



**Bosch Building Technologies Academy
Training Catalog 2022**

Dear customer,

We would like to welcome you to our Bosch Building Technologies Academy. Within this catalogue you will have access to an overview of the various training courses that we offer.

We offer a broad range of training courses across various Business Units domain, such as:

- **Video Systems:** Imagine when you know what's next. You can respond before potential situations occur and predict new business opportunities. AIoT video systems from Bosch deliver the Power to Predict, are built on trust, and support sustainable business practices.
- **Intrusion and Access Control systems:** Access management is an essential component of building security. It is the process of granting authorized users the right to enter certain buildings, areas and rooms, while preventing access to non-authorized users. Sounds simple, but today's market also wants access management systems that are easy to set up and use. Access management systems must also be easily scalable and able to integrate with other security domains like video and intrusion systems. And perhaps, most importantly, today's market wants access management systems that are highly resilient and always available.
- **Communication Systems:** Part of the Bosch Group, the Bosch Communications Systems family of brands offers the world's most complete portfolio of professional audio and communication solutions.
- **Fire Alarm Systems:** Keeping people safe is our first priority. In order to protect lives and property, it is vital to quickly locate, detect, verify and contain fires. Our fire detection systems stand for reliability, innovation, flexibility and the pioneering use of artificial intelligence worldwide.

This document is valid for 2022. Training and information provided can be subjected to changes, e.g. trainings may be cancelled in case there are not enough participants. For further details, please refer to the terms & conditions at our Bosch Building Technologies Academy, following this [link](#).

If you wish to contact us, please do through this e-mail:
boschsecurity.training@bosch.com

Contents

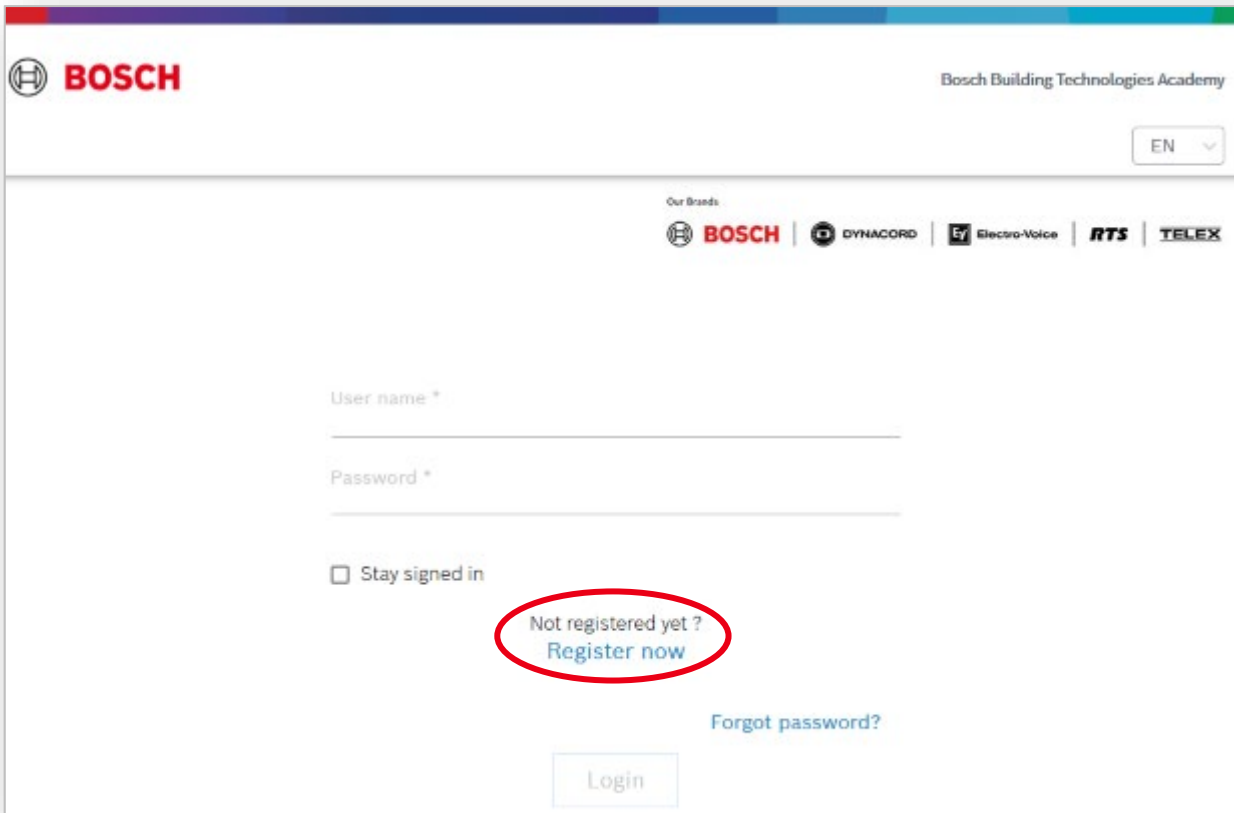
Starting at Bosch Building Technologies Academy	6
Types of training and classes	7
Certifications and Recertifications.....	8
Certifications.....	8
Recertifications	9
Types of Documents.....	10
Booking Information	11
Calendar	12
VIDEO SYSTEMS.....	15
Learning path - Bosch Video Systems Commercial Certification	16
Bosch Video Systems Commercial Certification	17
Learning path - BVMS Commercial Certification	18
BVMS Commercial Certification.....	19
Learning path - BVMS Technical Certification.....	20
BVMS Technical Certification.....	21
Learning path - BOSCH Video Camera Technical Certification	22
BOSCH Video Camera Technical Certification.....	23
Learning path - BOSCH DIVAR IP AIO Technical Certification	24
BOSCH DIVAR IP AIO Technical Certification	25
Learning path - BOSCH Video Analytics Technical Certification Training	26
BOSCH Video Analytics Technical Certification Training.....	27
Learning path - Cyber (Data) Security Technical Certification Training.....	28
Cyber (Data) Security Technical Certification Training	29
COMMUNICATION SYSTEMS	30
Learning path – Acoustics Basics	31
Acoustics Basics – Professional Level.....	32
Learning path – Dynacord Install Electronics.....	33

