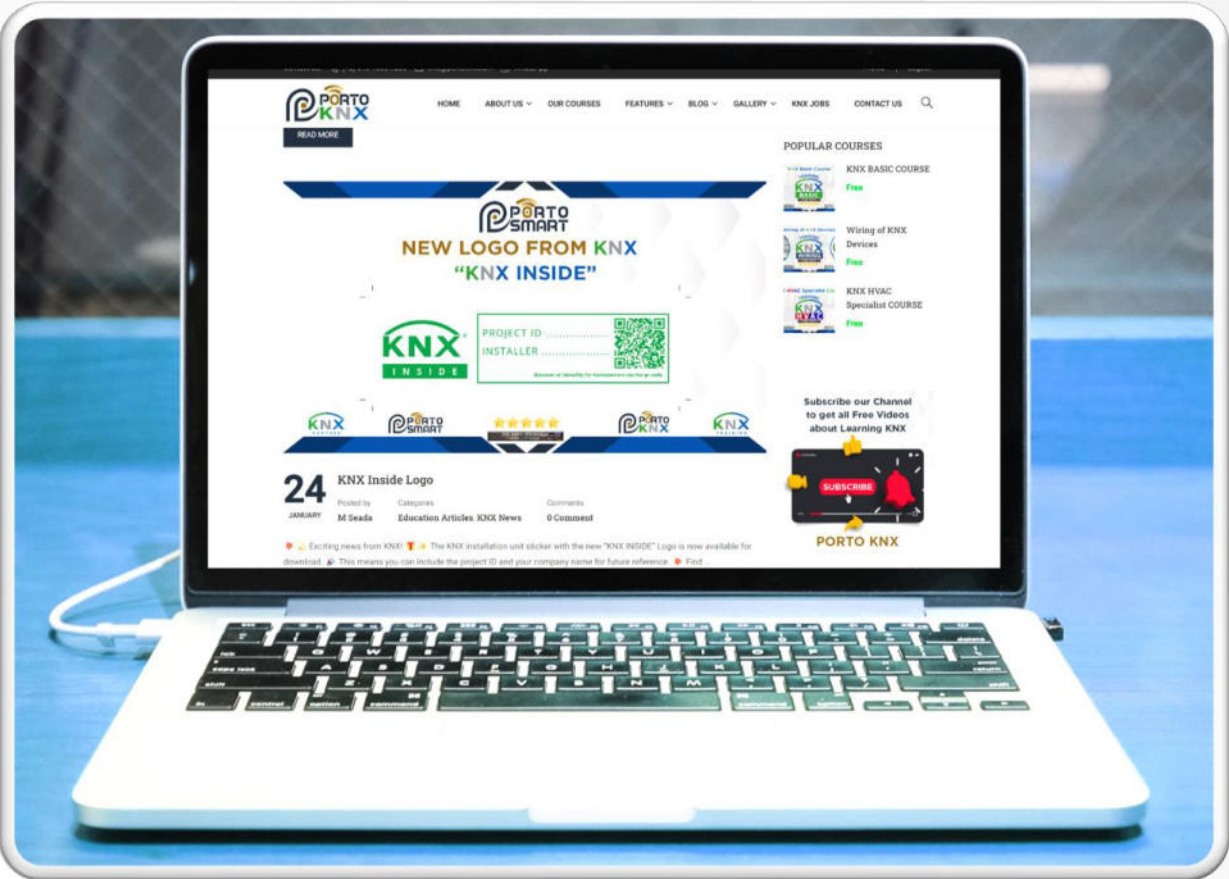
<<<<< 4- KNX EDUCATIONAL & NEWS POSTS >>>>>

- ❖ We are very happy to Post the latest news from **KNX** and all updates in the standard.
- ❖ we publish a lot of posts that show the latest updates and news from **KNX** on our website platform



- ❖ We post these articles in Arabic and English Languages
- ❖ We also Publish Educational Articles about every thing related to **KNX** and its Updates







**PORTO KNX, WE MAKE LEARNING KNX
FREE, EASY, SIMPLE & ATTRACTIVE**

<<<< 5- INSTALLATIONS & WIRING OF KNX DEVICES>>>>



- ❖ We teach a basic electrical Installation course to increase the base of trainers to understand knx protocol to expand the base of trainees and students who have a passion to learn smart home and building systems, **but their studies are not specialized in the field of electricity.**
- ❖ We make several and various practical applications and that is suitable to beginners and professionals



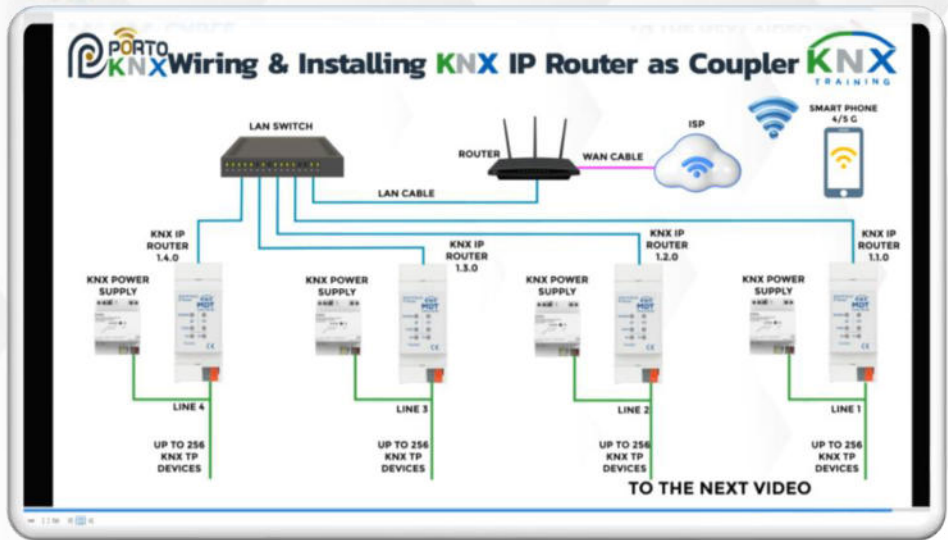
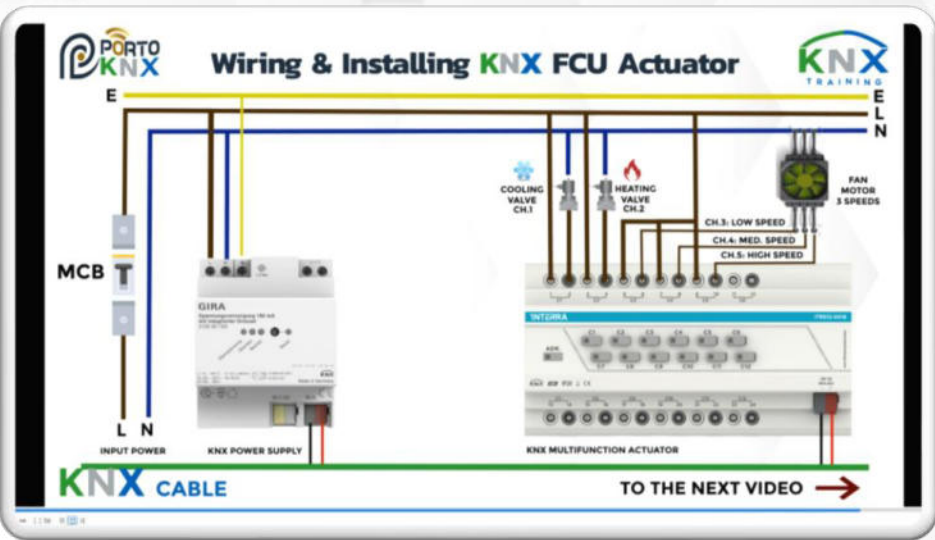
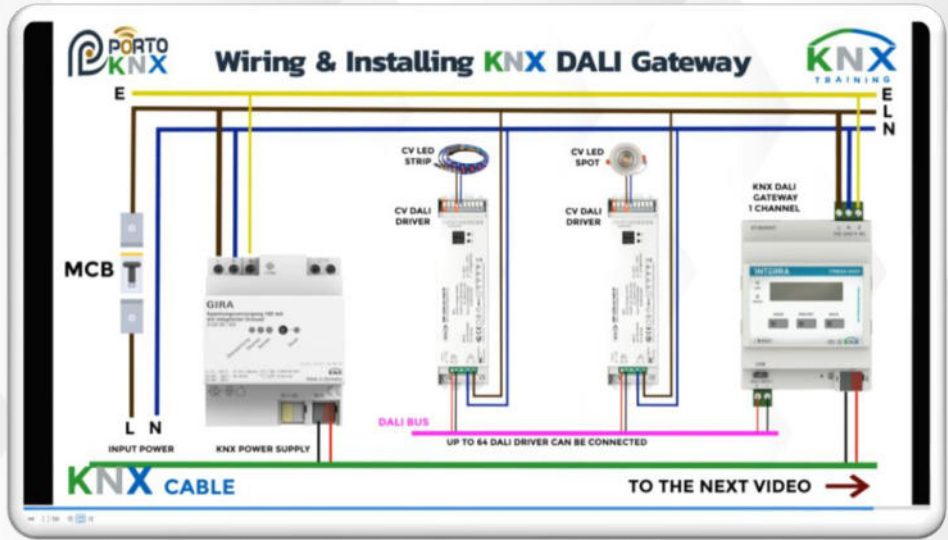
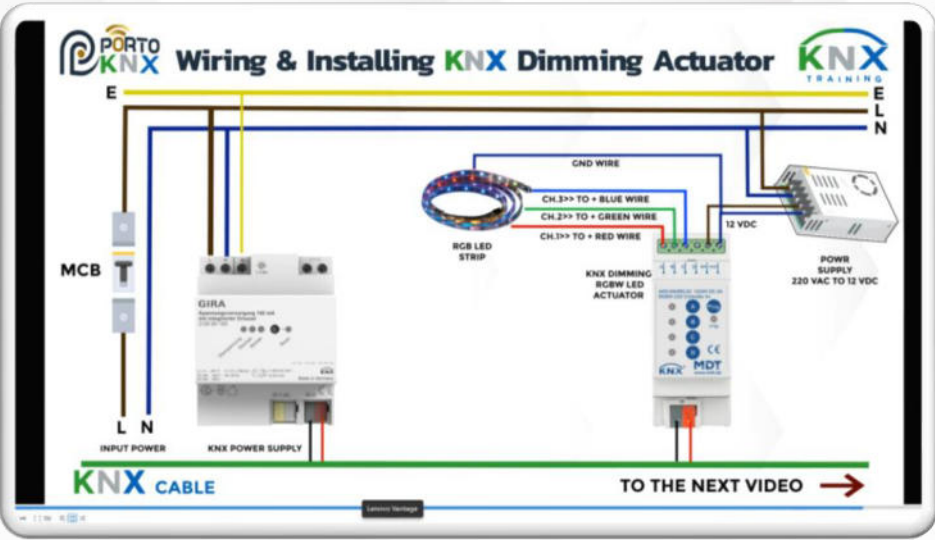


- ❖ We offer a **KNX Panel Building Course** focusing on practical wiring of devices and connecting electrical components.
- ❖ Our amazing videos with graphic solutions simplify the process of wiring **KNX** devices in an attractive way.
- ❖ Access these videos for free on our YouTube channel and explore our online course on this topic on our website platform.



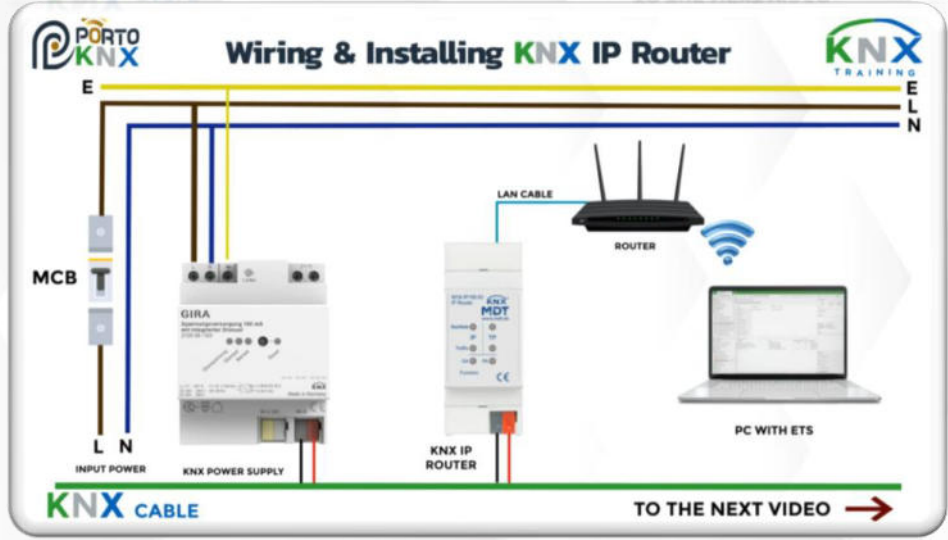
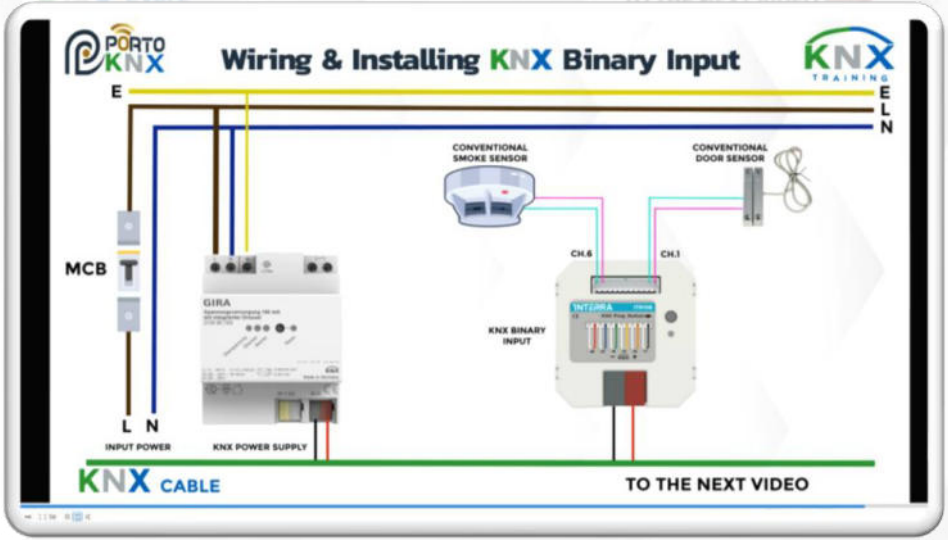
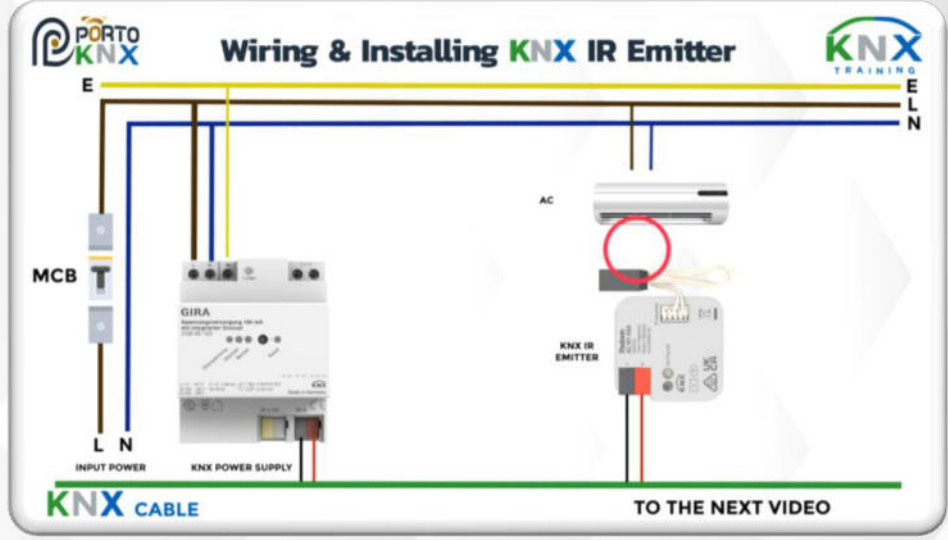
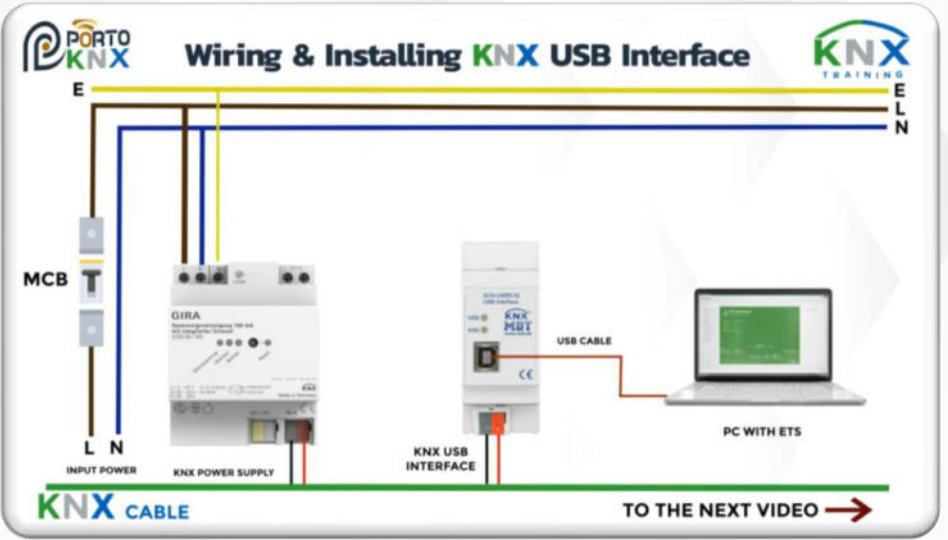


Installations & Wiring Of KNX Devices





Installations & Wiring Of KNX Devices





- ❖ Beside online videos, courses and our Certified KNX training kits we use **real certified devices** like Shutter motors, Conventional Sensors, etc., to implement practical applications alongside our **KNX Devices**. With over 50 different applications available, there are numerous opportunities for hands-on learning and implementation.
- ❖ We provide many different devices that have the same functions and from several different brands to communicate information about the advantages of using the **KNX** protocol and to train on more than one product from more than one manufacturer.
- ❖ **Use real Equipment's** to integrate them with **KNX** like, Shutter motors, Lamps, RGB LED strip, Electric valves for controlling floor heating & HVAC Systems, AC Split unit, Alexa, Zwave devices, Conventional Sensors and others.

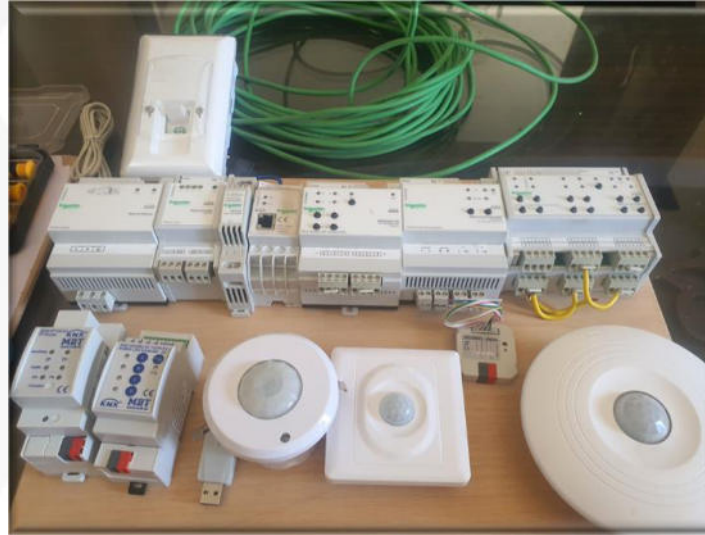


- ❖ **Our Application we used in our Learning Program using Real Devices:**
- ❖ **Lighting** as switching using Switching actuator & Multifunction Actuators.
- ❖ **Lighting** as **KNX** with **DALI**, using different types of Dali drivers.
- ❖ **Dimming Lighting** for Halogen, LED and RGB Led Strip, We used Different types of Dimmer Actuators.
- ❖ **Shutter controls** using Shutter actuator & Multifunction Actuators & **Actual Motors**
- ❖ Fan Coil Actuators for **HVAC Control & Floor Heating** using real Electric valves & Fans
- ❖ **KNX IR Emitter & KNX Gateways** for Split units & VRF Systems using Real AC.
- ❖ **Security Applications** as we use **conventional sensors** with **KNX** binary inputs beside **KNX** Devices and Sensors that used in security solutions.
- ❖ Energy Management
- ❖ **KNX** RF Devices & **KNX** IOT
- ❖ **Mobile Application** using servers with cloud and it have Logics, Timing Schedule, Routines, Control using Alexa and connected other protocols with **KNX** Like Zwave.



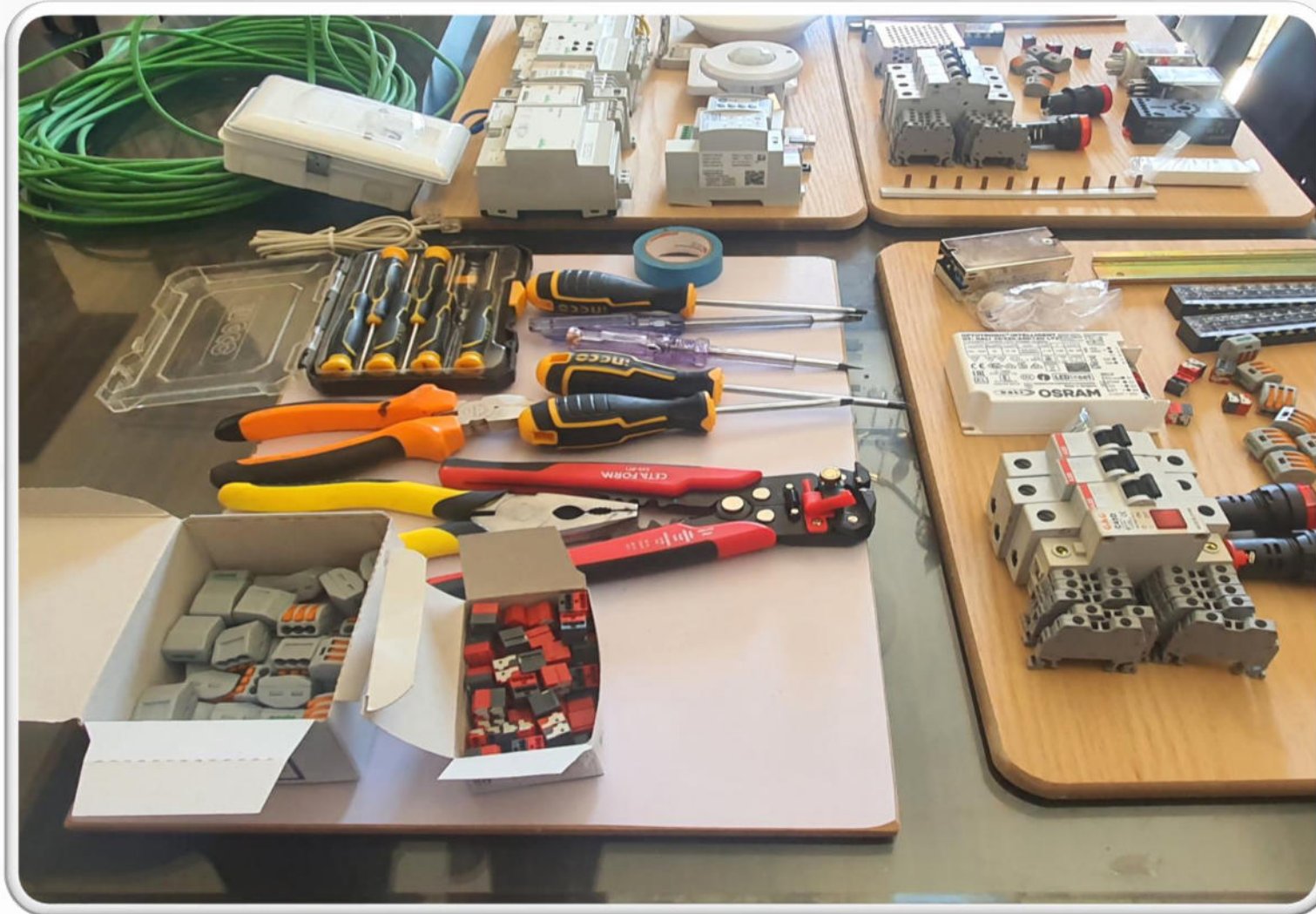


❖ Electrical Tools and Instruments used in Electrical Installation Training





❖ Electrical Tools and Instruments used in Electrical Installation Training



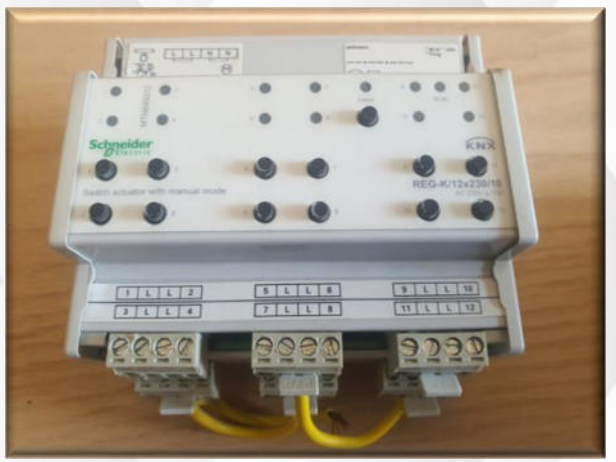


- ❖ Different types of conventional sensors and using KNX Binary inputs.
- ❖ Different types of **KNX** Sensors used in Electrical Installation Training.





