

TRAINING KNX



**How to become a Certified
KNX Training Centre**



What is a Certified KNX Training Centre

Many training centers around the world have in the past years decided to offer training courses on home and building control systems to their students, as they quite rightfully see the technology as the future of conventional installation techniques.

Many of the above training centers have again quite rightfully decided to focus on KNX, the worldwide standard for Home and Building Control, complying to ISO/IEC 14543-3.

For those training centers that offer training courses meeting requirements set by the KNX Association in Brussels, it is possible to apply for KNX certification. KNX Association operates this Certification Scheme for Training Centres, in order to ensure minimum requirements of all institutions operating the „KNX Course“ (or similar courses) throughout the world.

In this way, anyone anywhere in the world, interested in the KNX technology, can apply to attend KNX certified training at one of the in the mean while *more than 170 training centers in 31 countries*, where he/she is sure that the same standardized minimum KNX knowledge will be conveyed.



Advantages of becoming a Certified KNX Training Centre

- Right to hand out KNX certificates to students after successful exam, after which they can apply for *KNX partnership*
- *ETS Lite for FREE* for your students once registered for the course
- *Rebates* for your students when purchasing ETS licenses
- Considerably reduced price for ETS Professional licenses used in the KNX certified courses
- Access to constantly updated electronic *KNX training documentation*.
- Use of the *KNX Training logo* (on letter headed paper, envelopes, business cards etc)
- Listing of center in *KNX International Database* that can be consulted via the KNX Association web pages (if desired).
- Free publicity in the *KNX Journal* upon application
- Free copies of the *KNX Journal* for distribution to students
- Right to participate to the *KNX Training Centre Conference* organized by KNX Association



Types of Certified KNX Training Centres

Training Centers can apply for following types of KNX certification:

- **KNX certified training centre:** training centre with or without ISO-9001 certification, which is accredited by KNX Association for the *organization of basic courses*.
- **KNX+ certified training centre:** training centre which is accredited by KNX Association for the *organization of basic as well as advanced courses*.
- **KNX++ certified training centre:** training centre which is accredited for the *organization of tutor seminars*.



Certified KNX Courses

Three different KNX course levels have been standardized by KNX Association with the following content:

types	KNX Basic Course	KNX Advanced Course	KNX Tutor Course
Topics	<ul style="list-style-type: none"> ✓ KNX System Arguments ✓ KNX Communication ✓ KNX TPI Topology ✓ KNX TPI Telegram ✓ KNX Bus Devices ✓ KNX TPI Installation ✓ KNX Powerline PLI I/O ✓ ETS Project Design: Basic ✓ ETS Project Design: Advanced (informative) ✓ ETS Commissioning ✓ ETS Diagnostics 	<ul style="list-style-type: none"> ✓ Fail-safe planning ✓ Flags ✓ Heating ✓ Integrated applications ✓ Interworking ✓ Couplers ✓ Lighting Control ✓ Security Technology ✓ Logic Operations ✓ Visualization systems ✓ Supplementary tools 	<ul style="list-style-type: none"> ✓ KNX Requirements for Training Centers ✓ Structure and Scope of KNX Association ✓ KNX Software ✓ History of Bus Systems ✓ Serial data transmission - KNX Protocol ✓ Microcontrollers ✓ Application program ✓ IP Communication ✓ KNX Certification Scheme for Products
Exams	<ul style="list-style-type: none"> • Theoretical • Practical 	<ul style="list-style-type: none"> • Practical 	<ul style="list-style-type: none"> • Theoretical
Certificate	KNX Partner	KNX Advanced	KNX Tutor

Requirements

Tutor knowledge

It is indispensable that a KNX certified internal or external tutor conducts the theoretical part of the KNX basic course. KNX certified KNX tutor training is offered at the following KNX++ certified training centers: <http://www.knx.org/knx-partners/training-centres/list/>.

KNX material

Each student working station shall be equipped with at least: KNX power supply, KNX devices for dimming, switching, blinds control and a line coupler. On the student's PC at least an ETS Lite shall be installed, either licensed by the training center itself or the free Lite available upon course registration installed by the student on his/her laptop.

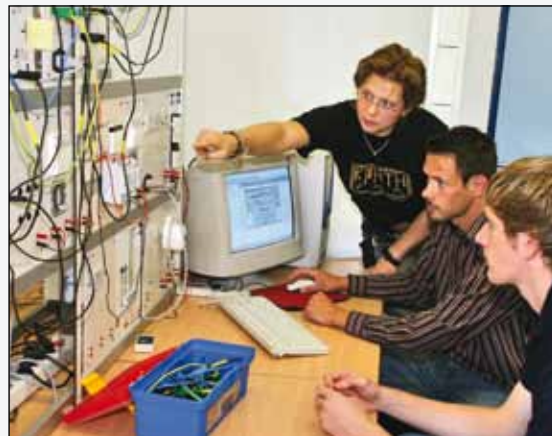
Facilities

KNX courses shall be conducted in rooms equipped with at least:

- Large image projection
- Blackboard (traditional or digital)
- The tutor PC shall be loaded with an ETS Professional license.

Cost

A symbolic annual cost per certified KNX Training Centre of 500 Euros is charged at the end of each year.



Berufsbildende Schule Metalltechnik • Elektrotechnik der Region Hannover



The KNX Certification procedure for Training Centres

Phase	Phase explanation
Registration	The interested Training Centre completes the KNX questionnaire for certification and returns it to KNX Association (with a statement whether it's an application for KNX certification or -when desired – KNX+ certification). The Training Centre is subsequently registered and has access to the current electronic version of the KNX training documentation. The "registered" Training Centre may convey the KNX technology but are unable to issue certificates that are accepted as a basis for partnership. Important: Registration status expires after one year and can be extended.
Authorisation	When the registered Training Centre has proved compliance to the minimum requirements, it shall be subsequently authorised for the organisation of basic courses with KNX exam and/or (when applied for) advanced courses. The authorisation phase is restricted to 2 basic courses with KNX exam or 2 advanced courses and lasts one year. Important: An authorized Training Centre may organize two courses concluded with a certificate.
Inspection	Compliance to the ISO 9001 standard is recommended. On the basis of supplied documentation, the entire set of KNX requirements is checked for compliance. Important: Training centres that have already been KNX certified for the organisation of basic courses can apply for extension of their certification to advanced courses by the submission of documents showing the compliance of the additional requirements.
Certification	KNX Association grants the respective KNX certificate after successful assessment of the requested documentation.
Surveillance	When the training centre is certified according ISO 9001, the continued compliance to the requirements is checked by a renewed submission of an ISO 9001 certificate after three years. When the training centre has not been certified according ISO 9001, KNX Association has at any time the right to request documentation at the certified training centre showing the continued compliance to the KNX requirements. These documents must reach KNX at the latest 3 weeks after KNX' request. KNX Association has the right to organise surprise inspections at KNX certified training centres.



Contact / Documentation

For further information, do not hesitate to contact KNX Certification Department via:

Tel: +32.2.7758590

Email: certification@knx.org

For additional information, see also

- www.knx.org/knx-partners/training-centres/about/
- www.knx.org/knx-partners/training-centres/joining/
- www.knx.org/knx-partners/training-centres/documentation/