Dynacord Install Electronics – Professional Level	34
Dynacord Install Electronics – Expert Level	35
Learning path - OMNEO / Dante Networking	36
OMNEO / Dante Networking – Professional Level	37
OMNEO / Dante – Expert Level.....	39
Learning path – Retail Partner	41
Retail Partner - Professional Level	42
Retail Partner - Expert Level	43
Retail Partner - Master Level	44
Learning path – Live Sound Partner	45
Live Sound Partner - Professional Level.....	46
Live Sound Partner - Expert Level	47
Live Sound Partner - Master Level	48
Learning path – Install Partner.....	49
Install Partner - Professional Level.....	50
Install Partner - Expert Level.....	51
Install Partner - Master Level.....	52
Learning path - IRIS-Net Basic GUI Programming	53
IRIS-Net Basic GUI Programming – Expert	54
IRIS-Net Advanced GUI Programming – Master	55
Learning path – PRAESENSA	56
PRAESENSA – Professional Level.....	57
PRAESENSA – Expert Level	58
PRAESENSA – Master Level.....	59
Learning path - PAVIRO.....	60
PAVIRO - Professional Level.....	61
PAVIRO - Expert Level	62
PAVIRO - Master Level	63
Learning path – PRAESIDEO	65
PRAESIDEO – Professional Level	66
PRAESIDEO – Master Level	67

Learning path – PLENA MATRIX	69
PLENA MATRIX – Professional Level	70
Learning path – DICENTIS	71
DICENTIS – Professional Level.....	72
DICENTIS – Expert Level	73
DICENTIS – Master Level	74
Learning path - RTS Intercom Full Range Training.....	75
RTS Intercom Full Range Training - Professional Level	76
RTS Intercom Full Range Training - Master Level	77
Learning path - TELEX Radio Dispatch.....	78
TELEX Radio Dispatch - Master Level.....	79
ACCESS CONTROL AND INTRUSION SYSTEMS.....	81
Learning path - Bosch Building Integration System (BIS) technical certification.....	83
Bosch Building Integration System (BIS) technical certification	84
Learning path - Bosch Access Control Systems Technical Certification.....	85
Bosch Access Control Systems Technical Certification	86
FIRE ALARM SYSTEMS	87
Learning path - AVENAR panel series	88
AVENAR panel series Technical Certification, Professional Level.....	89
AVENAR panel series Technical Certification, Expert Level	90
AVENAR panel series Technical Certification, Master Level	91
AVENAR panel series: What’s new – for certified FPA-5000 users.....	92
Additional online trainings.....	93

Starting at Bosch Building Technologies Academy




As the first step, you need to register in the Bosch Building Technologies Academy. You can do that by clicking [here](#).



BOSCH Bosch Building Technologies Academy

EN

Our Brands

 **BOSCH**  **DYNACORD**  **Electro-Voice** **RTS** **TELEX**

User name *

Password *

Stay signed in

Not registered yet?
[Register now](#)

[Forgot password?](#)

Login

Please, whenever possible register with your commercial e-mail and address.

Types of training and classes



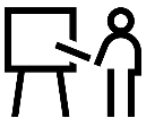
Online training courses

These types of training allow you to the tasks at your own speed. Just start whenever and wherever you like, pause when necessary, and continue where you left off.