- ❖ Different types of actuators and Different Manufactures in our training
- ❖ We use Multifunction Actuator, Shutter Actuators and Switching actuators



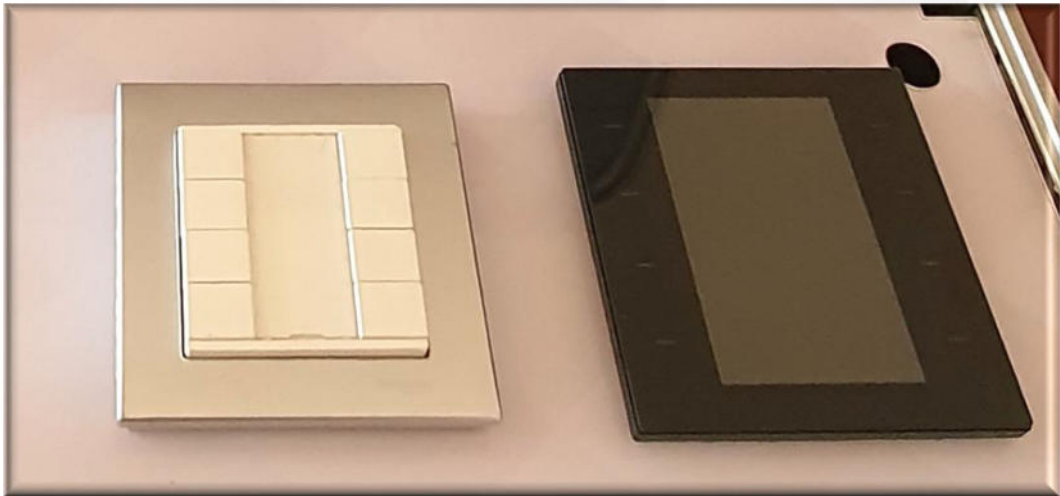


- ❖ We use Multifunction Actuator, Shutter Actuators and Switching actuators
- ❖ We Use real devices like different types of Shutter and Blind motors to be controlled with KNX





- ❖ Different types of actuators and Different Manufactures in our training
- ❖ We use **KNX** Push Button Devices and **KNX** Touch Screens for full control
- ❖ We use Different types of Lights Dimming like:
 - ❖ **Universal Dimmer actuator for halogen Lamps**
 - ❖ **LED Dimmer Actuators for LED Lights**
 - ❖ **RGB Led Strib Dimmer Actuator for controlling the the color of led strip**





- ❖ Different types of actuators and Different Manufactures in our training
- ❖ We use Different KNX Devices to teach HVAC Systems Like, Multifunction Actuator, IR Emitter for IR devices and KNX Weather Stations.





- ❖ We use also **real Equipment** that are used for controlling HVAC systems like, Electric valves & water pump motor for HVAC & Floor heating control.



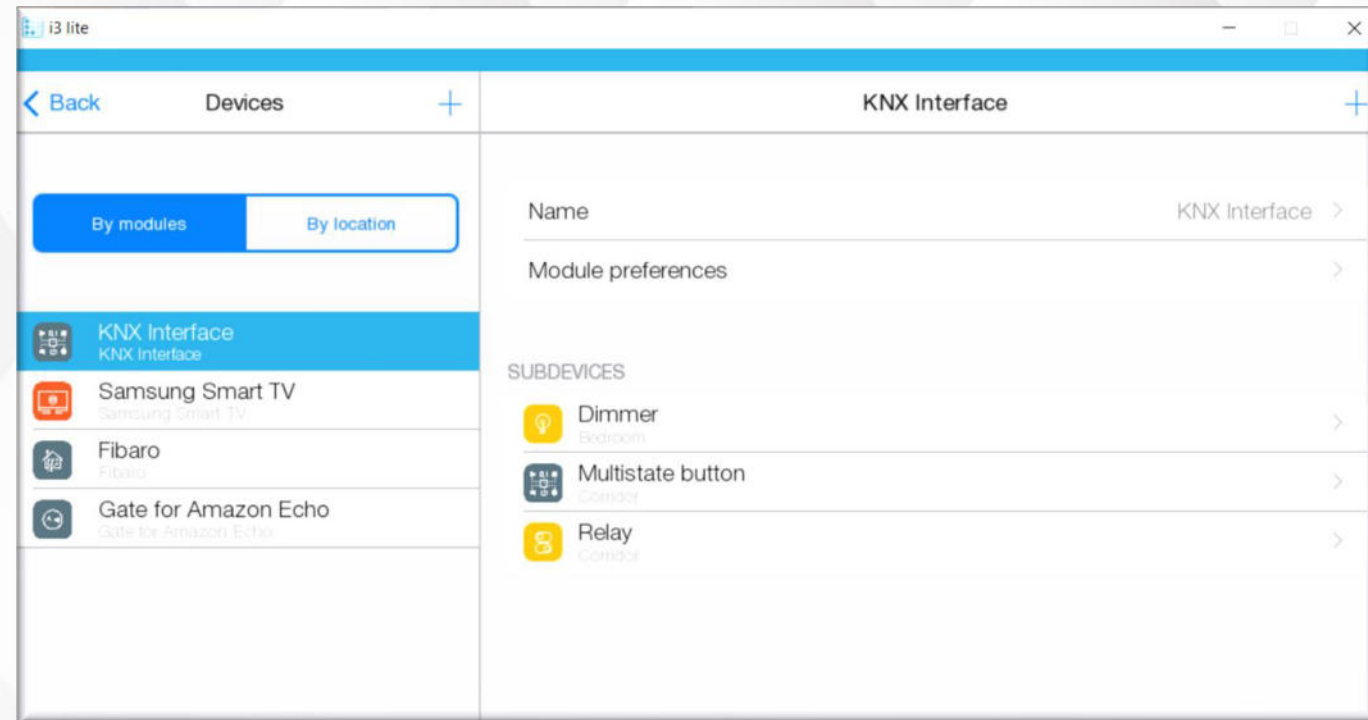
5 Installations & Wiring Of KNX Devices

- ❖ Different types of KNX IP Interfaces and Routers to implement the connection with Mobile applications
- ❖ Also we use Secure KNX IP Router..





- ❖ We integrate Zwave Devices with **KNX** System, enabling seamless connectivity. Our students learn to control **KNX** System with voice commands through Alexa.
- ❖ Additionally, we utilize a server application for device control via smartphones.





- ❖ We teach our students how to use **KNX RF Products**.
- ❖ We teach them How to save energy using **KNX Energy management Devices**.

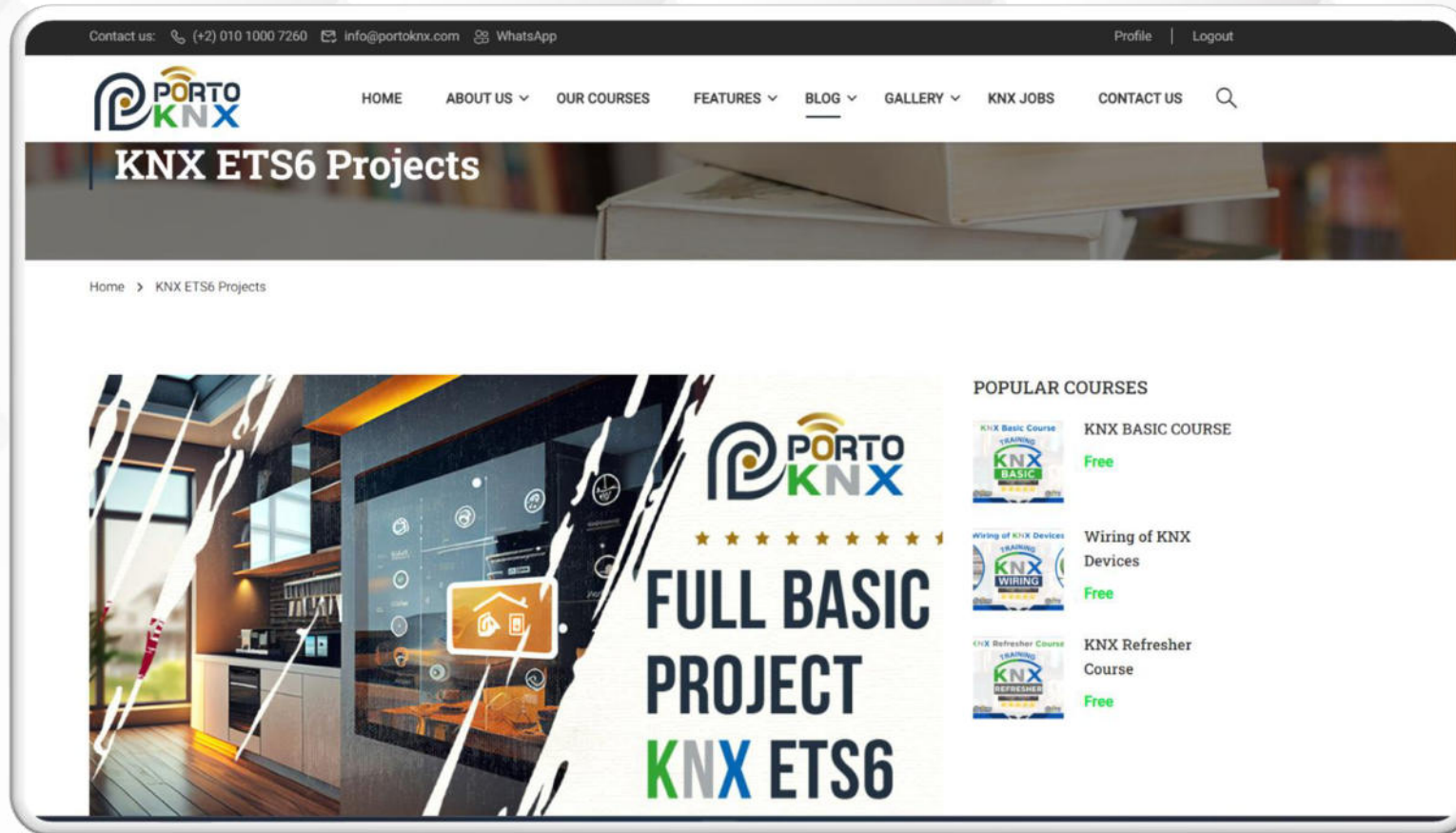




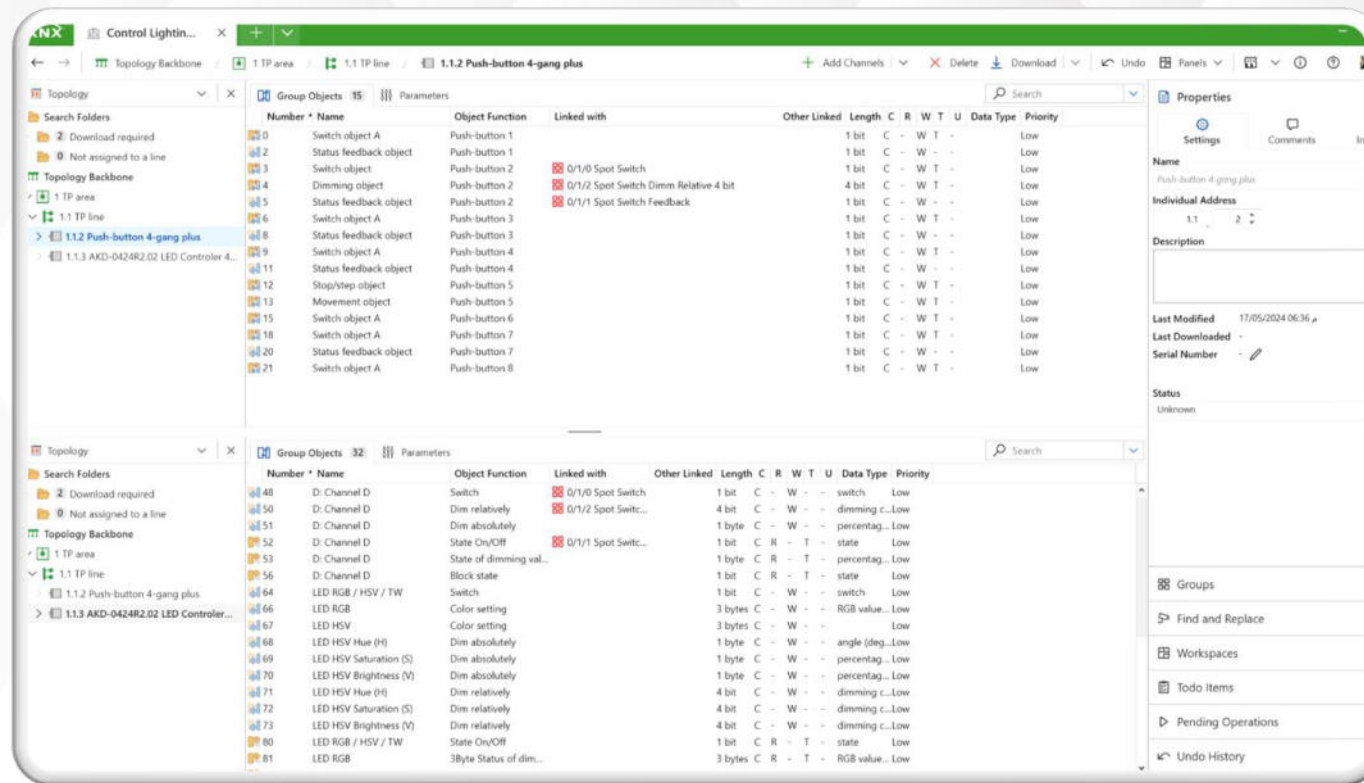
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<<<<< 6- READY KNX PROJECTS IN ETS6 >>>>>

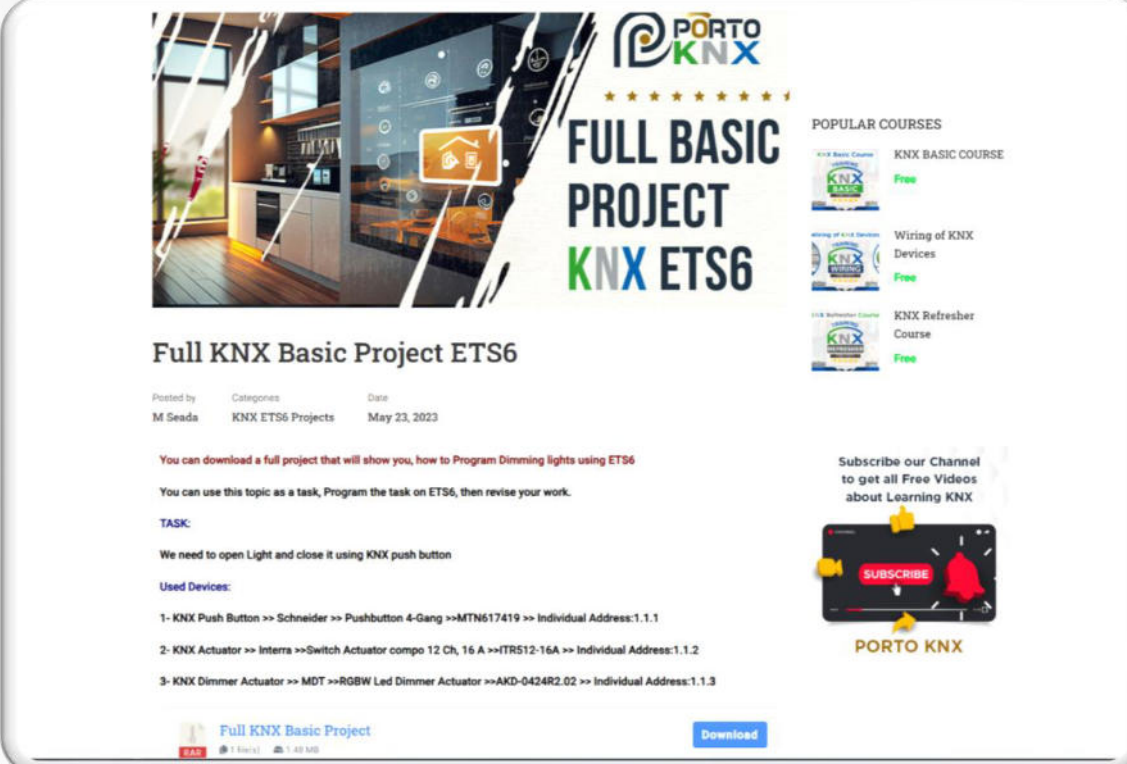
- ❖ We have recently developed several **KNX** projects in ETS6 and made them accessible to everyone for FREE on our website platform.



- ❖ We introduce a new initiative aimed at supporting students and individuals interested in delving into the world of KNX protocol using ETS6.
- ❖ This resource is designed to simplify the process of adding devices with parameters and group addresses, making it easier for everyone to grasp the fundamentals..



- ❖ Trainees now have the opportunity to implement a new task in ETS.
- ❖ By solving and implementing this task, they can enhance their skills and knowledge in programming devices.
- ❖ After completing the task, trainees can download the ETS project to revise and ensure the correct programming of devices.
- ❖ A hands-on approach to learning that fosters practical experience and skill development.



PORTO KNX

FULL BASIC PROJECT KNX ETS6

POPULAR COURSES

- KNX BASIC COURSE Free
- Wiring of KNX Devices Free
- KNX Refresher Course Free

Full KNX Basic Project ETS6

Posted by: M Seada | Categories: KNX ETS6 Projects | Date: May 23, 2023

You can download a full project that will show you, how to Program Dimming lights using ETS6

You can use this topic as a task, Program the task on ETS6, then revise your work.

TASK:

We need to open Light and close it using KNX push button

Used Devices:

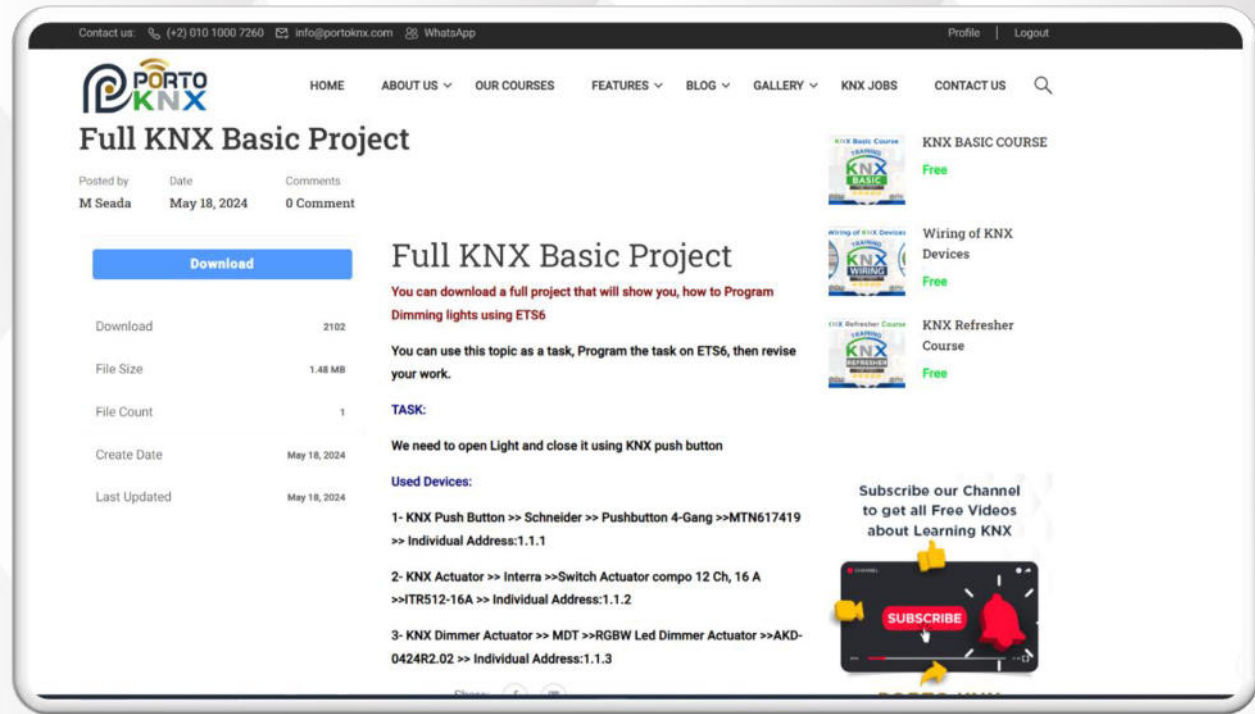
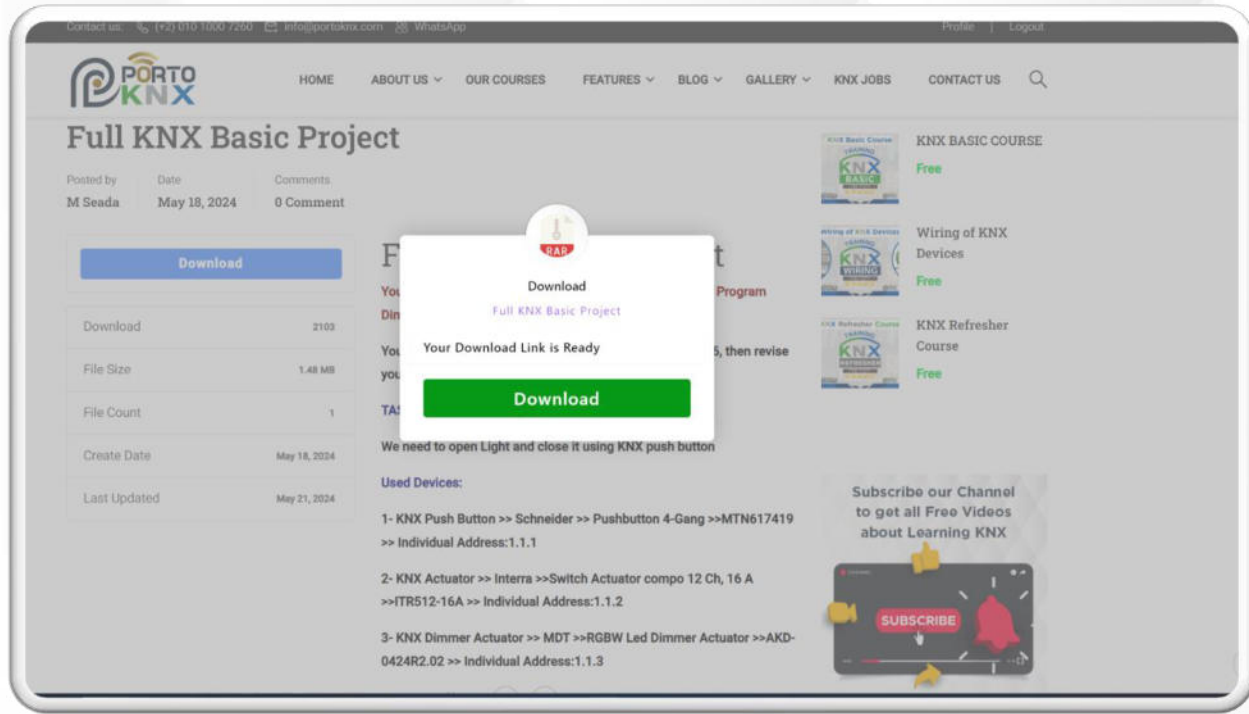
- 1- KNX Push Button >> Schneider >> Pushbutton 4-Gang >>MTN617419 >> Individual Address:1.1.1
- 2- KNX Actuator >> Interra >>Switch Actuator compo 12 Ch, 16 A >>ITR512-16A >> Individual Address:1.1.2
- 3- KNX Dimmer Actuator >> MDT >>RGBW Led Dimmer Actuator >>AKD-0424R2.02 >> Individual Address:1.1.3

Full KNX Basic Project Download

Subscribe our Channel to get all Free Videos about Learning KNX

PORTO KNX

❖ These Projects are available for download for FREE for Everyone



A schematic diagram of a TP (Twisted Pair) topology project. It shows a central 'Main line' with several 'Backbone line' segments. Components include bus couplers (BC 1, BC 2, BC 15), line couplers (LC 1, LC 15), and data voltage controllers (DVC 1, DVC 25P). The system is divided into 'Area 1' and 'Area 2'. A 'Line 1' is also indicated.

