



# Heating, Cooling, Ventilation with KNX

Training offer

# HVAC Training

**New training: "Heating, cooling and ventilation with KNX" (2 days)**



## Contents

*The new course "Heating, cooling and ventilation with KNX" broadens your knowledge of the already existing advanced course with a wide range of practical exercises and additional topics.*

### Basic know-how:

Temperature, heat, thermal energy, thermal capacity, humidity, dew point, formation of condensation and its consequences, ...

### Heat distribution systems:

Thermal comfort, temperature profiles, heat distribution systems, heat pumps, heating surfaces, heating fittings, heat meters

### Heat generators:

Operation of mini CHP plants and heat pumps, solar heat, conventional heat generators, domestic water heating

### In-depth understanding of control and regulation:

Continuous-action and switching controllers, practical setting of the control parameters not only for individual room thermostats

### Heating control:

Regulation of flow temperature and room temperature, significance of hydraulic balancing, ...

### Domestic water heating:

Storage / flow-through principle, avoidance of legionella, heat exchangers, ...

### Increase in energy efficiency

with KNX through individual room temperature control dependent on room usage, influence of flow temperature, influence of domestic water temperature, influence of pressure of the circulating pump, ...

### KNX interfaces / gateways for heat generators



## Your benefits

You will receive solid, basic knowledge about HVAC applications in home and building technology using KNX. Important HVAC terms, contexts and typical HVAC components are clearly explained using practical examples. You will be technically qualified to communicate with HVAC manufacturers and specialists.

## Target group

- Primarily specialists in electro-technology
- with experience in electrical installation
- with experience in / knowledge of installation in the HVAC sector

## Previous knowledge

- Successful completion of the KNX basic course with certification exam
- Successful completion of the KNX advanced course with certification exam (preferable)

## Certificate

After passing the final exam, you will receive the official KNX certificate.

## Dates

The first course will be held on 13 and 14 September 2017 at BFE in Oldenburg. Go to [www.bfe.de](http://www.bfe.de) for information and to register.

*You can find future courses offered by other training facilities at the following link:*

<http://start.knx.org/>

# Training on-site

Training on-site organised by certified training centers offer a possibility for newcomers and experienced KNX users to become a certified KNX Partner by:

- KNX Basic Courses: Introduction into the KNX Technology and the ETS (Engineering Tool Software)
- KNX Advanced Courses: Deepening the KNX knowledge

- KNX Tutor Courses: For all those who want to offer themselves certified trainings

Successfully completed certified KNX courses, organised by KNX certified training centers, allow to be registered as new KNX Partner. All KNX Partners receive as welcome present a voucher for a free of charge ETS Lite license and a further voucher for a discounted upgrade from ETS Lite to ETS Professional.



## How do I subscribe for a course?

Go to [www.knx.org](http://www.knx.org), look for a training center that complies with your expectations and login to your MyKNX account (<https://my.knx.org>). Under the menu item "My Account go to "My Subscriptions" and thereafter to "Subscribe to a KNX certified course".

# Many Ways, one Target

### Three easy ways to become an expert in KNX

#### On-site Training

- **KNX Basic Course**  
Getting familiar with KNX and become a certified KNX Partner
- **KNX Advance Course**  
Extend your KNX Knowledge
- **KNX Tutor Course**  
Become a KNX Trainer

#### Online Training

- **ETS eCampus**  
Free online training for beginners
- **KNX Webinars**  
Interactive KNX Presentations
- **Online KNX Basic Course**  
Preparation for certified Courses

#### Literature

- **KNX Brochures**  
Brochures about all aspects of KNX
- **KNX Books**  
Introduction books as well as official training course documentations
- **3<sup>rd</sup> Party literature**  
Various languages about further aspects of KNX by independent authors

KNX acceptance is on the way up at a rapid rate and training is an integral part of this continuing success. Regardless of whether you just immerse yourself into the world of KNX or you want to make KNX part of your business, a wide range of training possibilities exists for everyone. "Start@KNX" brings together all options.

"Start@KNX" offers an overview of the various training options, accompanying material and identifies how teaching materials and methods can effectively be used in order to increase knowledge about KNX.

<http://start.knx.org/>



[www.knx.org](http://www.knx.org)