Virtual classes

These classes are online and are given by a trainer. It has real-time interaction between students and trainer.



In person classes

These types of classes are in person. And they are usually set at one of our Bosch facilities.



Training Plans

A set of courses grouped together to provide you with a more complete knowledge about a given subject. Most of our courses are organized in training plans.

Certifications and Recertifications

Certifications

These are a special kind of training plans. Carefully created to enable you to have the most complete knowledge about a product, taking into consideration the level of proficiency you need. The levels being:



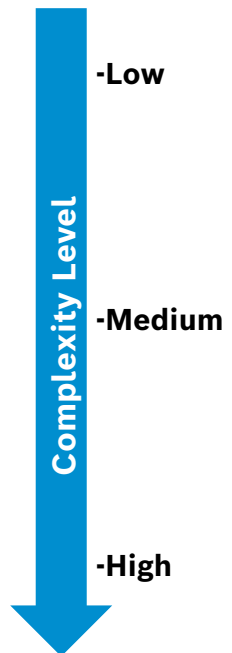
1st) Professional level - provides basic knowledge of product features and system architecture.



2nd) Expert level - provides basic knowledge of system design and/or configuration for lower complexity systems.



3rd) Master level - provides advanced knowledge in systems configuration, as well as in integrated systems and troubleshooting.



We are looking forward to soon having you **Certified** in one or more of our products!

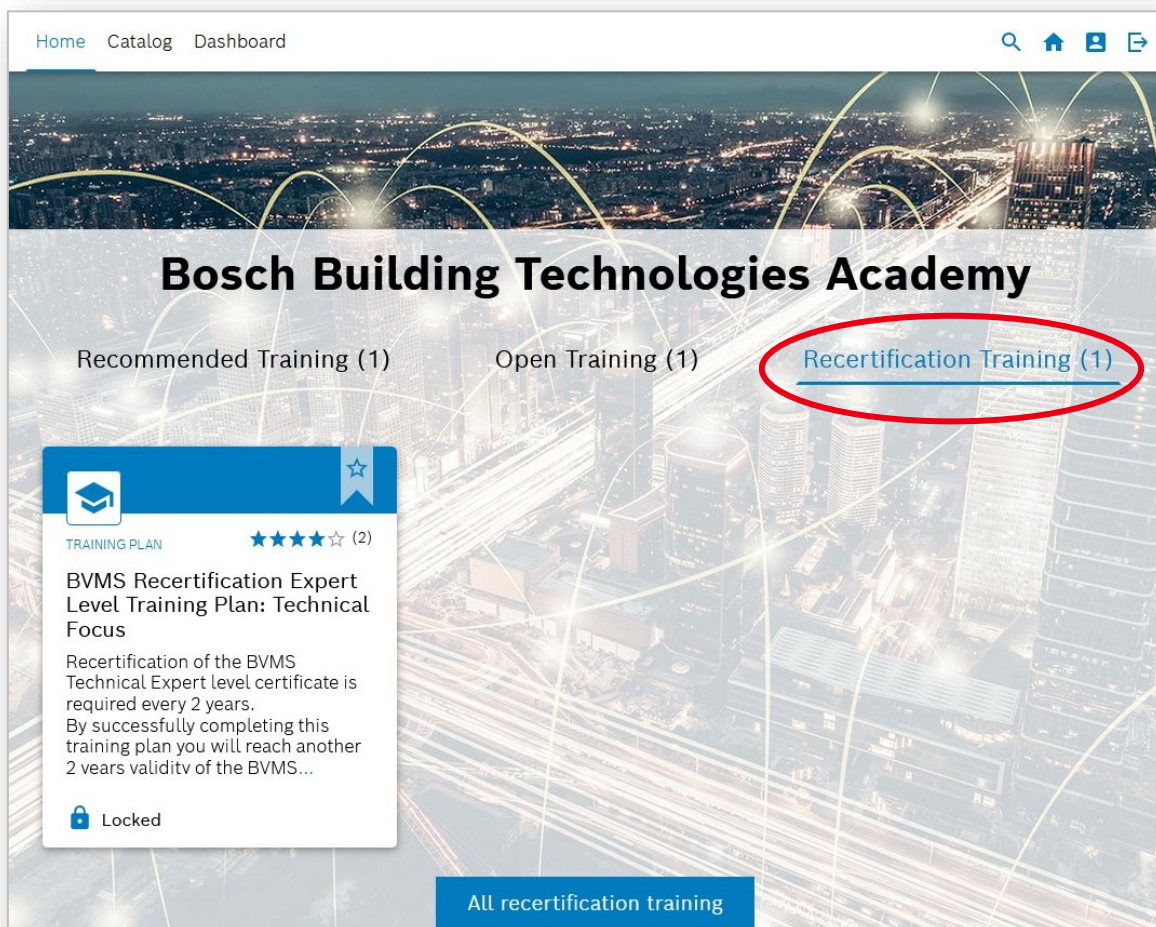


Take in consideration that you cannot start a higher level without completing first the lower ones.