PORTO KNX
★★★★★★★★
TP TOPOLOGY PROJECT
KNX ETS6

A screenshot of the ETS6 software interface showing a project titled 'TP TOPOLOGY PROJECT'. The interface displays a tree view of the project structure, including areas and rooms. The 'TP TOPOLOGY PROJECT' is highlighted in the tree.

PORTO KNX
★★★★★★★★
TP TOPOLOGY PROJECT
KNX ETS6

A schematic diagram of an IP/TP (Internet Protocol / Twisted Pair) topology project. It features a central 'LAN' cloud connected to a 'Router'. A 'Main line 1' is shown with components like 'et/water 4.0.0', 'KNXnet IP-Rou' 2.0, and various line couplers (LC 1.2.0, LC 1.3.0, LC 2.3.0). Data voltage controllers (DVC 1.2.1, DVC 1.2.2, DVC 1.3.1, DVC 1.3.2, DVC 2.3.1, DVC 2.3.2) are also present.

PORTO KNX
★★★★★★★★
IP/TP TOPOLOGY PROJECT
KNX ETS6

A screenshot of the ETS6 software interface showing a project titled 'IP/TP TOPOLOGY PROJECT'. The interface displays a tree view of the project structure, including areas and rooms. The 'IP/TP TOPOLOGY PROJECT' is highlighted in the tree.

PORTO KNX
★★★★★★★★
IP/TP TOPOLOGY PROJECT
KNX ETS6






 ★★★★★★
FULL BASIC PROJECT
KNX ETS6




 ★★★★★★
SWITCH LIGHTS
KNX ETS6




 ★★★★★★
DIMMING LIGHTS
KNX ETS6




 ★★★★★★
MOVE SHUTTERS
KNX ETS6





**PORTO KNX, WE MAKE LEARNING KNX
FREE, EASY, SIMPLE & ATTRACTIVE**

<<<<< 7- SUPPORT OF GRADUATION PROJECTS >>>>>



- ❖ We support all graduation projects for students of engineering faculties.
- ❖ We provide comprehensive technical support for engineering students' graduation projects, focusing on smart homes and buildings. Our assistance aims to equip students with the skills needed for the labor market.



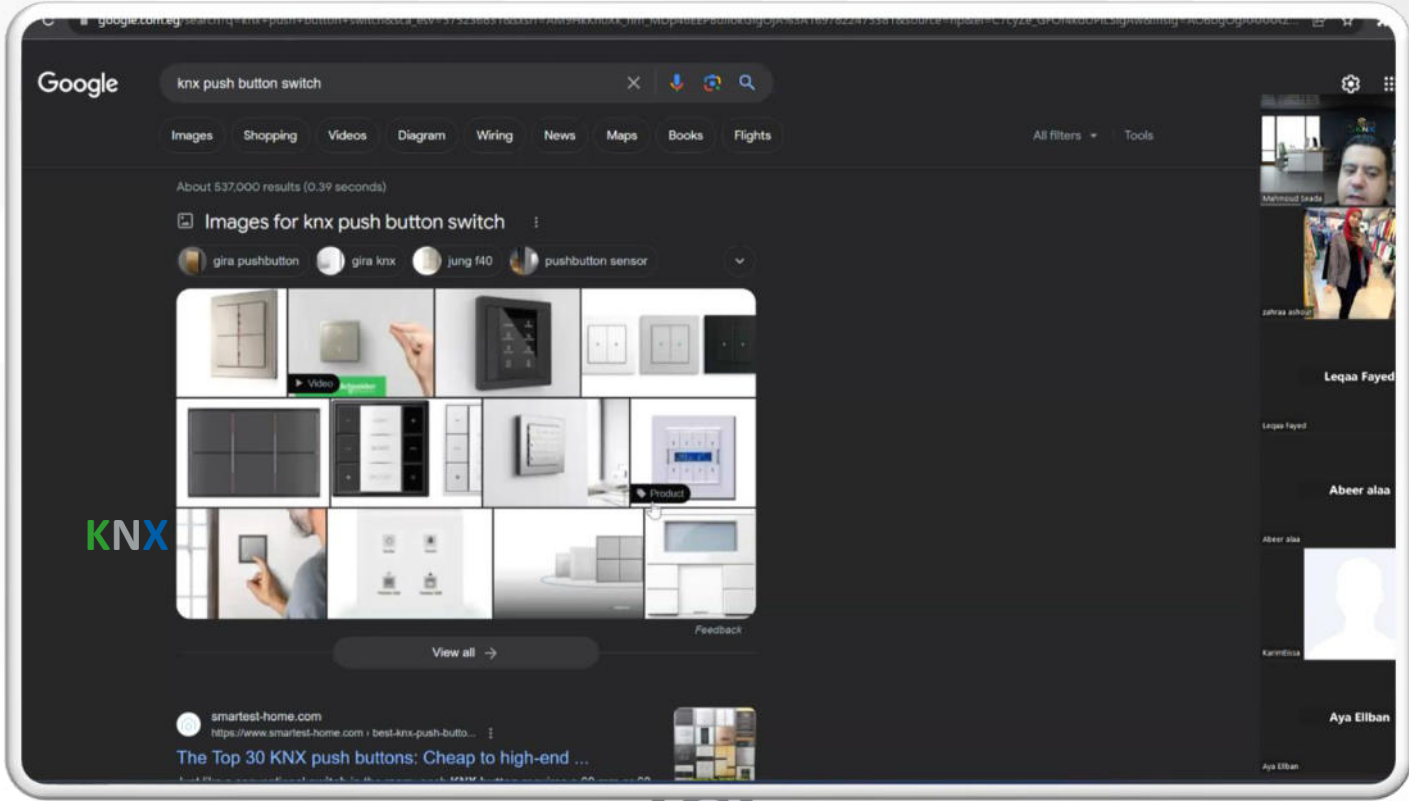


- ❖ We've arranged numerous field trips to real-life locations for our trainees to provide them with information in a more accessible and efficient manner, particularly regarding air conditioning and floor heating systems.
- ❖ This allows them to witness firsthand the practical aspects, from laying the groundwork to setting up KNX devices and completing the project.





- ❖ We kick off the **KNX** graduation projects by engaging our students in the analysis process, guiding them through device selection, and teaching them how to calculate the number of devices required and estimate project costs.
- ❖ Excited to see our students grow and excel in their projects!





❖ the next step, We worked hard and they finished the cost estimation of project and selection of KNX devices by themselves

Basement Floor

Rooms	Device
Beauty salon	1 - push button 4 gang No. (57)
Body and personal care B-021	1 - push button 4 gang No. (58) 1 - Motion sensor
Bathroom B-020	1 - push button 4 gang No. (59) 1 - Module No. (1)
Gym Hall B-002	2 - push button 4 gang No. (60&61)
Bathroom B-006	1 - push button 4 gang No. (63)
Shower B-004	1 - push button 4 gang No. (62)
Hand Washing B-005	1 - Module No. (2)
Bathroom B-007	1 - Motion sensor 1 - push button 4 gang No. (64) 1 - Module No. (3)
Lobby B-019	1 - push button 4 gang No. (56) 3 - Motion Sensor
Chief B-008	2 - push button 4 gang No. (65&66)
Store B-009	1 - push button 4 gang No. (67)
Laundry B-010	1 - push button 4 gang No. (69)
Maid's B-011	2 - push button 4 gang No. (70&71)
Bathroom B-012	1 - push button 4 gang No. (72) 1 - Module No. (4)
Bathroom B-013	1 - push button 4 gang No. (73) 1 - Module No. (5)
Maid's B-014	2 - push button 4 gang No. (74&75)
Living B-015	1 - push button 4 gang No. (76)
Kitchen B-016	1 - push button 4 gang No. (77)
Corridor B-017	1 - push button 4 gang No. (68) 1 - Motion sensor
Total Loads	NO.
Push button 8 gang	22
HVAC Module	5

Bathroom

	4 Gang	Touch Panel	Gate Way	IR-receiver	gives	ventilation	Shutter	Custom	more	door sensor	stop sensor	magnetic contact	proximity sensor	Motion Sensor	Gas Leakage Sensor	Smoke Sensor	lux sensor	Glass break sensor	weather station	Water Sensor	
						1	1				0			1							1
1						1	1							1							1
									1					1							1
		2	1	1			4	4					4	2				2	4		
		1		1			1	1					1						1		
					1								1								
		2	1	2			5	5					1	1							
1	5	2	4	1	2	12	10	1	1	1	6	9	1	0	0	2	5	0	0	3	





1.1 For Basement Floor

Line 2 (Ground Floor)	No	Devices	Control Devices	Application	Line 2 (Ground Floor)	No	Devices	Control Devices	Application	
	8	Dimming Actuator				9	Dimming Actuator			
		ch1	Touch Panel (1) & Touch Panel (2)	Living room (Dimming 1)			ch1	Touch panel (3)		Dinig room (RGBW Light strip)
		ch2	Touch Panel (1) & Touch Panel (2)	Living room (Dimming 2)			ch2			
		ch3	Touch Panel (3)	Dining room (Dimming 1)			ch3			
	ch4	—	Spare		ch4					
Line 2 (Ground Floor)	No	Devices	Control Devices	Application	Line 2 (Ground Floor)	No	Devices	Control Devices	Application	
	10	Binary Input				11	Binary Input			
		ch1	—	Bath corridor (Motion sensor)			ch1	Motion sensor		Stair (Stair light sensor)
		ch2	—	Living room (window magnetic contact 1)			ch2	—		Living room (Glass break sensor 4)
		ch3	—	Living room (Glass break sensor 1)			ch3	—		Dining room (Window magnetic contact 3)
		ch4	—	Living room (Glass break sensor 2)			ch4	—		Dining room (Glass break sensor 5)
		ch5	—	Living room (window magnetic contact 2)			ch5	—		spare
		ch6	—	Living room (Glass break sensor 3)			ch6	—		spare

All devices can be controlled via a main touch panel in the foyer

Devices		Beauty salon	Body & personal care	Bathroom B-020	Shower, hand washing bath	Bathroom B-007	Lobby	chief	store	Laundry	Maid's B-011	Bathroom B-012	Bathroom B-013	Maid's B-014	Living	Kitchen B-016	Corridor	GYM	Stairs	Auto sum
Push button - Actuat	Switching lighting	4	1	2	4	2	1	4	1	1	3	1	1	3	2	1	1	5	1	38
	Dimming lighting	1													1					2
	1-Gang push button		1				1		1	1			1			1	1			7
	2-Gang push button			1		1					1	1		1						5
	3-Gang push button				1			1												2
	4-Gang push button																			0
HVAC	Touch panel	1													1		1	1		4
	Gateway														1					1
Sensors	IR-Transmitte	1																1		2
	Siren						1													1
	Ventilation			1	1	1						1	1			1				6
	Shutter																			0
	Curtain	1						1												2
	Smart mirror	1	1		1													1		4
	KNX Energy Meter																		1	1
	Magnetic contact window/door security	3																4		7
	Stair light sensor																		1	1
	Presence sensor	1		1												1		1		4
Sensors	Motion sensor						1										1		1	3
	Gas leakage sensor															1				1
	Smoke detector	1														1				2
	Glass break	2							1	1					1			2		7
	Weather station																			0
	Water flood detector			1	1	1				1		1	1			1				7
	KNX air quality sensor			1	1	1					1	1				1				6
	Gas valve												1			1				2
water valve			1	1	1				1		1	1			1				7	





❖ We open a lot of sessions with the students to follow them and revise every step the worked on, that is to support and put them on the correct way

Basement Floor

Rooms	Device
Beauty salon	1 – push button 4 gang No. (57)
Body and personal care B-021	1 – push button 4 gang No. (58) 1 – Motion sensor
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Kitchen B-016	1 – push button 4 gang No. (77)
Corridor B-017	1 – push button 4 gang No. (68) 1 – Motion sensor
Total Loads	NO.
Push button 8 gang	22
HVAC Module	5
Motion Sensor	4

Hall

- Buzzer
- Door
- Security
- Lux
- Wind Speed
- Temp.
- Dimmer
- Constant Light
- Door Status



- ❖ After selection the devices and put them in their positions, we assign individual addresses for every KNX device
- ❖ Calculate the total consumption power to determine number of lines and KNX power supplies in easy and simple way

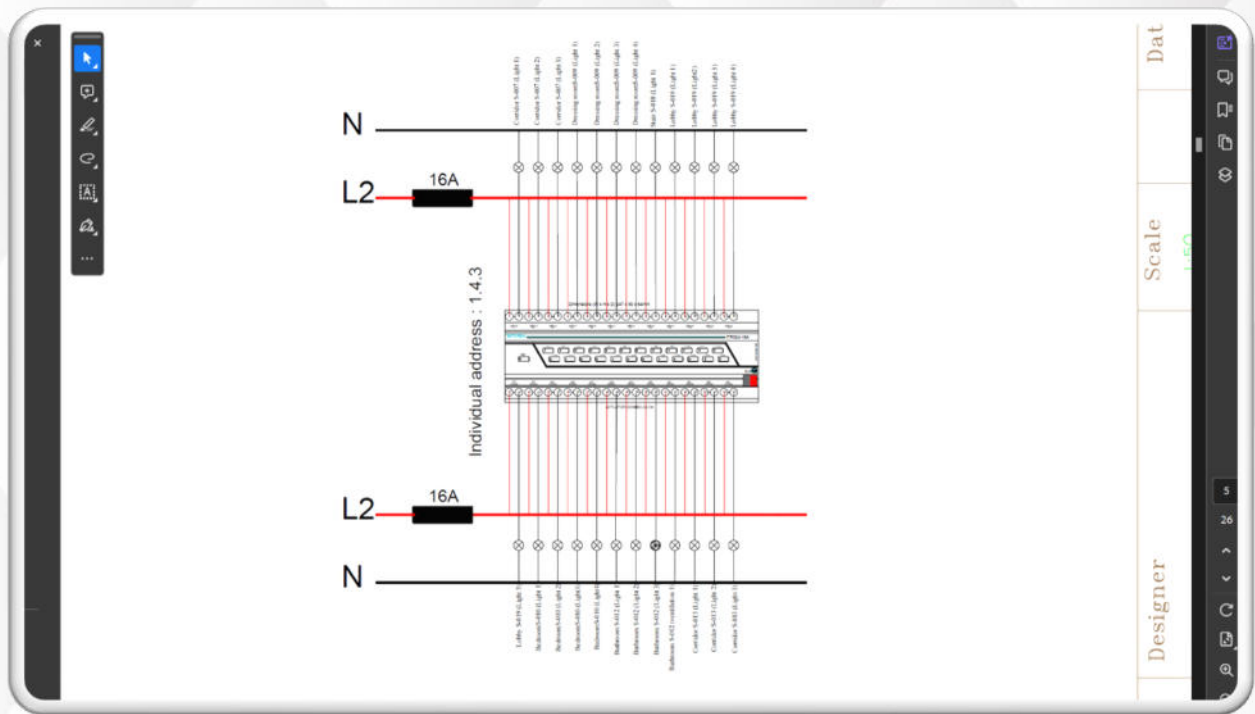
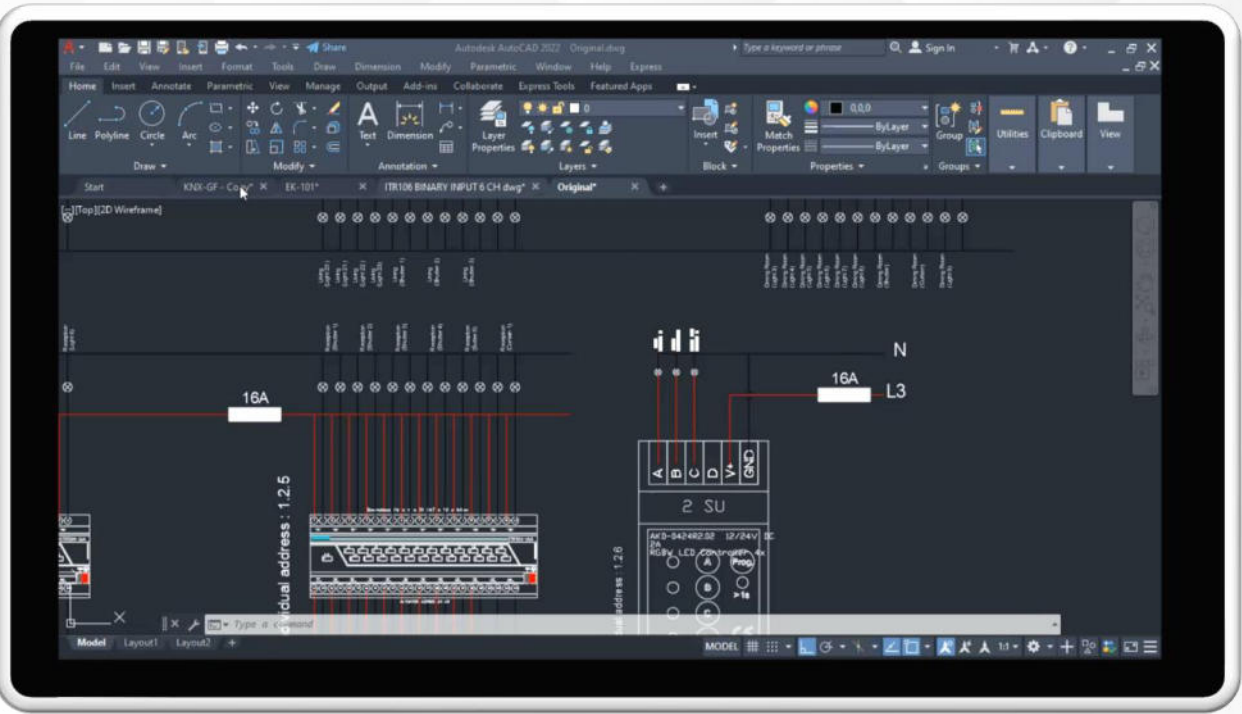
3.1 For Basement Floor

Device	Individual Address	Bus current(mA)
Line coupler	1.1.0	20
Combo Actuator 24 channel (1)	1.1.1	20
Combo Actuator 24 channel (2)	1.1.2	20
Combo Actuator 16 channel (3)	1.1.3	20
Dimming Actuator (1)	1.1.4	10
Binary input (1)	1.1.5	2
Binary input (2)	1.1.6	2
Binary input (3)	1.1.7	2
Binary input (4)	1.1.8	2
Push Button (1)	1.1.9	10
Push Button (2)	1.1.10	10
Push Button (3)	1.1.11	10
Push Button (4)	1.1.12	10
Push Button (5)	1.1.13	10
Push Button (6)	1.1.14	10
Push Button (7)	1.1.15	10
Push Button (8)	1.1.16	10
Push Button (9)	1.1.17	10
Push Button (10)	1.1.18	10
Push Button (11)	1.1.19	10
Push Button (12)	1.1.20	10
Push Button (13)	1.1.21	10
Push Button (14)	1.1.22	10
Touch Panel (1)	1.1.23	12
Touch Panel (2)	1.1.24	12
Touch Panel (3)	1.1.25	12
Touch Panel (4)	1.1.26	12
Presence sensor (1)	1.1.27	5
Presence sensor (2)	1.1.28	5
Presence sensor (3)	1.1.29	5
Presence sensor (4)	1.1.30	5
IR Transmitter (1)	1.1.31	8
IR Transmitter (2)	1.1.32	8
Gateway (1)	1.1.33	8
KNX Energy Meter	1.1.34	10
Water flood detector (1)	1.1.35	10
Water flood detector (2)	1.1.36	10
Water flood detector (3)	1.1.37	10
Water flood detector (4)	1.1.38	10
Water flood detector (5)	1.1.39	10
Water flood detector (6)	1.1.40	10
Water flood detector (7)	1.1.41	10
KNX Air quality sensor (1)	1.1.42	12
KNX Air quality sensor (2)	1.1.43	12
KNX Air quality sensor (3)	1.1.44	12
KNX Air quality sensor (4)	1.1.45	12
KNX Air quality sensor (5)	1.1.46	12
KNX Air quality sensor (6)	1.1.47	12

7 Support of KNX Graduation Projects For Students

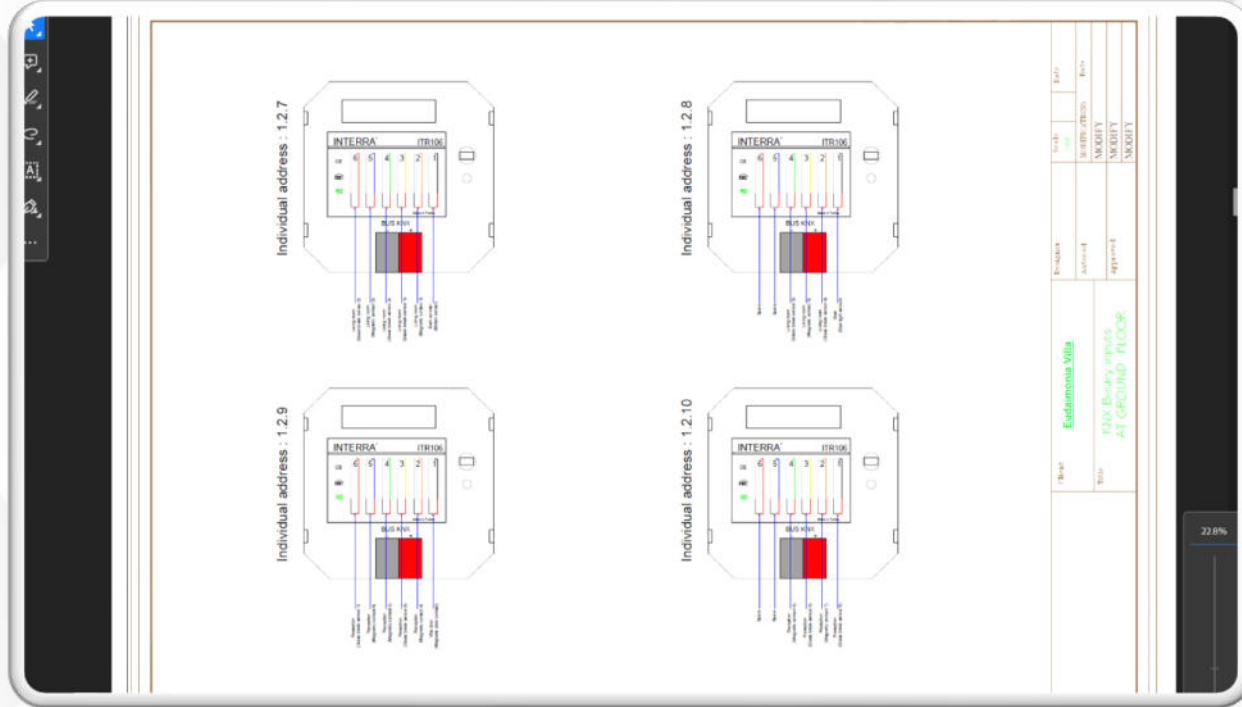
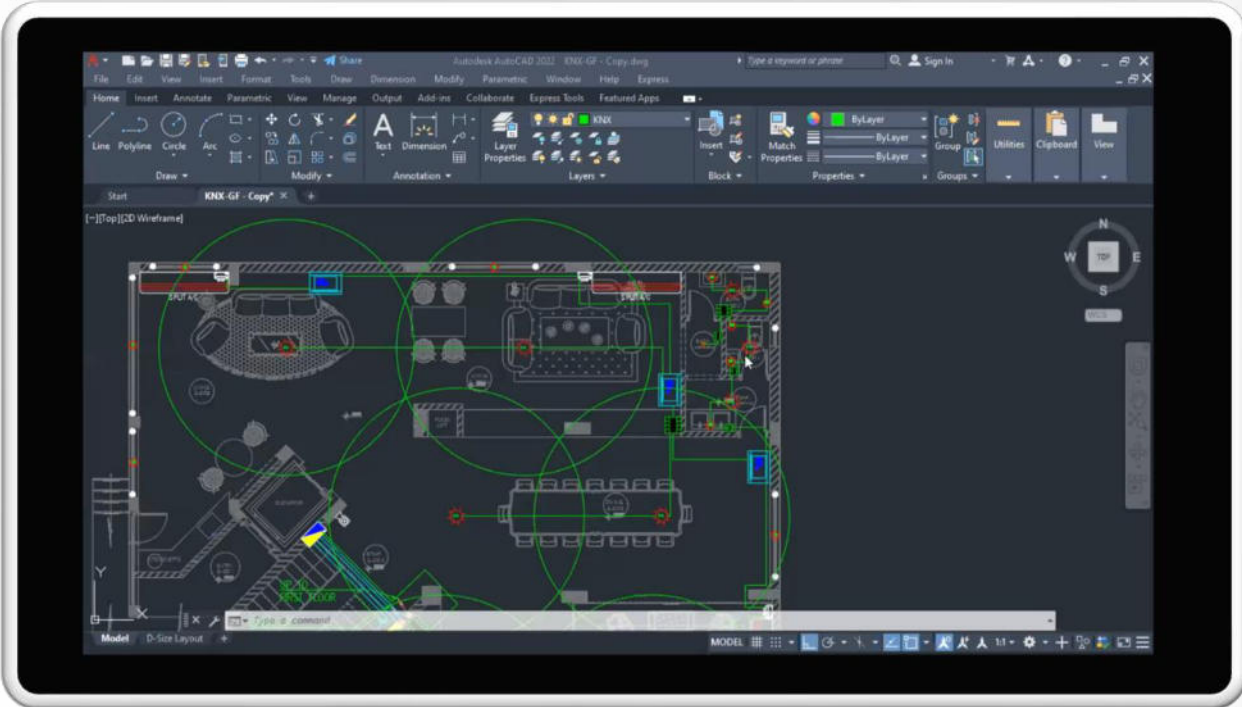


❖ After that we put the basics for electrical wiring of the selected Devices, Then they make the drawings of electrical works for the project



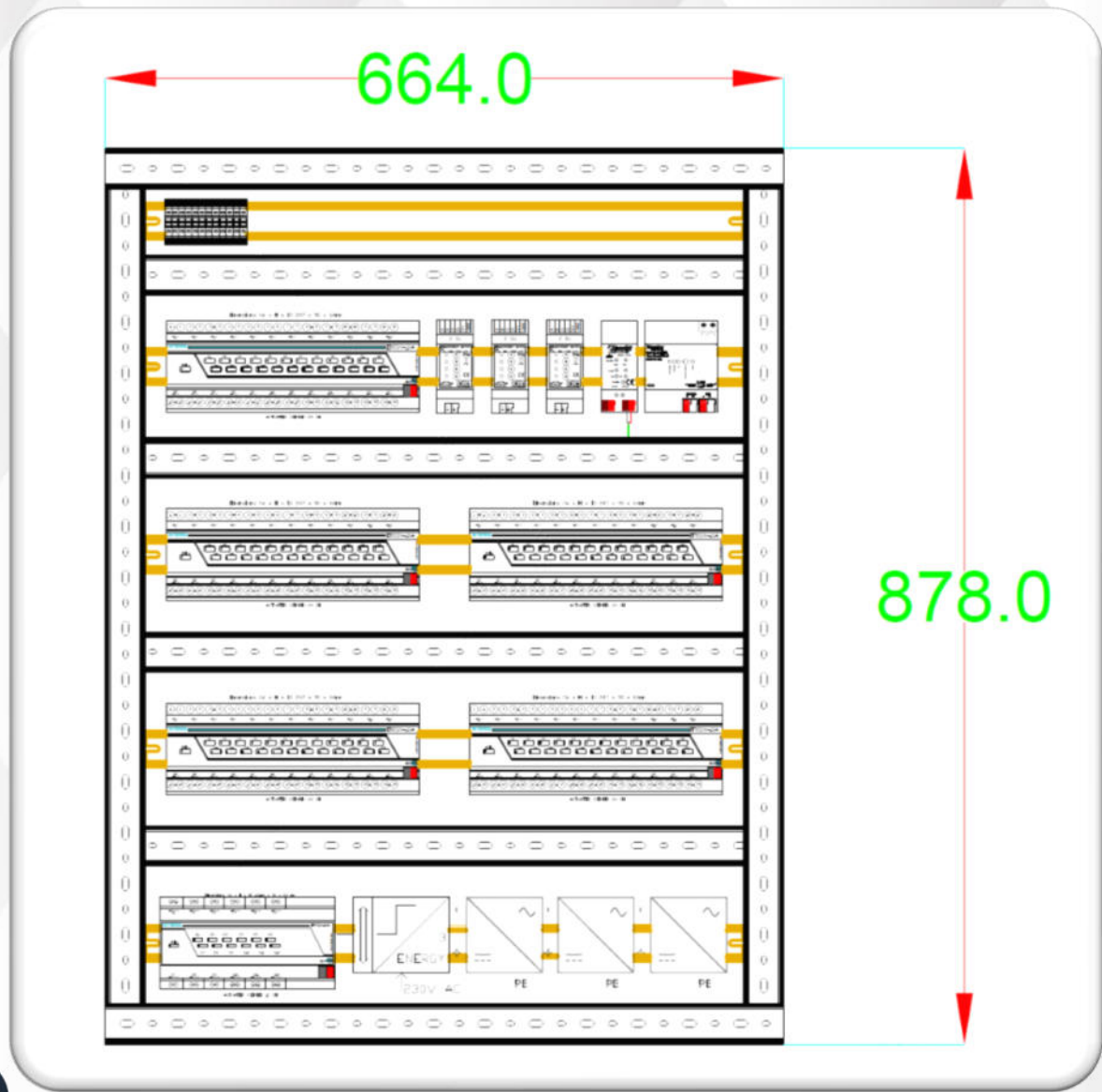


❖ They learned how to put the KNX devices in the drawing of the project, Putting every KNX device in its place, and put all Din Rail KNX devices in the main Electric panels





- ❖ We teach them How to Make the Panel Sizing, arrange KNX devices in the electrical panel,
- ❖ all drawing outputs had done by the students themselves.
- ❖ We guide them to start the Project in the correct way.
- ❖ We start Supporting them from first point to the end of their graduation projects





❖ We teach them all things about programming devices using ETS6 with all functions

Group Addresses Eudaimonia villa

Address	Name	Length	Central	Pass through Line Coupler
3/0	Switching			No
3/0/228	Bedroom 5-016 Light 5 Automatic/Manual	enable	No	No
3/0/229	Bedroom 5-016 Light 6 Motion	switch	No	No
3/0/230	Bedroom 5-016 Light 6 Automatic/Manual	enable	No	No
3/0/231	Bathroom 5-015 Light 1 Motion	switch	No	No
3/0/232	Bathroom 5-015 Light 1 Automatic/Manual	enable	No	No
3/0/233	Bathroom 5-015 Light 2 Motion	switch	No	No
3/0/234	Bathroom 5-015 Light 2 Automatic/Manual	enable	No	No
3/0/235	Dressingroom 5-016a Light 1 Motion	switch	No	No
3/0/236	Dressingroom 5-016a Light 1 Automatic/Manual	enable	No	No
3/0/237	Lobby 5-006 Light 1 Motion Sensor Locking	enable	No	No
3/0/238	Lobby 5-006 Light 2 Motion Sensor	switch	No	No
3/0/239	Lobby 5-006 Light 2 Motion Sensor Locking	enable	No	No
3/0/240	Corridor 5-007 Light 1 Motion Sensor	switch	No	No
3/0/241	Corridor 5-007 Light 1 Motion Sensor Locking	enable	No	No
3/0/242	Corridor 5-007 Light 2 Motion Sensor	switch	No	No
3/0/243	Corridor 5-007 Light 2 Motion Sensor Locking	enable	No	No
3/0/244	Corridor 5-013 Light 1 Motion Sensor	switch	No	No
3/0/245	Corridor 5-013 Light 1 Motion Sensor Locking	enable	No	No
3/0/246	Corridor 5-013 Light 2 Motion Sensor	switch	No	No
3/0/247	Corridor 5-013 Light 2 Motion Sensor Locking	enable	No	No
3/0/248	Corridor 5-013 Light 3 Motion Sensor	switch	No	No
3/0/249	Corridor 5-013 Light 3 Motion Sensor Locking	enable	No	No
3/0/250	Lobby 5-006 Light 1 Motion Sensor	switch	No	No
3/0/251	Corridor 5-007 Light 3 Motion Sensor	switch	No	No
3/0/252	Corridor 5-007 Light 3 Motion Sensor Locking	enable	No	No
3/0/253	Stair 5-018 Stair Light Sensor	switch	No	No
3/0/254	stair 5-018 Serin	switch	No	No
3/0/255	stair 5-018 serin feedback	switch	No	No
3/1	Light Dimming			No
3/1/0	Bedroom -S008 D1 Switch	switch	No	No
3/1/1	Bedroom -S008 D1 Switch Feedback	state	No	No
3/1/2	Bedroom -S008 D1 Dimming Relative	dimming control	No	No
3/1/3	Bedroom -S008 D1 Dimming Absolute	percentage (0..100%)	No	No
3/1/4	Bedroom -S008 D1 Dimming Absolute Feedback	percentage (0..100%)	No	No
3/1/5	Bedroom -S008 D2 Switch	switch	No	No
3/1/6	Bedroom -S008 D2 Switch Feedback	state	No	No
3/1/7	Bedroom -S008 D2 Dimming Relative	dimming control	No	No
3/1/8	Bedroom -S008 D2 Dimming Absolute	percentage (0..100%)	No	No

Group Addresses Eudaimonia villa

Address	Name	Length	Central	Pass through Line Coupler
2/5	Scenes			Yes
2/5/10	Bathroom2 all switch on	scene control	No	Yes
2/5/11	Bathroom2 all switch off	scene control	No	Yes
2/5/12	Bathroom4 all switch on	scene control	No	Yes
2/5/13	Bathroom4 all switch off	scene control	No	Yes
2/5/14	Bathroom5 all switch on	scene control	No	Yes
2/5/15	Bathroom5 all switch off	scene control	No	Yes
2/5/16	Bathroom8 all switch on	scene control	No	Yes
2/5/17	Bathroom8 all switch off	scene control	No	Yes
2/5/20	Bedroom1 curtain all on	scene control	No	Yes
2/5/21	Bedroom1 curtain all off	scene control	No	Yes
2/5/22	Bedroom3 curtain all on	scene control	No	Yes
2/5/23	Bedroom3 curtain all off	scene control	No	Yes
2/5/24	Bedroom6 curtain all on	scene control	No	Yes
2/5/25	Bedroom6 curtain all off	scene control	No	Yes
2/5/26	Bedroom7 curtain all on	scene control	No	Yes
2/5/27	Bedroom7 curtain all off	scene control	No	Yes
2/5/28	Lobby all switch on	scene control	No	Yes
2/5/29	Lobby all switch off	scene control	No	Yes
2/5/30	condoor all switch on	scene control	No	Yes
2/5/31	condoor all switch off	scene control	No	Yes
2/5/32	dimming 1 all on	scene control	No	Yes
2/5/33	dimming 1 all off	scene control	No	Yes
2/5/34	dimming 3 all on	scene control	No	Yes
2/5/35	dimming 3 all off	scene control	No	Yes
2/5/36	dimming 6 all on	scene control	No	Yes
2/5/37	dimming 6 all off	scene control	No	Yes
2/5/38	dimming 7 all on	scene control	No	Yes
2/5/39	dimming 7 all off	scene control	No	Yes
2/5/40	lobby all on	scene control	No	Yes
2/5/41	lobby all off	scene control	No	Yes
2/5/42	Bedroom1 sleep-mode	scene control	No	Yes
2/5/43	Bedroom3 sleep-mode	scene control	No	Yes
2/5/44	Bedroom6 sleep-mode	scene control	No	Yes
2/5/45	Bedroom7 sleep-mode	scene control	No	Yes
2/5/46	Bedroom1 wakeup-mode	scene control	No	Yes
2/5/47	Bedroom3 wakeup-mode	scene control	No	Yes
2/5/48	Bedroom6 wakeup-mode	scene control	No	Yes
2/5/49	Bedroom7 wakeup-mode	scene control	No	Yes
2/6	Measuments			No
2/6/0	Bathroom2 - CO2	parts/million (ppm)	No	No





- ❖ We give them all KNX Courses from Basic, HVAC and Advanced, that is to make them programming the devices in simple way with all functions required for the project.
- ❖ Also we provide them with Certified KNX Basic Course as they introduce their project to their supervisors in their faculty and they are officially KNX Partners.
- ❖ They also trained on our KNX smart kit as practical Sessions for FREE



7 Support of **KNX** Graduation Projects For Students



❖ They also trained on our **KNX** smart kit as practical Sessions for FREE





WE MAKE LEARNING KNX FREE & ATTRACTIVE



CERTIFIED KNX BASIC, HVAC, ADVANCED & TUTOR COURSES

WE MAKE LEARNING KNX FREE & ATTRACTIVE



CERTIFIED KNX BASIC, HVAC, ADVANCED & TUTOR COURSES





WE MAKE LEARNING KNX FREE & ATTRACTIVE

PORTO SMART **PORTO KNX**

KNX PARTNER **KNX TRAINING**

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Good Luck

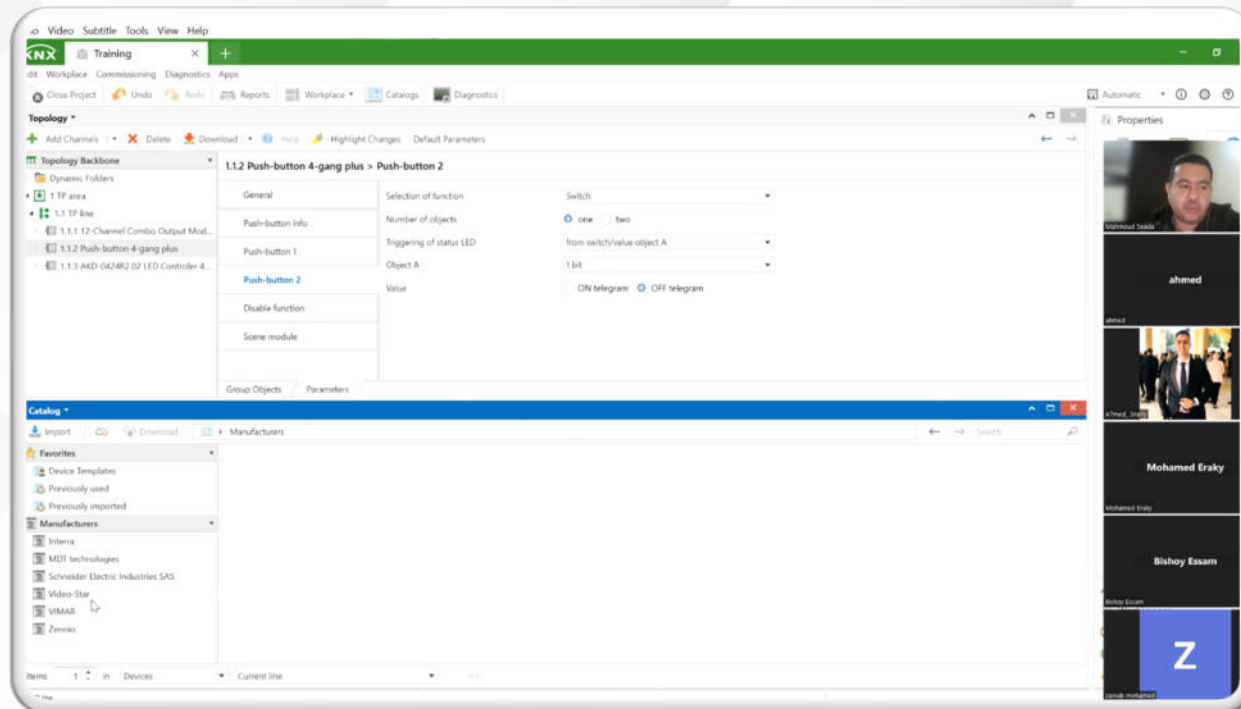


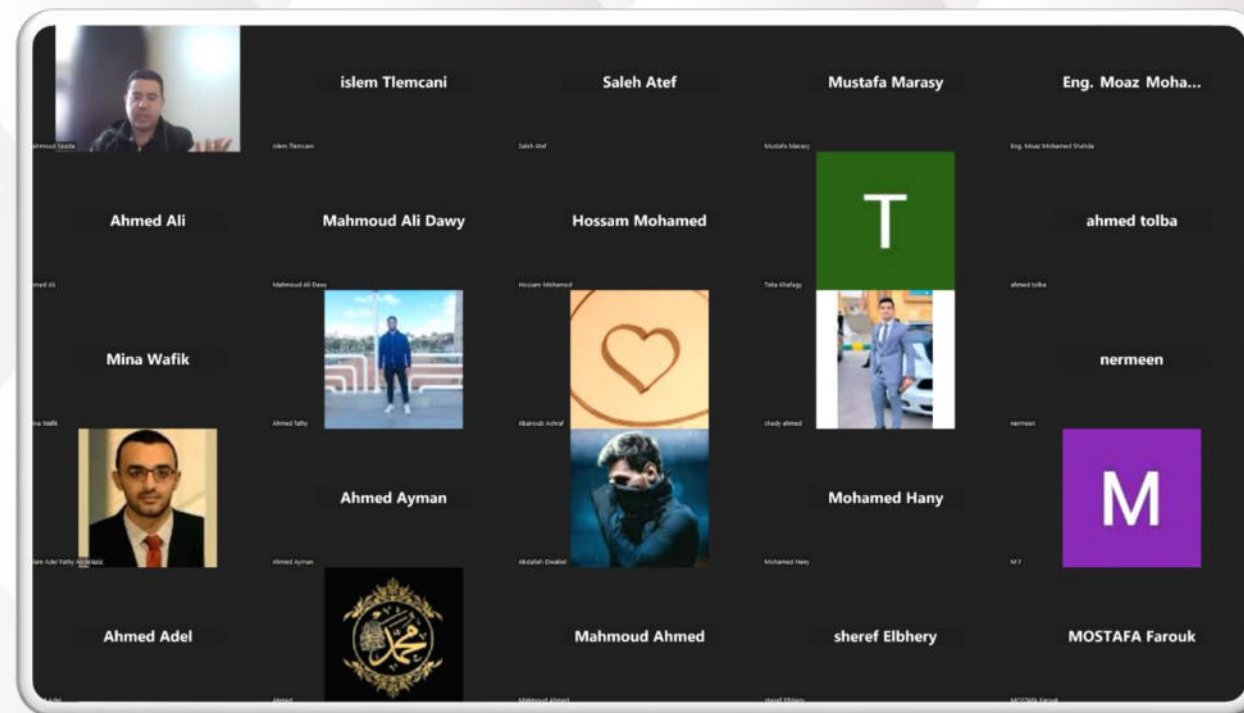
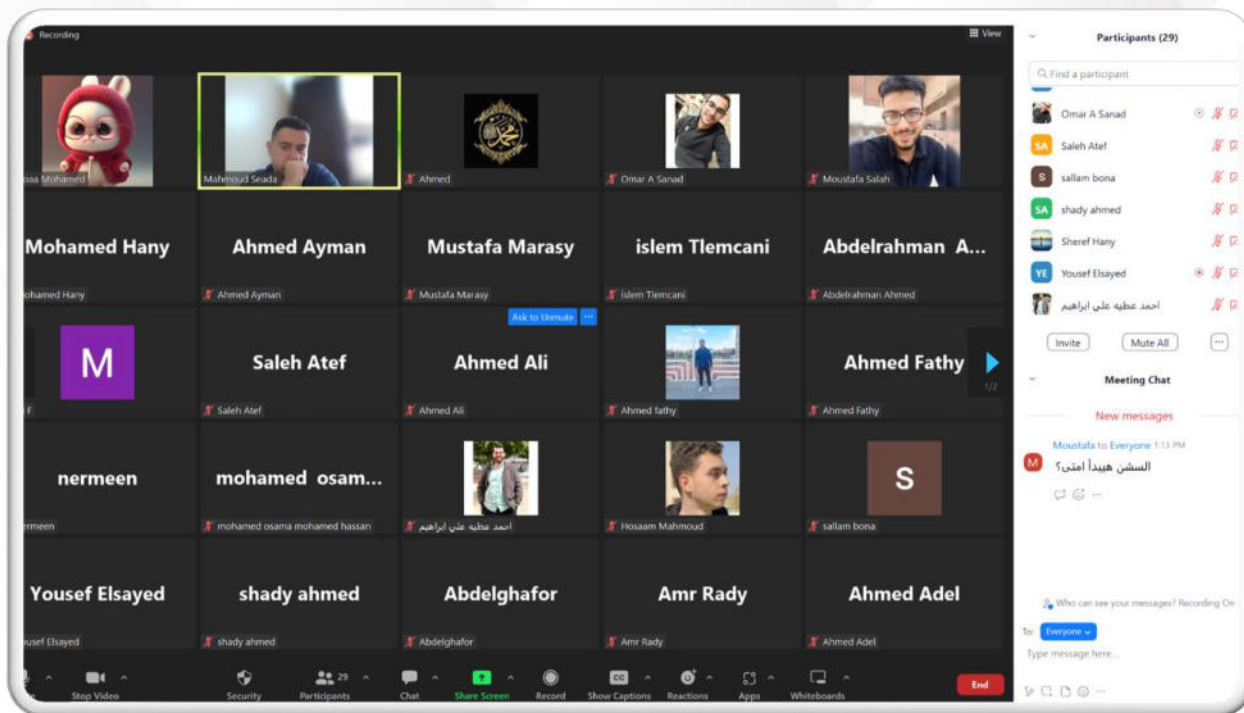


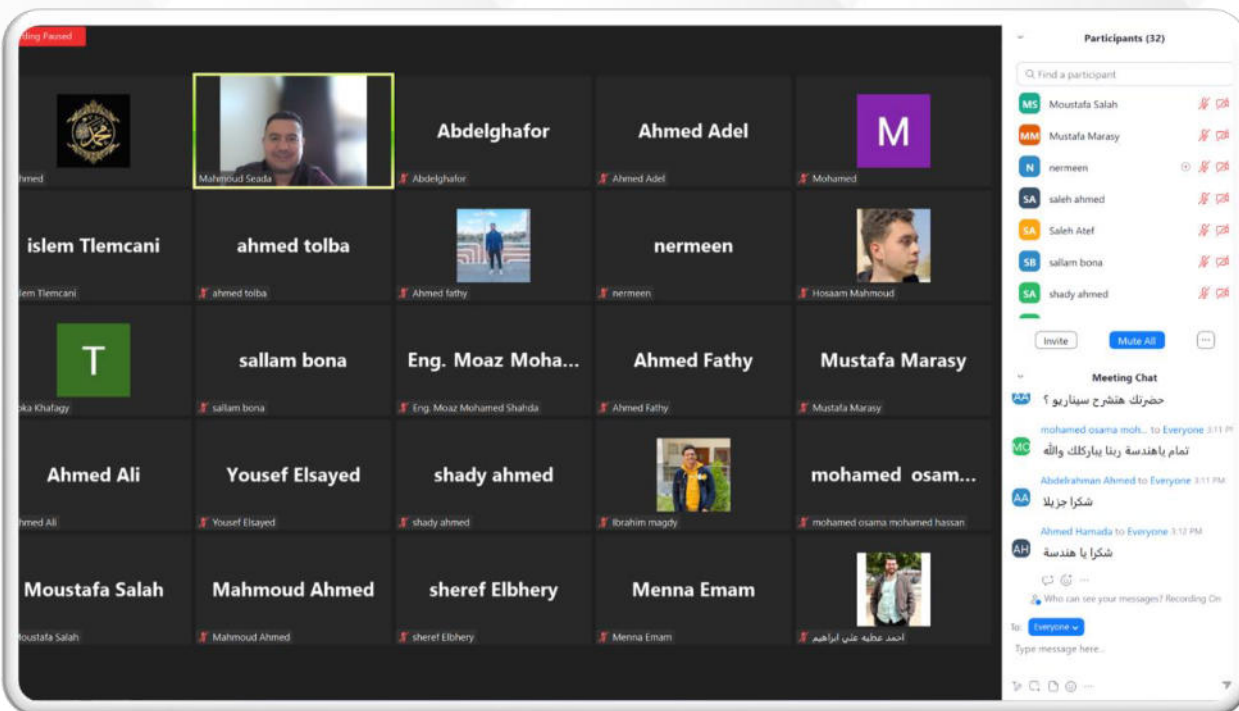
**PORTO KNX, WE MAKE LEARNING KNX
FREE, EASY, SIMPLE & ATTRACTIVE**

<<<<< 8- FREE KNX LIVE SESSIONS & COURSES>>>>>

- ❖ We have organized numerous Live Sessions and courses for free, including full courses like KNX Basic, HVAC, and Advanced courses covering both theoretical and practical parts.
- ❖ Our main goal is to teach KNX to everyone who wants to enhance their knowledge in the field but may not have the financial means to access these courses.







Participants (32)

Find a participant

- MS Moustafa Salah
- MM Mustafa Marasy
- N nermeen
- SA saleh ahmed
- SA Saleh Atef
- SB sallam bona
- SA shady ahmed

Meeting Chat

حضرتك هتشرح سيناريو ؟

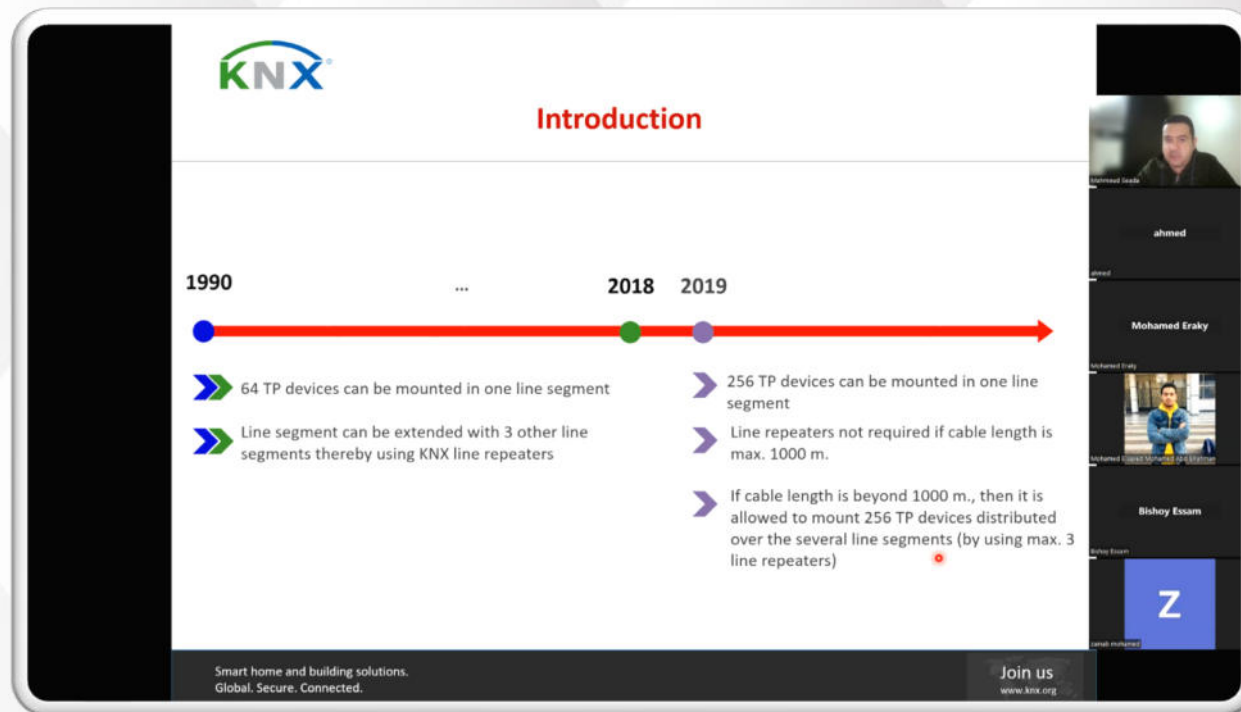
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تمام يا هندسة ريتا يباركلك والله

Abdelrahman Ahmed to Everyone 3:11 PM
شكرا جزيلاً

Ahmed Hamada to Everyone 3:12 PM
شكرا يا هندسة

Who can see your messages? Recording On

Type message here...



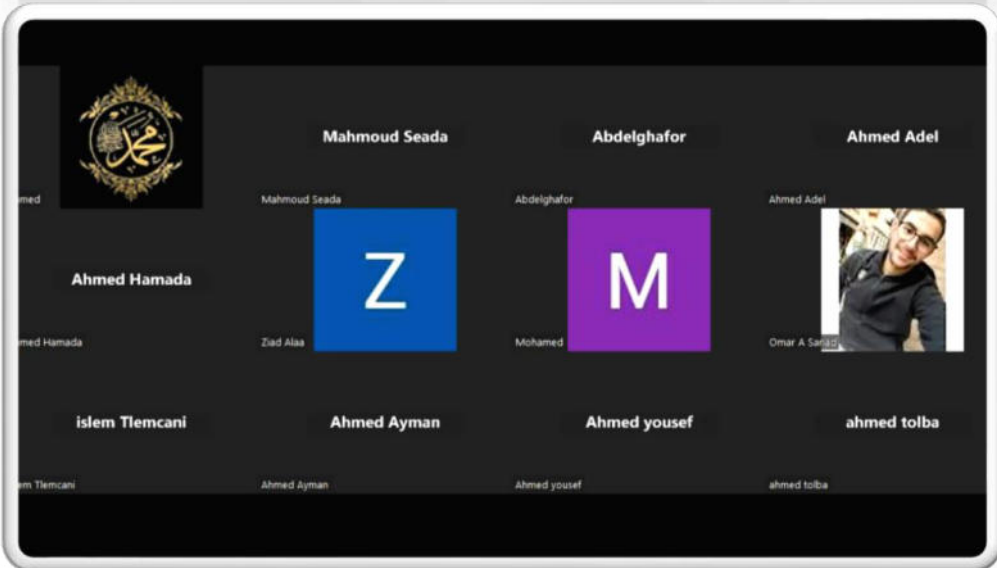
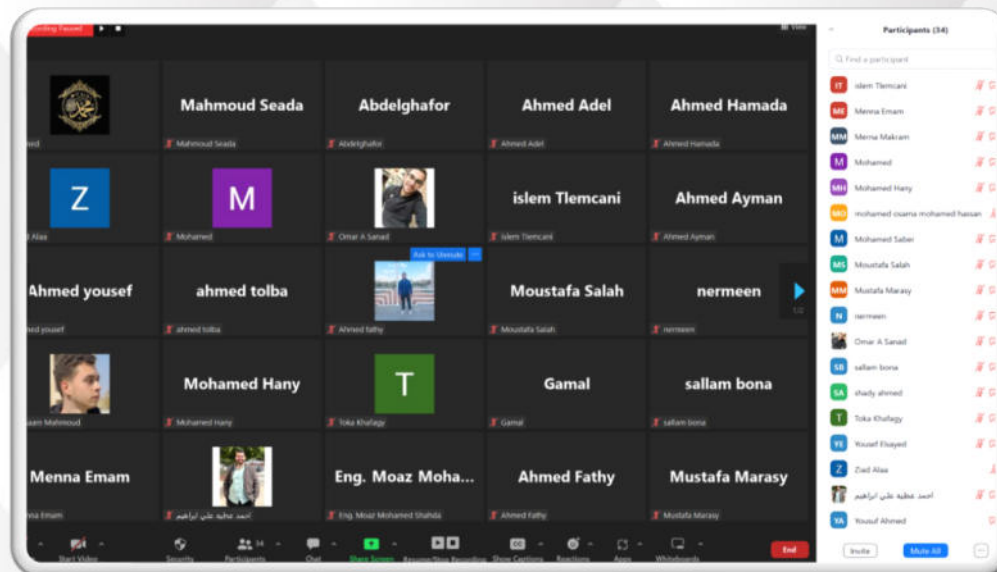
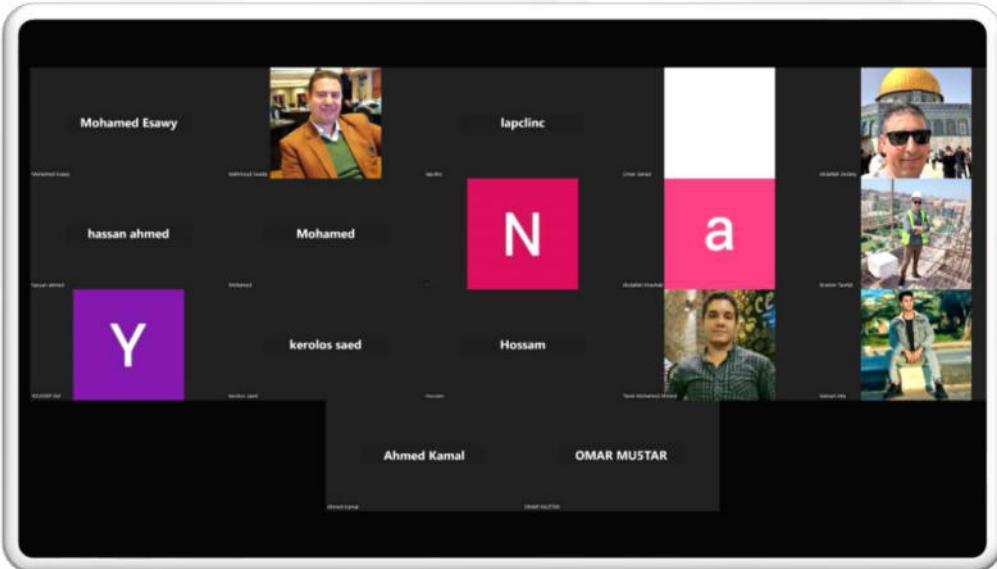
Introduction

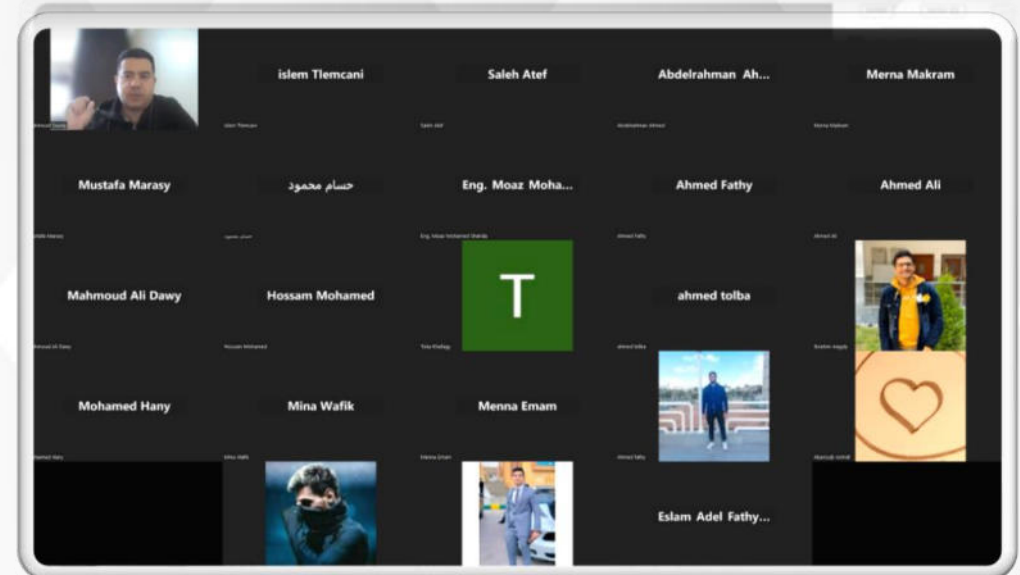
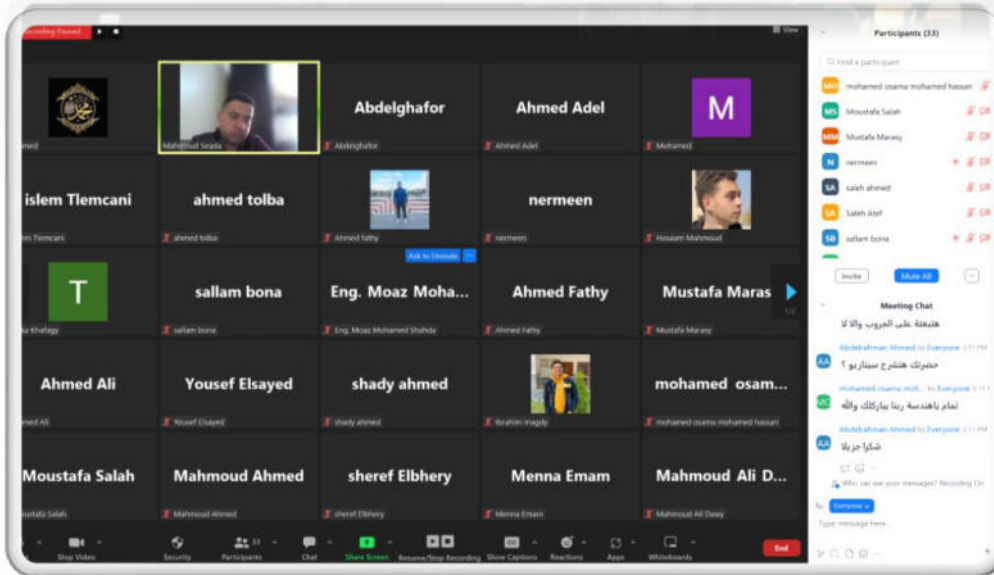
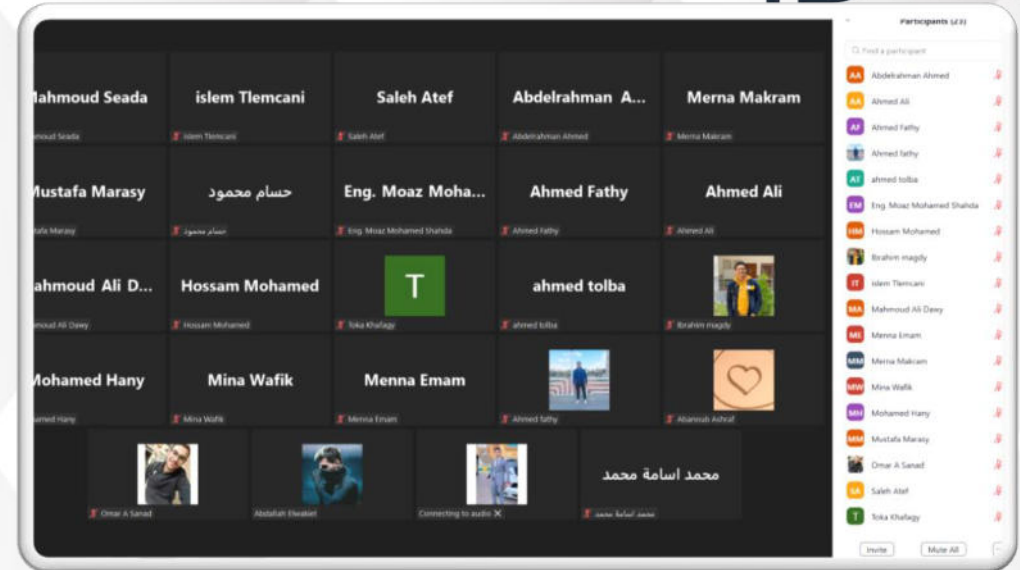
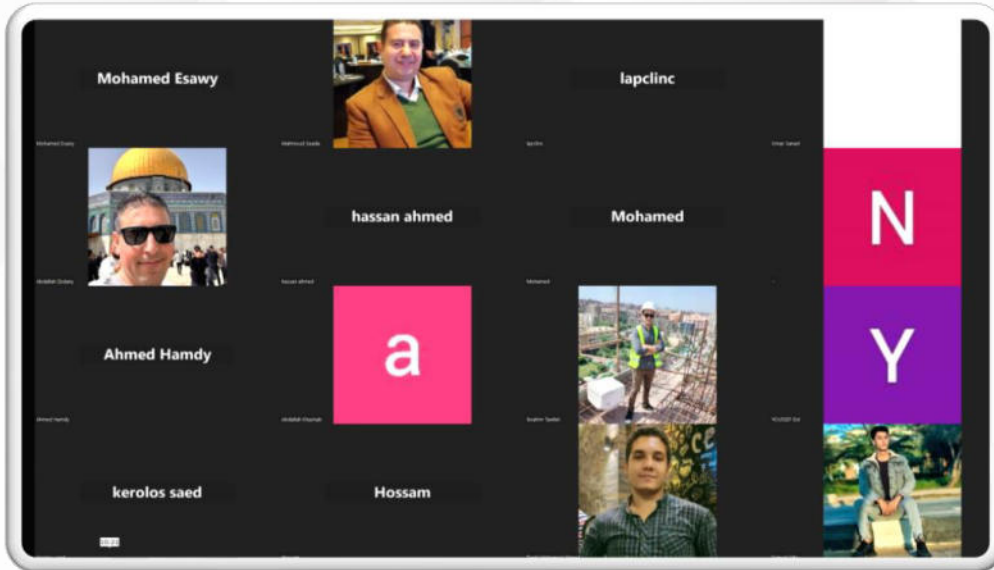
1990 ... 2018 2019

- 64 TP devices can be mounted in one line segment
- Line segment can be extended with 3 other line segments thereby using KNX line repeaters
- 256 TP devices can be mounted in one line segment
- Line repeaters not required if cable length is max. 1000 m.
- If cable length is beyond 1000 m., then it is allowed to mount 256 TP devices distributed over the several line segments (by using max. 3 line repeaters)

Smart home and building solutions.
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Join us
www.knx.org







❖ We explain to our students, **how to increase their knx partner ranking so:**

- We **encourage** partners to participate in all knx certified courses, buying the official ETS licenses, updating their K **KNX** NX knowledge.

❖ We explain to our students,

- how to become a **KNX expert** before beginning of basic course.
- Show them the way to be professional at **KNX** Field.



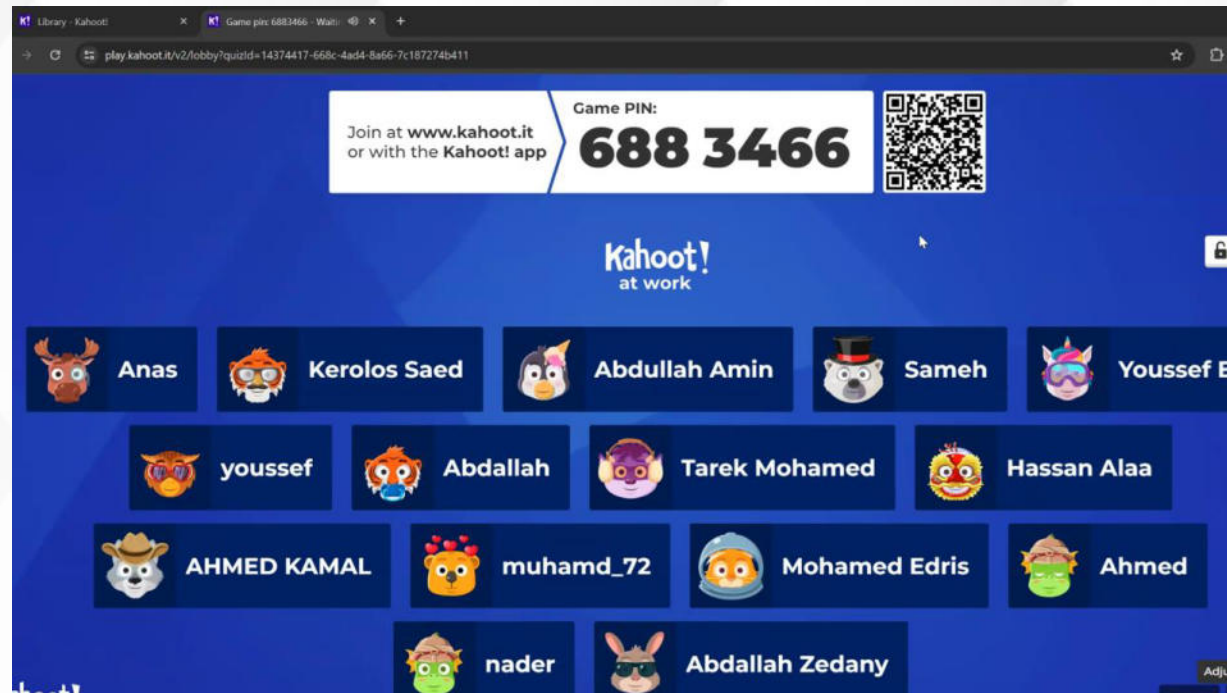


**PORTO KNX, WE MAKE LEARNING KNX
FREE, EASY, SIMPLE & ATTRACTIVE**

<<<<< 9- LIVE QUIZZES & PRIZES >>>>>

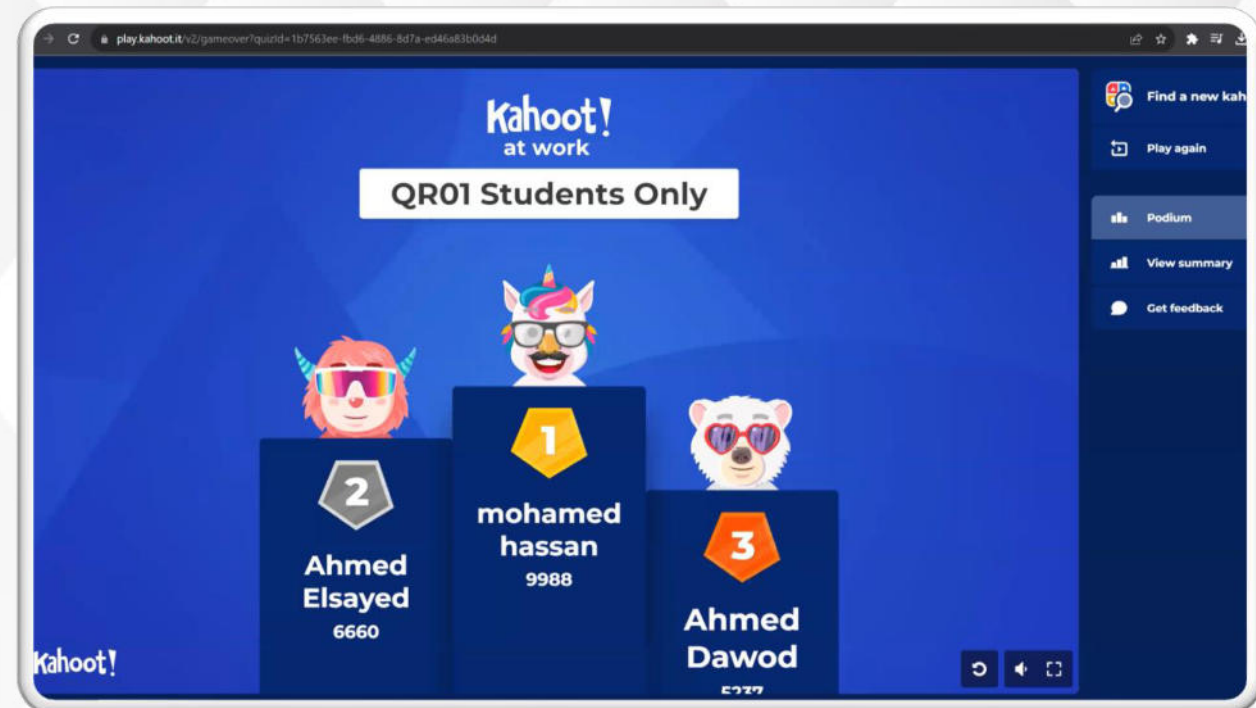
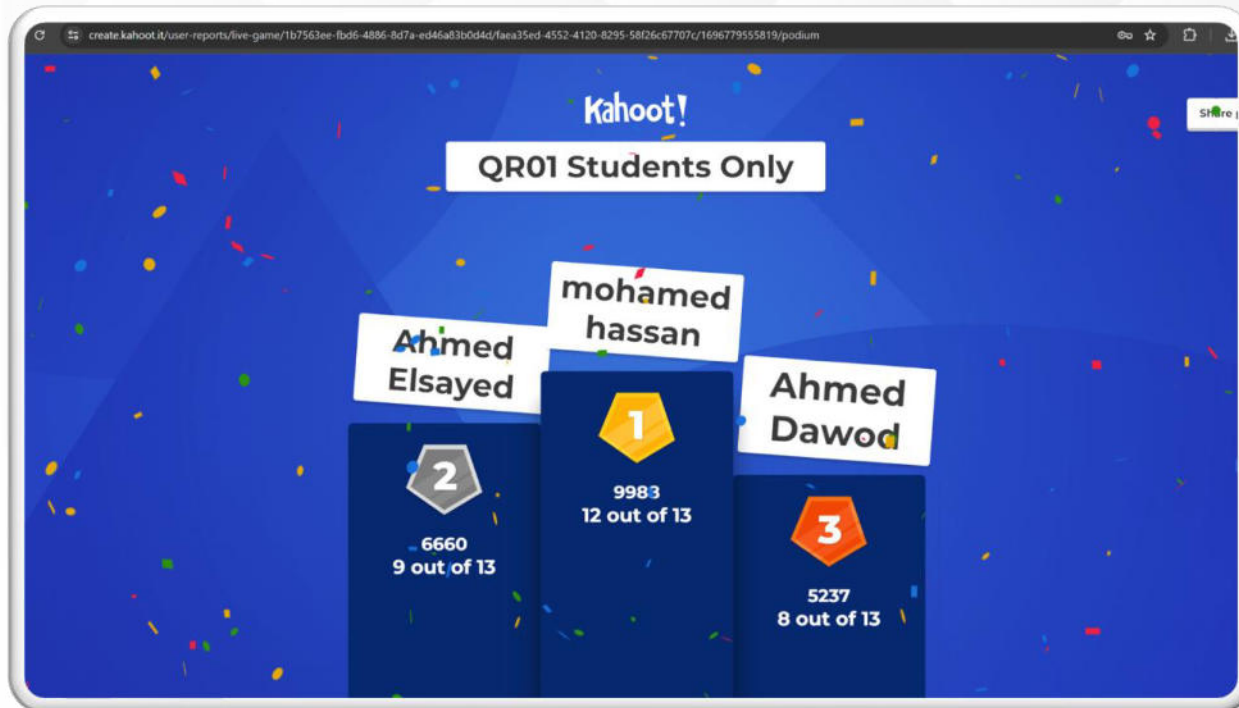


- ❖ We organized a lot of Live amazing quizzes using KAHOOT in funny way and offer all of our winners with amazing prizes like:
 - ❖ Free certified **KNX** Basic, HVAC Course.
 - ❖ Free Translated **KNX** Books.
 - ❖ Huge discounts for Certified **KNX** Courses.





- ❖ We organize quizzes as standalone sessions and after every free live course.
- ❖ This adds a nice and attractive element to our training for our trainees.





Live KNX Quizzes & Amazing Prizes



Kahoot! at work

QR01 Students Only

2	1	3
Ahmed Elsayed 6660	mohamed hassan 9988	Ahmed Dawod 5237

Kahoot!

Ramadan 2024 Quiz

2	1	3
Anas Abdullah 14363 15 out of 15	Anas Elbaz 14464 15 out of 15	Ali 14339 15 out of 15

Kahoot!

QR02-24

2	1	3
Mahmoud Ibrahim 14090 15 out of 15	MohamedRamadan 14137 15 out of 15	Mahmoud_Ebrahim 7 15

Runners-up

4 Abdurhman ... 5 MahmoudEb...

Kahoot! at work

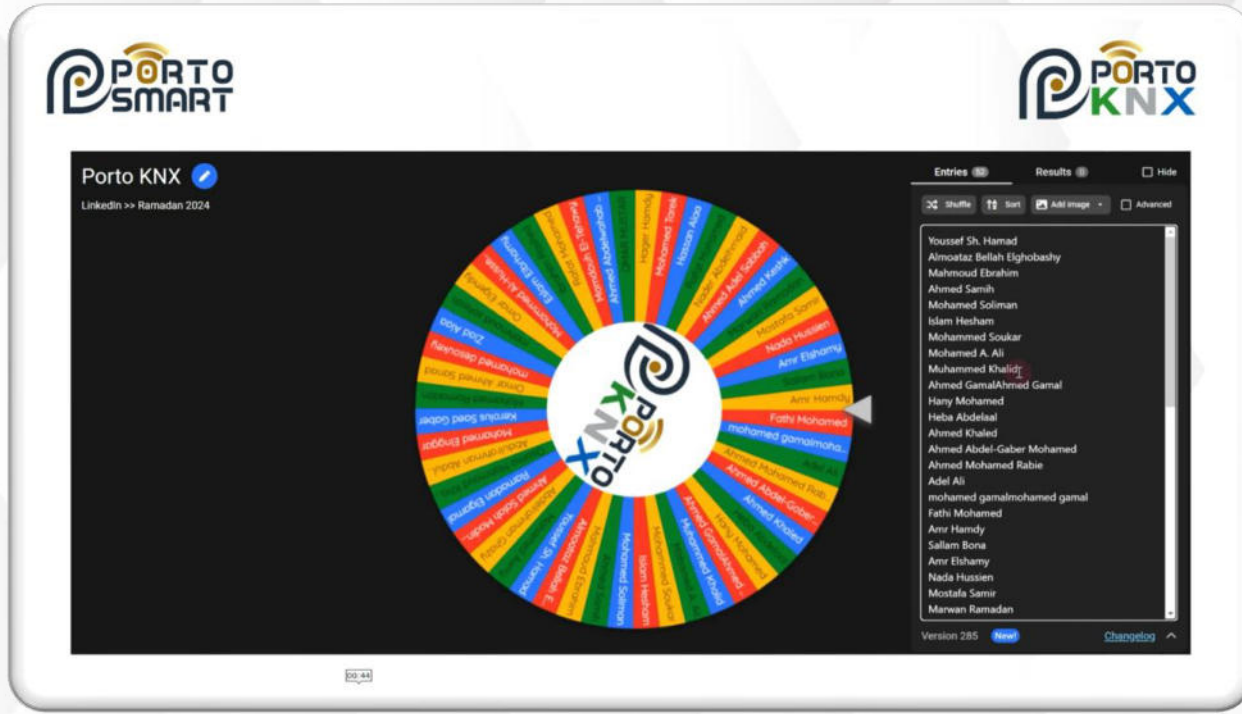
KNX HVAC 05-24

2	1	3
Abdallah 7525	nader 8626	Abdullah Amin 7272





❖ We organize another amazing quizzes and choosing winners between all subscribers





Live KNX Quizzes & Amazing Prizes



A screenshot of a live quiz interface. A large, colorful wheel of names is displayed. A white results window in the center shows the name "Eng-Moustafa Salah" with a confetti background. The interface includes a top navigation bar with "New", "Save", and "Share" options, and a sidebar with "Edit", "Results", and "Hide" buttons. A list of names is visible on the right side of the screen.

A screenshot of a live quiz interface. A large, colorful wheel of names is displayed. A blue results window in the center shows the name "Mohamed abada" with a dark background. The interface includes a top navigation bar with "Porto KNX" and a timestamp "024-01".

A screenshot of a live quiz interface. A large, colorful wheel of names is displayed. A yellow results window in the center shows the name "Nader Abdelhmaid" with a dark background. The interface includes the "PORTO SMART" logo on the left and the "PORTO KNX" logo on the right. A sidebar with "Entries" and "Results" buttons is visible.

A screenshot of a live quiz interface. A large, colorful wheel of names is displayed. A sidebar on the right shows a list of entries, including names like Talha farroug, Mostafa labib, Mahmoud suliman, and many others. The interface includes the "PORTO KNX" logo at the top and a "Version 283" indicator at the bottom right.





Live KNX Quizzes & Amazing Prizes



PORTO SMART PORTO KNX

Porto KNX Facebook Post → Ramadan 2024

Shady A Abdelhadi
Mawazin Ramadan

We have a winner! Congratulations

Marawan Ramadan

Close

Subscribe

PORTO SMART PORTO KNX

Porto KNX LinkedIn → Ramadan 2024

Hader Abdelhmad
Abdulrahman Abdulhameed

We have a winner! Congratulations

Abdulrahman Abdulhameed

Close

PORTO SMART PORTO KNX

Porto KNX Quiz 01

We have a winner! Congratulations

Ahmed ayman

Close

Spin Wheel

Tap to spin wheel

Mohamed Bakry
Ahmed Fahy
Abdelrahman Ramadan
Ahmed AmrView
Ali Hussein
Ahmed Mohamed
Mahmoud Yousef
Muhamad Elshafy
Ahmed Helal
Hehham Eberlady

Sotheby's

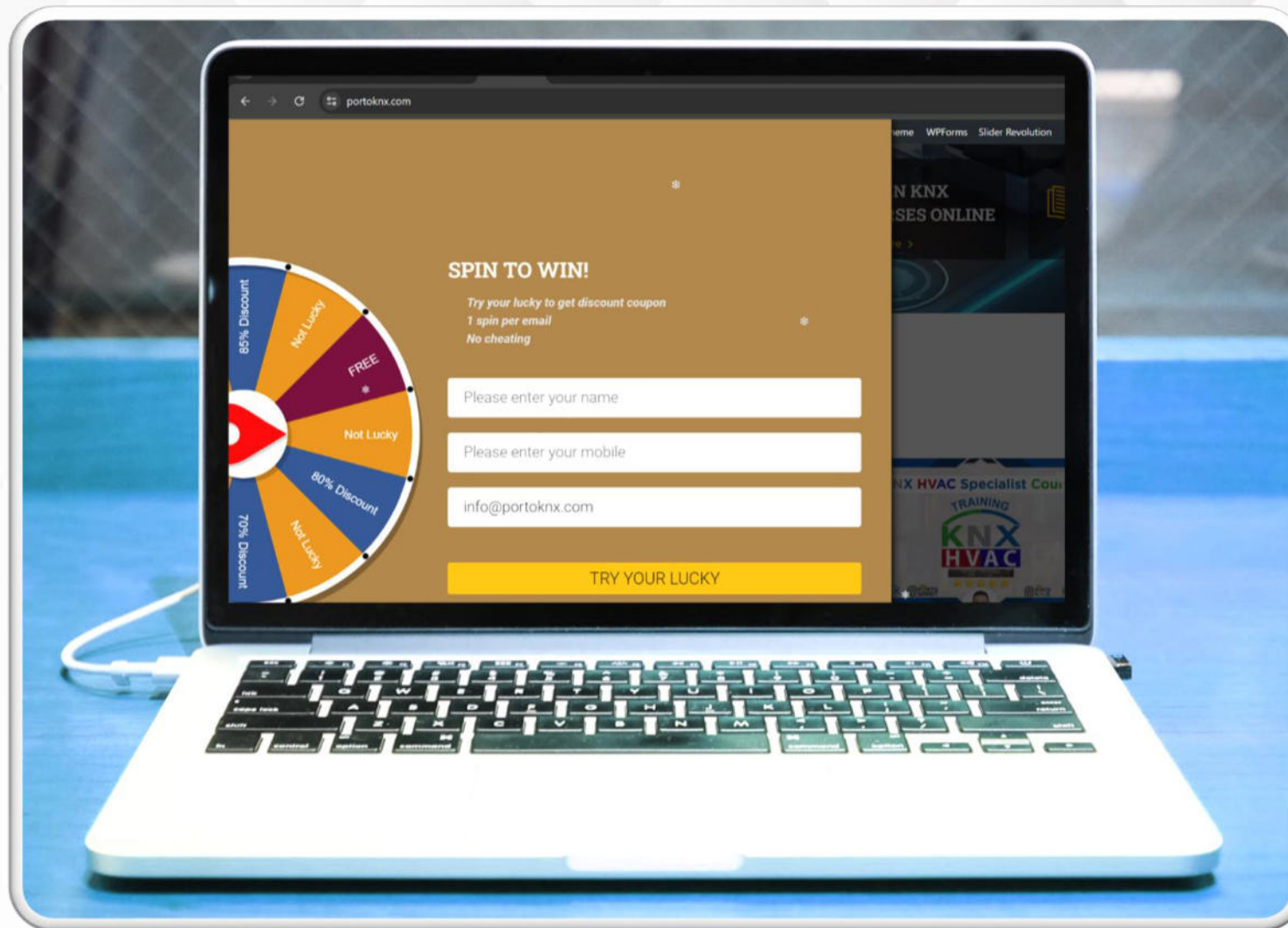
The Wolf Family Collection

BID NOW





❖ WE Developed Lucky wheel in our Website, spin and win Free Certified KNX Courses





**PORTO KNX, WE MAKE LEARNING KNX
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<<<< 10- KNX SUPPORT IN OUR SOCIAL GROUP>>>>

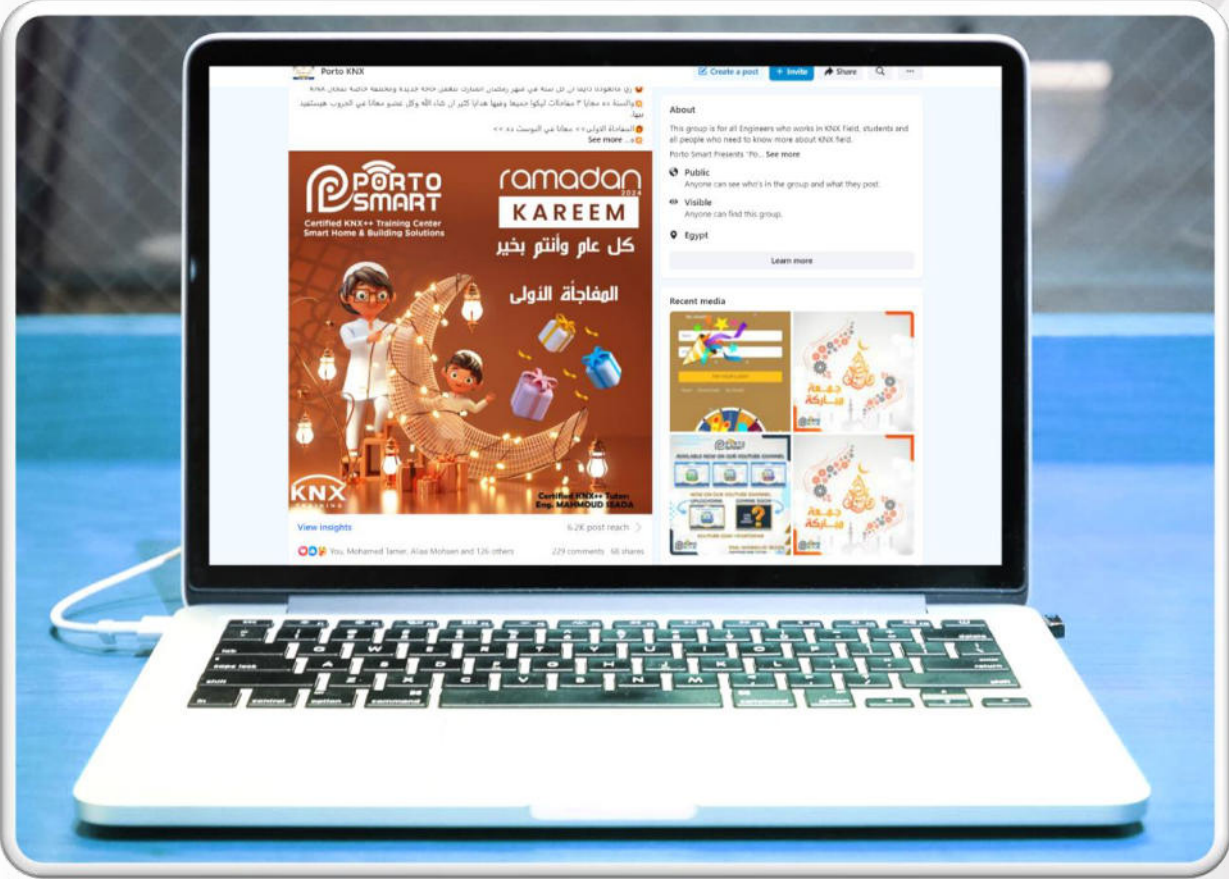
- ❖ We established a group on Facebook, one of the most popular social media platforms, dedicated to those interested in learning about KNX.
- ❖ “Porto KNX” group has thousands of followers who are eager to engage with KNX - related content.



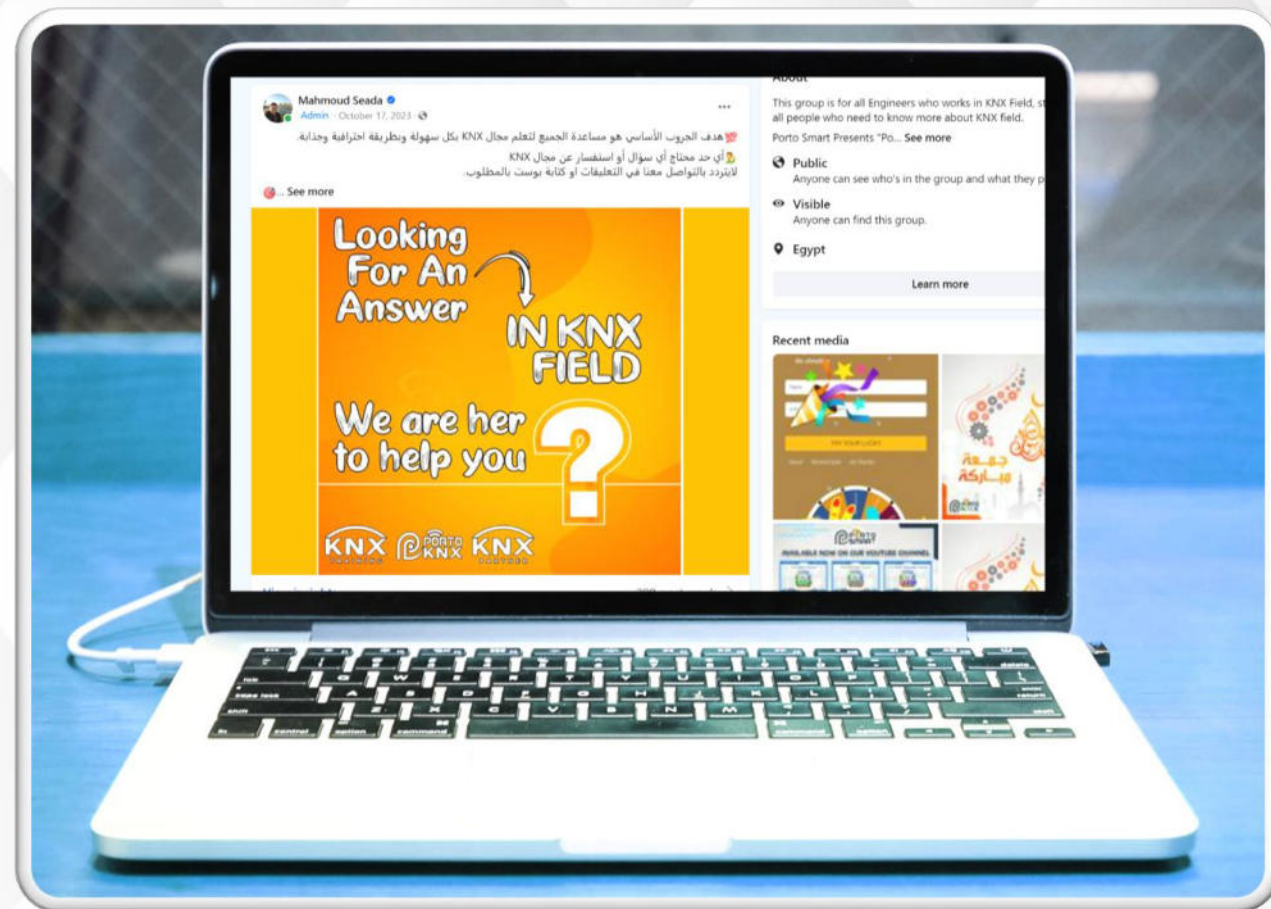
❖ Our group focuses solely on KNX news, posts, and projects, offering a variety of free certified courses presented in engaging formats such as quizzes in funny ways.



- ❖ We consistently share new educational resources on a daily basis and encourage members to ask any questions they may have.
- ❖ The response of our followers on our posts is very high and amazing.

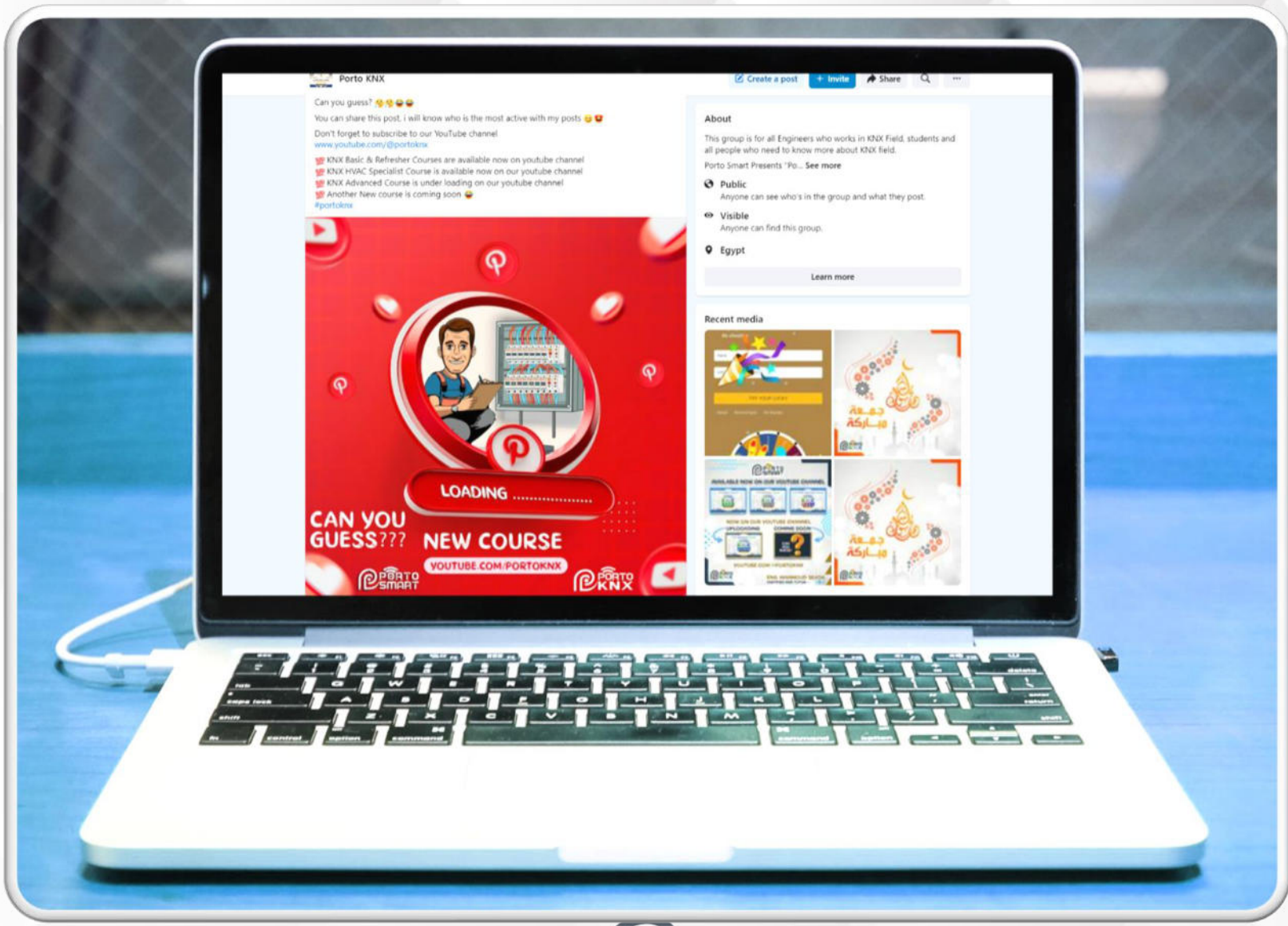


- ❖ Our team is committed to resolving any issues encountered by our followers in the **KNX** field and providing professional advice on how to excel in this area.
- ❖ We offer technical support to all our followers at no cost, addressing common problems that may arise during training.
- ❖ Additionally, we make it a priority to respond to all comments and questions posted by our followers.





Social Groups For Support all KNX Trainees





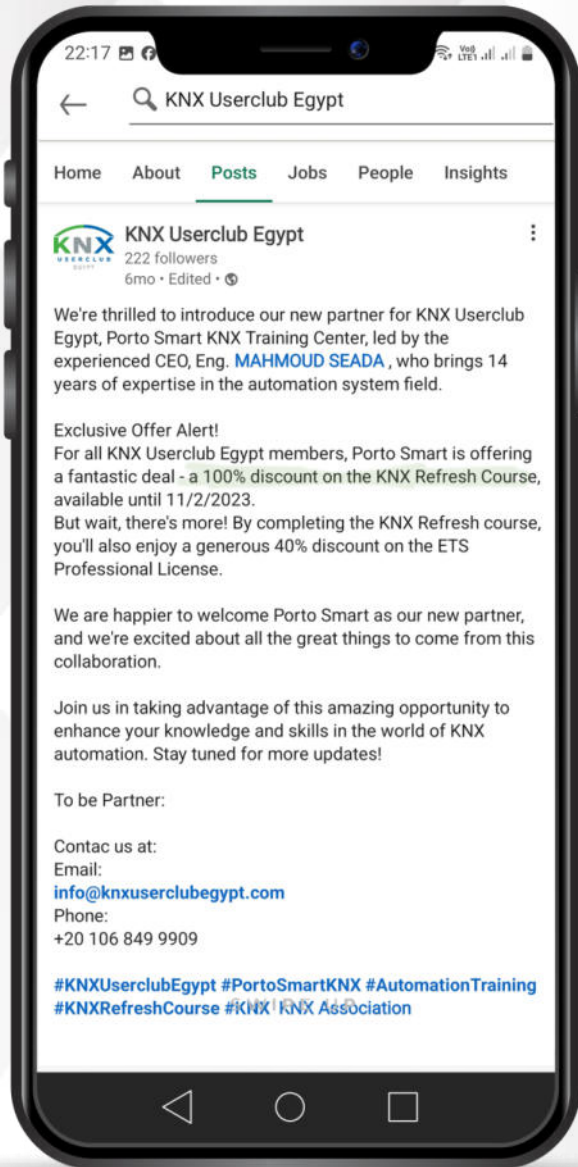
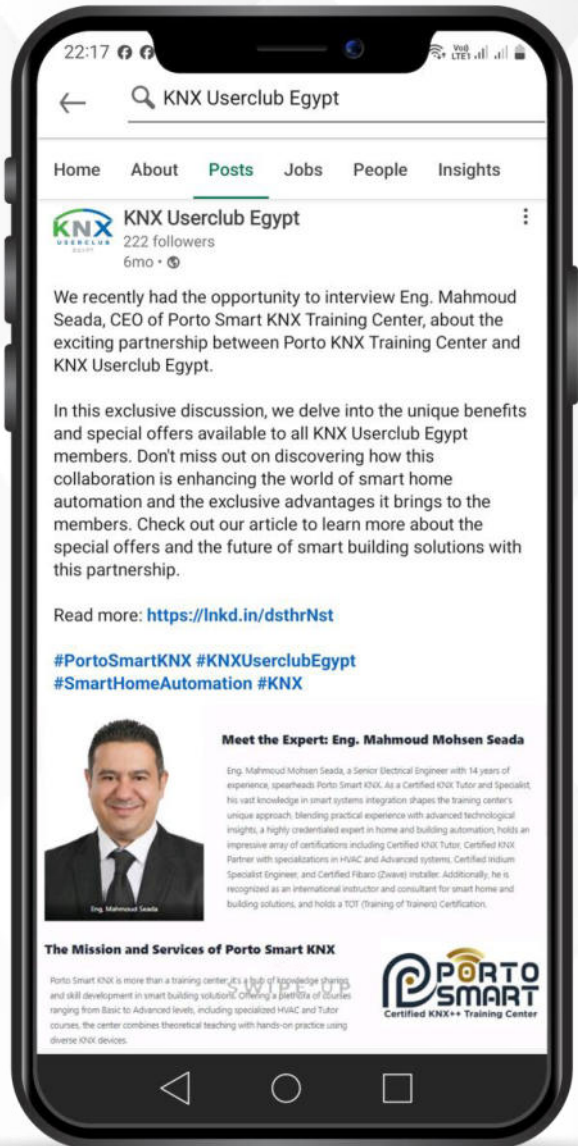
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<<< 11- SUPPORT MEMBERS OF KNX USER CLUB EGYPT >>>

- ❖ We are thrilled to be a part of the **KNX User Club Egypt** community! Our main objective is to provide training services for learning **KNX** in an easy and free manner.
- ❖ As a way to support and encourage all **KNX** ers to join this certified community, we are excited to offer a **FREE Certified KNX Refresher** course for all club members.



Support of KNX User Club Egypt Members





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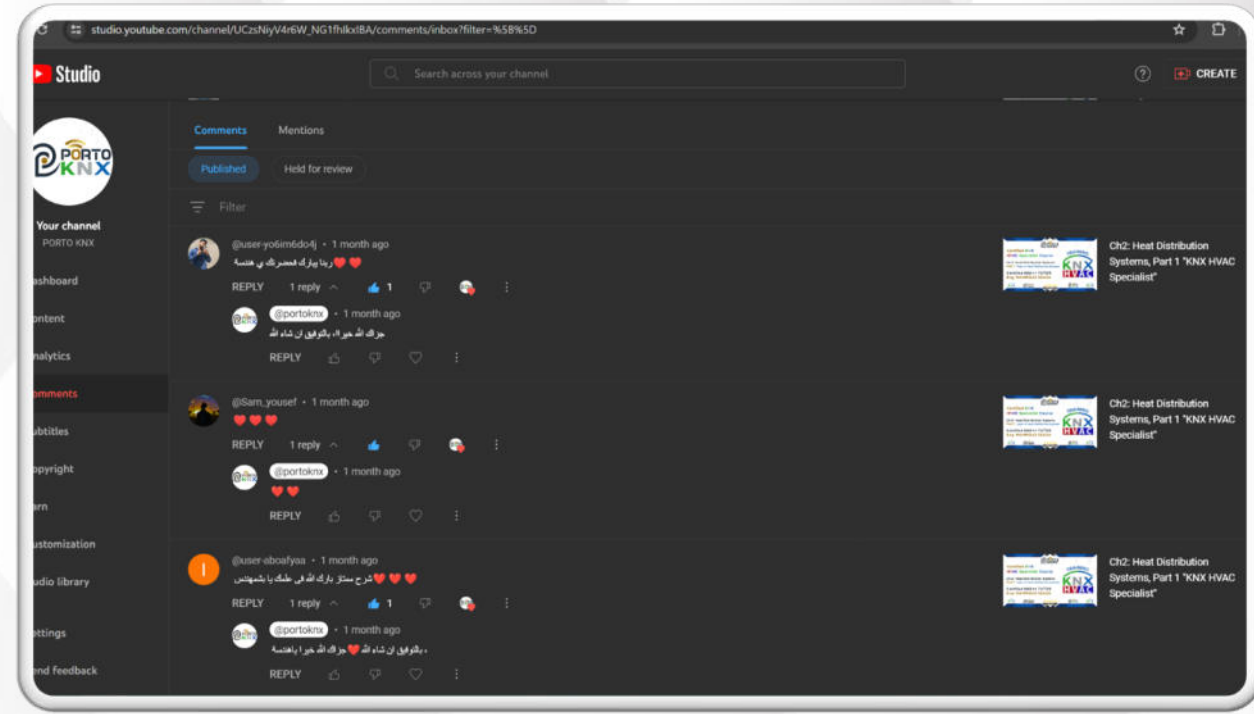
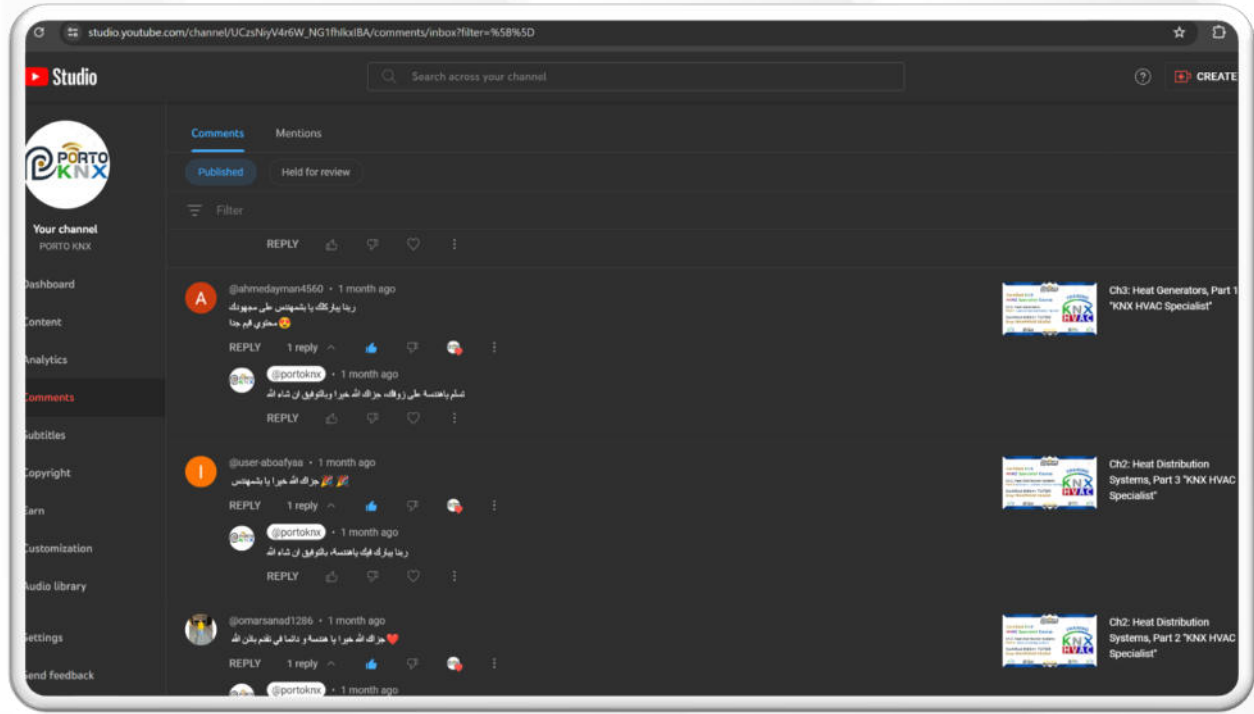
<<< 12- REVIEWS ABOUT OUR FREE LEARNING PLATFORMS >>>



- ❖ Porto **KNX** has put in a significant effort to make Learning **KNX** easy and attractive for FREE.
- ❖ The positive feedback received on our extensive Learning project speaks for itself.
- ❖ Our trainees have shared glowing reviews about the resources used in this educational initiative.
- ❖ They particularly appreciate the quality of our videos and courses.
- ❖ Now we will show some of these testimonials as a sample from these huge comments

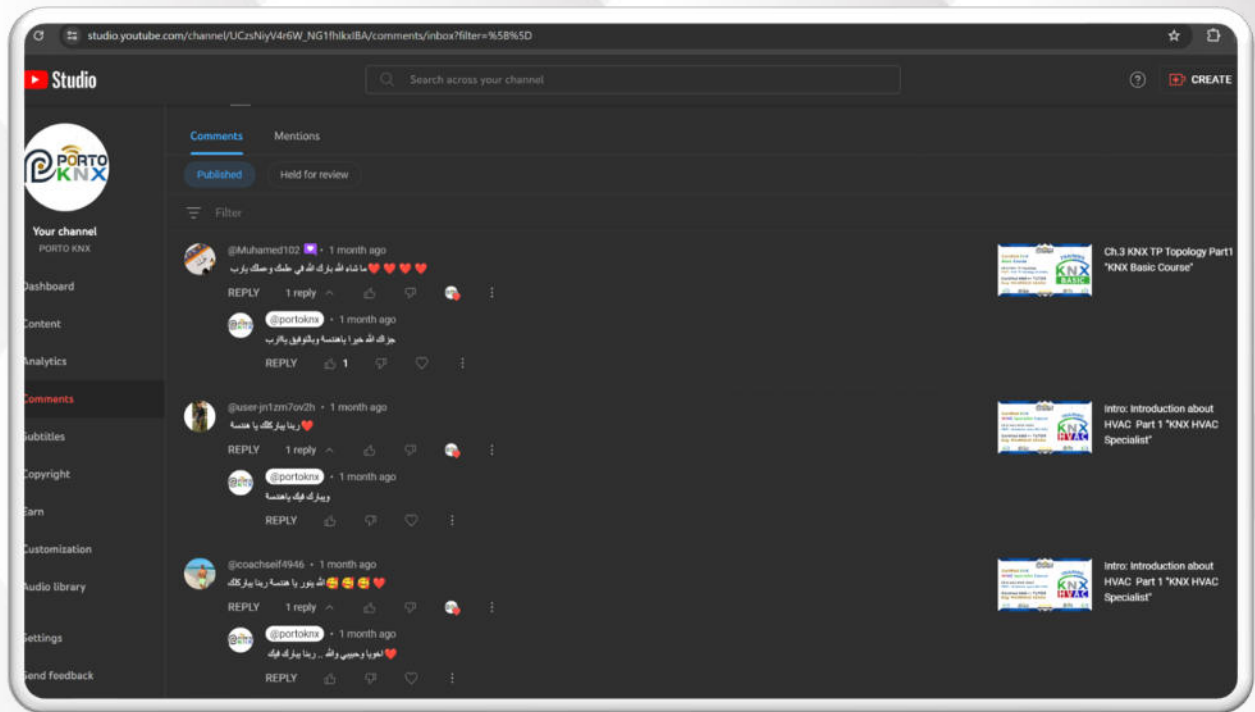
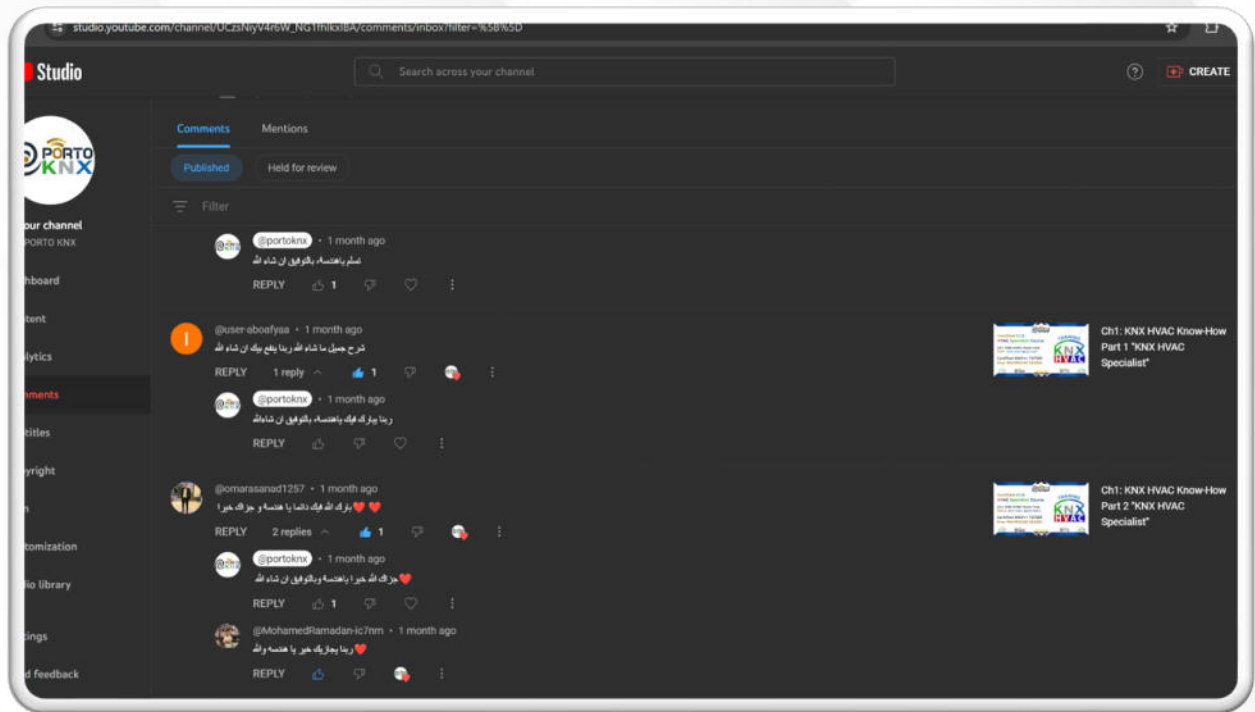


❖ Some Reviews of our trainees on our Videos



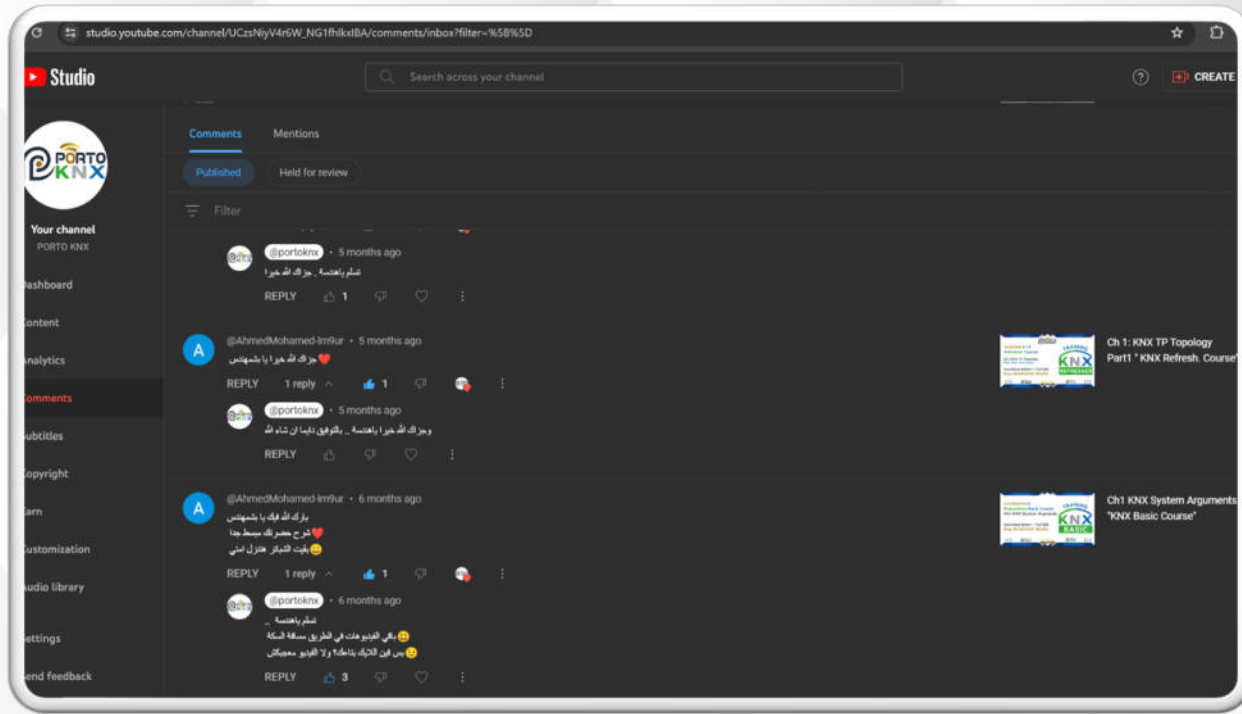
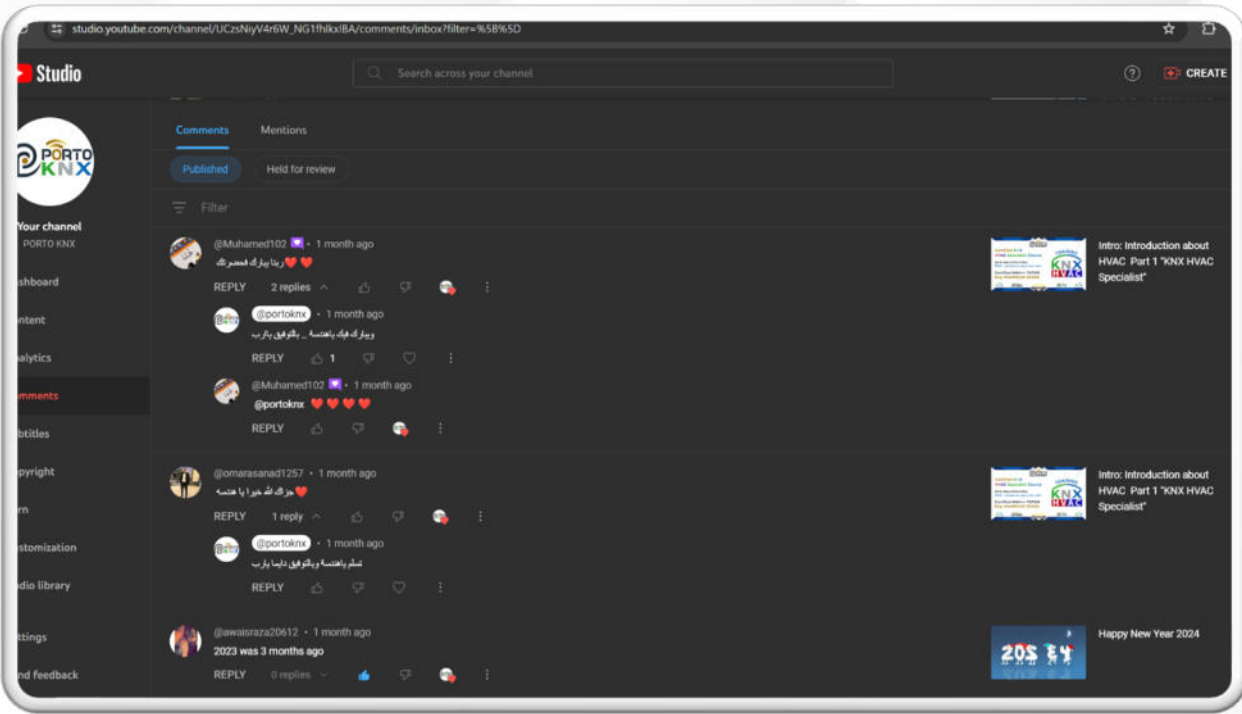


❖ Some Reviews of our trainees on our Videos



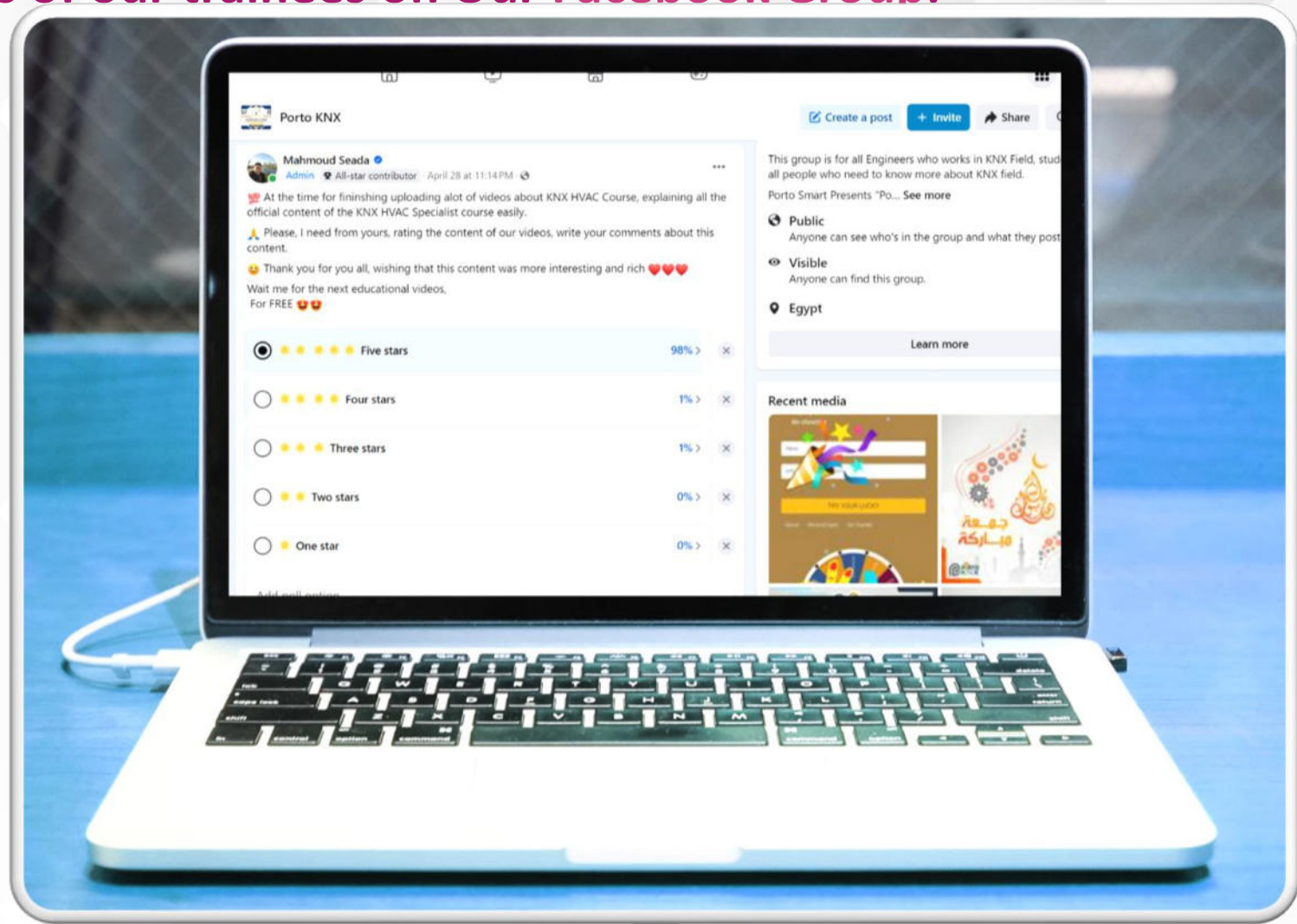


❖ Some Reviews of our trainees on our Videos

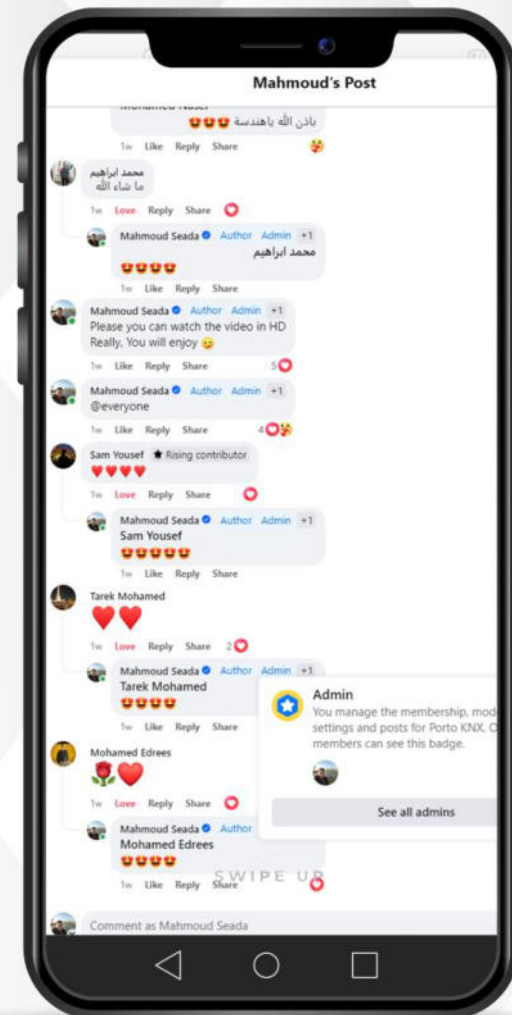
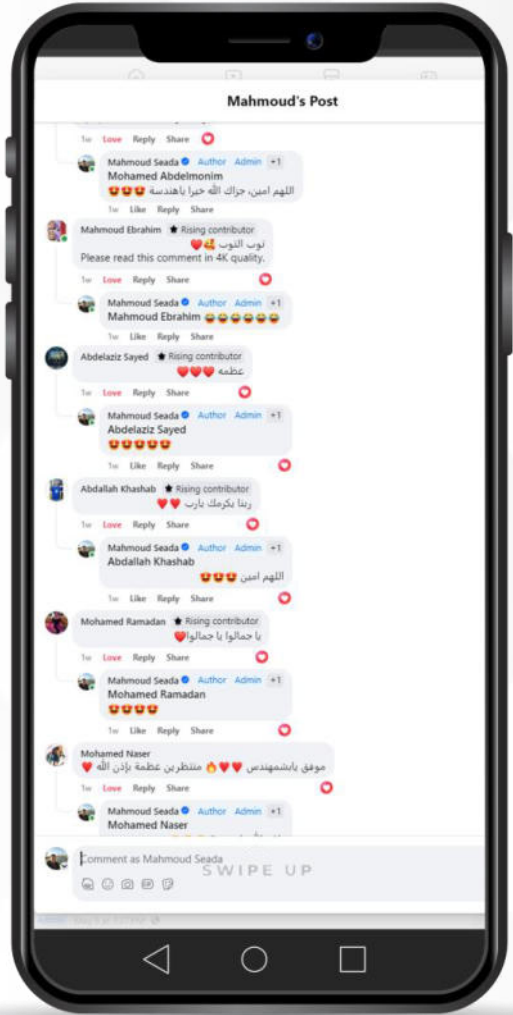




❖ Some Reviews of our trainees on Our Facebook Group:

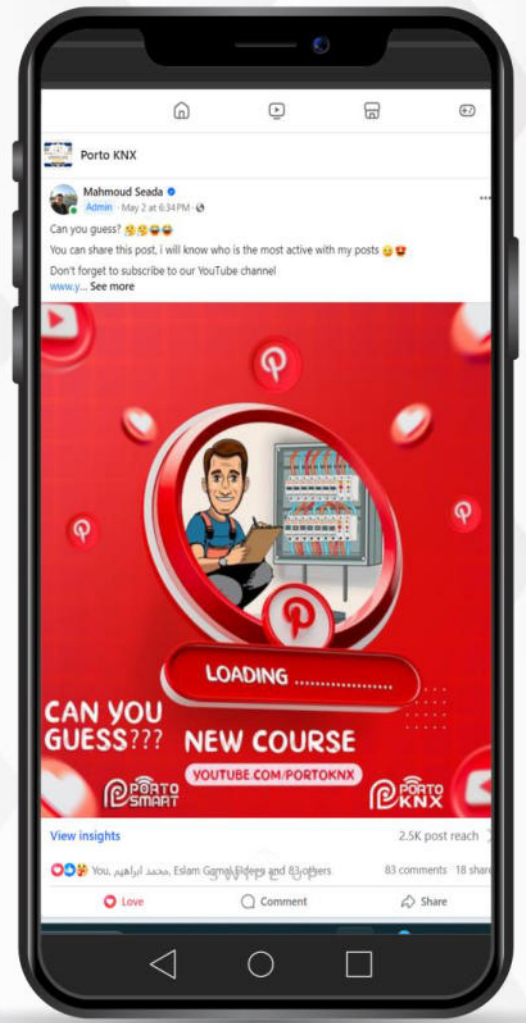
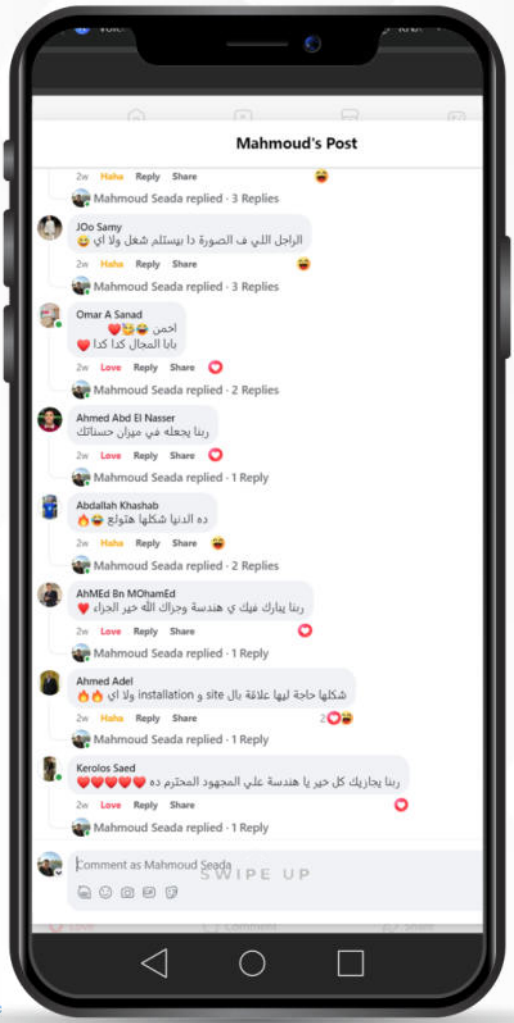


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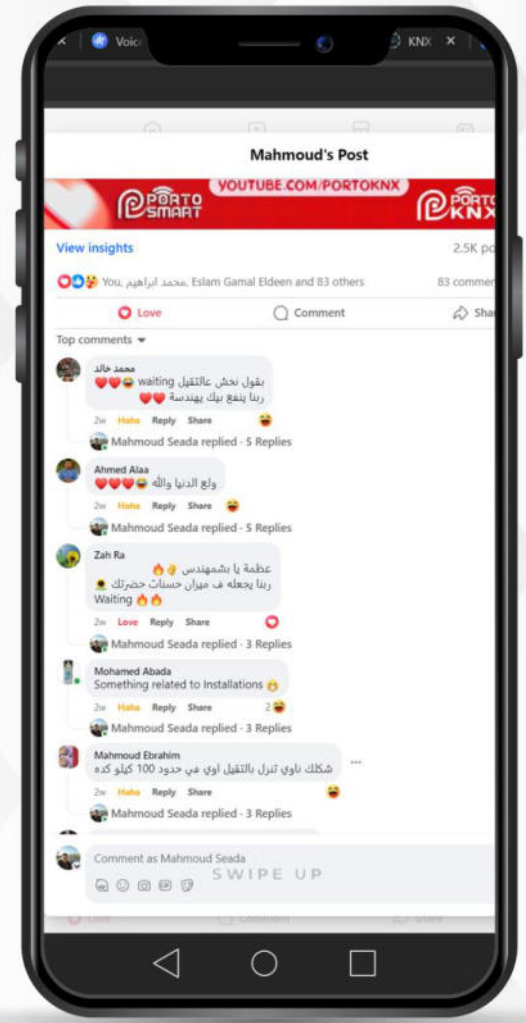


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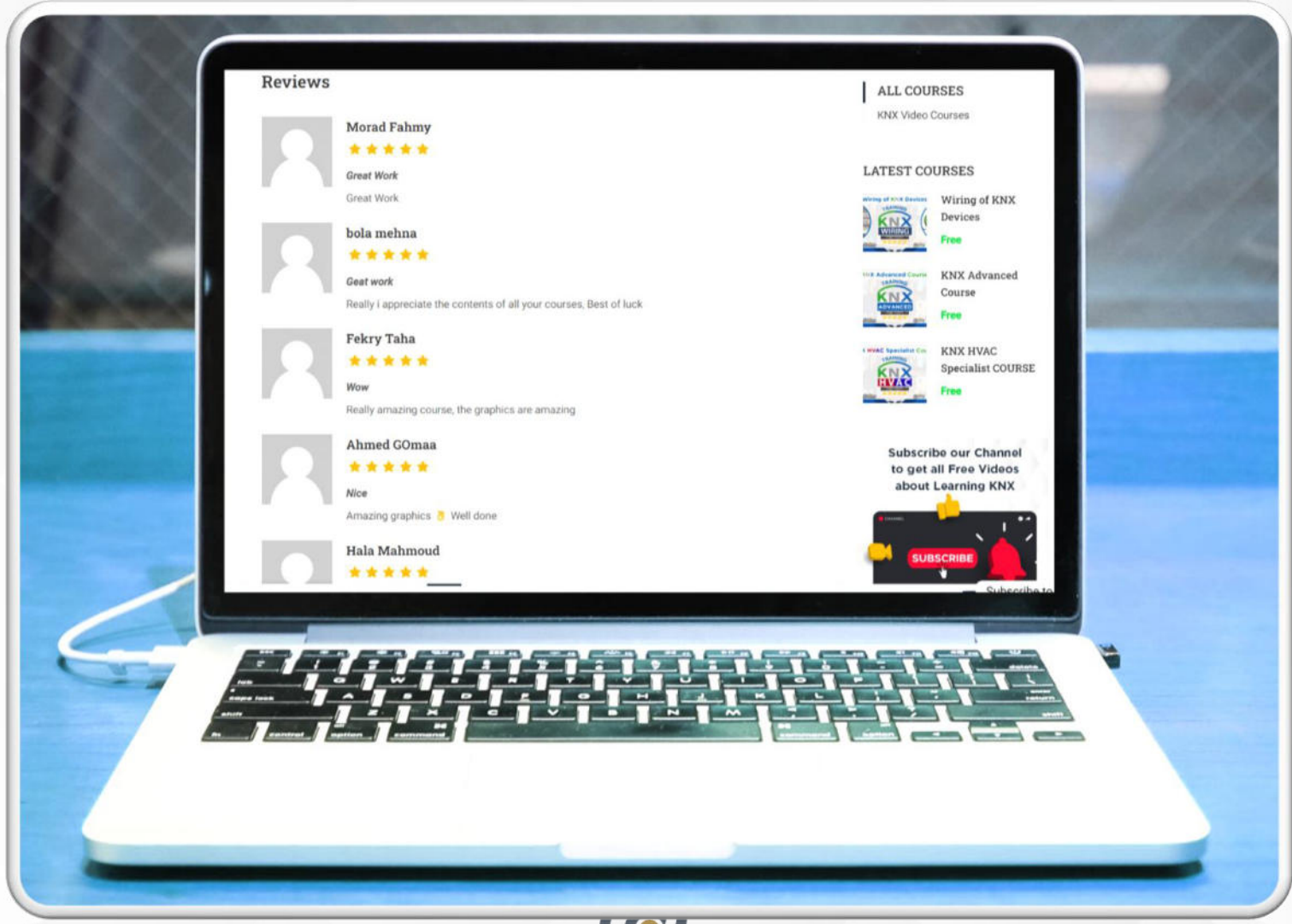


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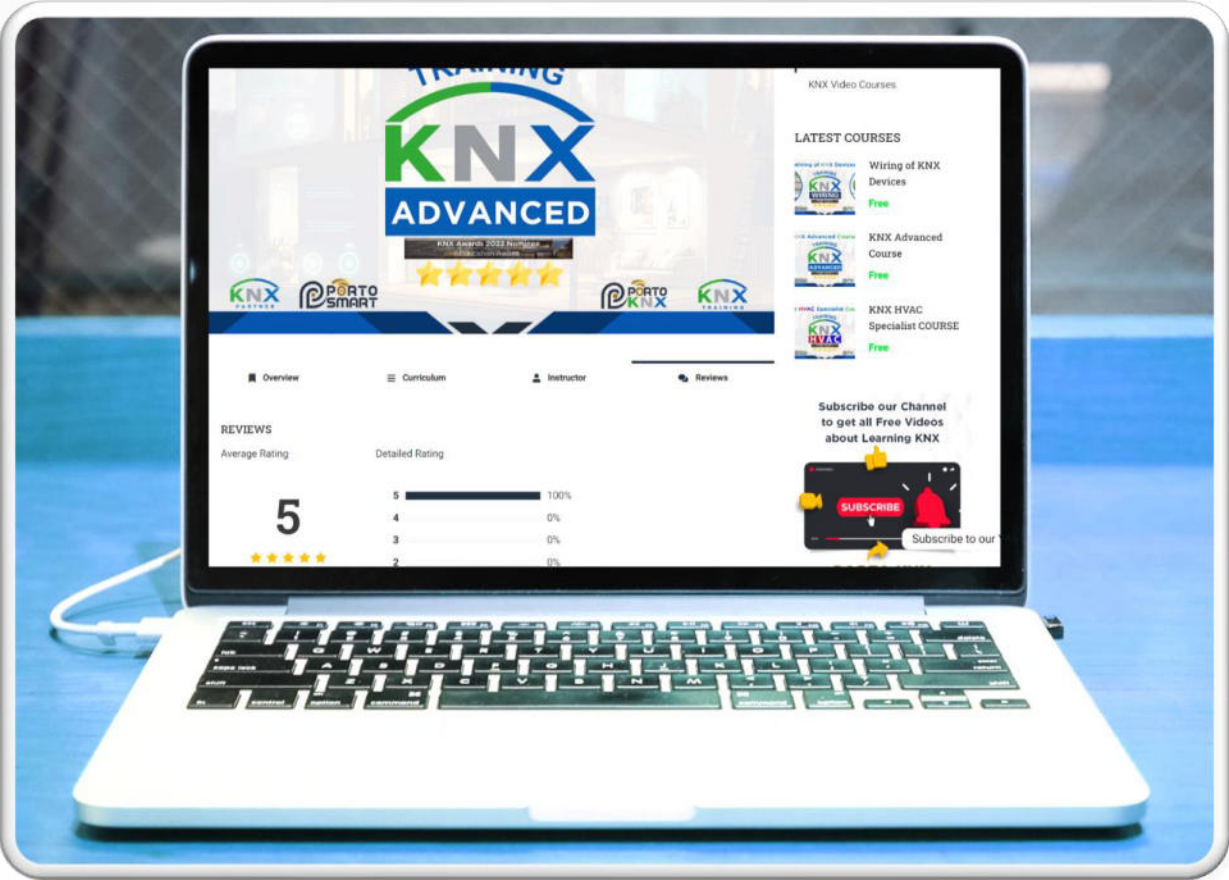


❖ Some Reviews of our trainees on Our Online Courses Web :



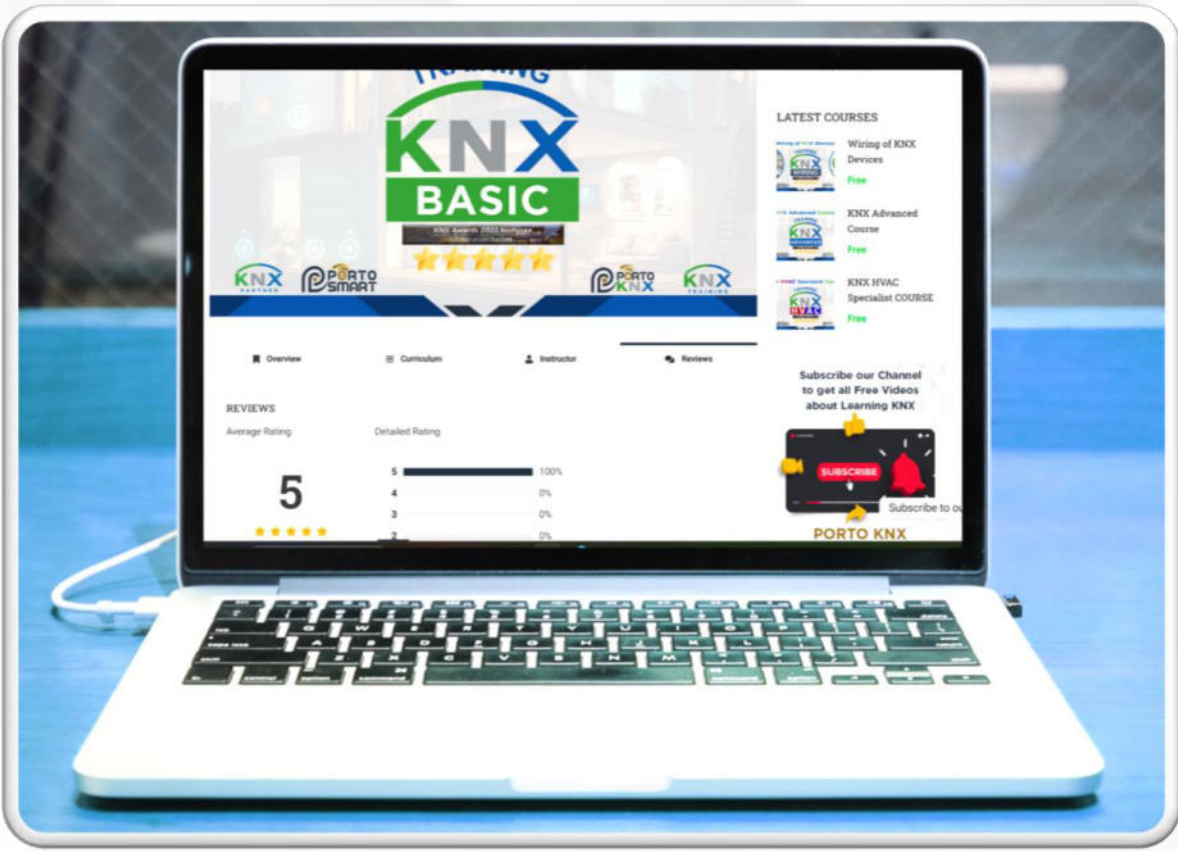


❖ Some Reviews of our trainees on Our Online Courses Web :





❖ Some Reviews of our trainees on Our Online Courses Web :





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<<<<< CONTACT US >>>>>



SCAN ME





Contact us on:

 **Website:** www.portoknx.com

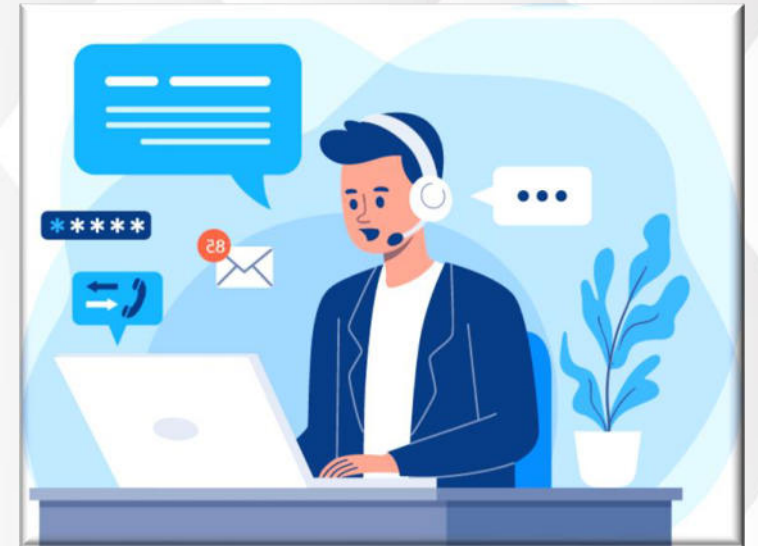
 **YouTube:** www.youtube.com/@portoKNX

 **E-Mail:** info@portoknx.com

 **Facebook:** www.fb.com/groups/PortoKNX

 **WhatsApp:** +2 01010007260

 **LinkedIn:** www.linkedin.com/company/porto-smart/





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<<<<< THANK YOU >>>>>