Recertifications

Since we are always seeking to improve our products and services, it is important to keep you up to date. So, our certification expires after two year. After that, you obtain access to a recertification training which provides you all the information needed to stay updated. You have 1 year to do the recertification. And it's online and quick!

You can find the recertification training available to you here:



The screenshot shows the Bosch Building Technologies Academy website interface. At the top, there are navigation links for 'Home', 'Catalog', and 'Dashboard', along with search, home, and user icons. The main header reads 'Bosch Building Technologies Academy'. Below this, there are three categories of training: 'Recommended Training (1)', 'Open Training (1)', and 'Recertification Training (1)'. The 'Recertification Training (1)' link is circled in red. A training plan card is visible, titled 'BVMS Recertification Expert Level Training Plan: Technical Focus'. It includes a star rating of 4.5 (2 reviews) and a description: 'Recertification of the BVMS Technical Expert level certificate is required every 2 years. By successfully completing this training plan you will reach another 2 years validity of the BVMS...'. The card is marked as 'Locked' with a lock icon. At the bottom of the page, there is a blue button labeled 'All recertification training'.

Types of Documents

We mainly have two types of documents:



You receive a **Confirmation of Completion** every time you complete online training courses, in person or virtual classes.



You receive a **Certificate** only when you complete all the courses and exams of Expert or Master certification level.

Booking Information

How to book an in-person or virtual class:

- Click on the link of the class in the calendar.
- Select the class you wish to register. **1**
- Confirm the information and proceed with the registration. **2**
- Get in touch with the sales contact of your country to make the payment.
- Check if there are any online prerequisites to be completed before attending the class.

Dates	Location	Open seats	Status	
08/10/2021 - 08/12/2021	Virtual Room	Waiting list	<input type="radio"/> Not registered	Details / Register
09/07/2021 - 09/08/2021	Shatin, New Territories	3 registrations available	<input type="radio"/> Not registered	Details / Register
10/20/2021 - 10/20/2021	Milan	4 registrations available	<input type="radio"/> Not registered	Details / Register
11/03/2021 - 11/04/2021	Campinas, SP	10 registrations available	<input type="radio"/> Not registered	Details / Register
11/16/2021 - 11/17/2021	Shatin, New Territories	3 registrations available	<input type="radio"/> Not registered	Details / Register

Class details

Overview

Course: AVENAR panel series training - Expert
 Code: F_L_F2_E_F_2007_AVEX/58
 Class title: Grasbrunn / 08102021
 Location: Virtual Room
 Price: 600 EUR / person
 Open seats: Waiting list
 Registration period: 01/01/2021 - 08/08/2021
 Status: Not registered

Schedules

Dates	Location	Trainer
08/10/2021 08:00 AM - 11:00 AM	Virtual Room VirtualRoom-FIR Virtual Room . Virtual Room	Ronald Marier
08/11/2021 08:00 AM - 11:00 AM	Virtual Room VirtualRoom-FIR Virtual Room . Virtual Room	Ronald Marier
08/12/2021 08:00 AM - 11:00 AM	Virtual Room VirtualRoom-FIR Virtual Room . Virtual Room	Ronald Marier

[Register](#)

Please be aware that, usually, there are mandatory online training courses as prerequisites to be able to attend the in person and virtual classes. This will help you to fully focus on the complex content the classes offer, and you won't lose time dealing with basic information. Thus, this prerequisite exists in some training courses.



Also, please check if the training plan you are doing gives a certification if that's what you are trying to achieve. Some training plans only give a confirmation of attendance, so be aware of this.

The prices for in-person and virtual training are based on pricing for the full course. All prices exclude VAT.

Calendar

Training			2022					
	Course to register	Training Plan with prerequisites	January	February	March	April	May	June
AI	BIS Expert	Link		1-4 (virtual) (EN)	14-18 (virtual) (EN)		2-6 (virtual) (EN)	20-24 (virtual) (EN)
	BIS Master	Link			21-25 (Virtual) (EN)			
	AMS Expert	Link	19-20 (virtual) (EN)	16-17 (virtual) (EN)	9-10 (virtual) (EN)	25-26 (virtual) (EN)	18-19 (virtual) (EN)	15-16 (virtual) (EN)
VS	BVMS Expert	Link	25-28 (Eindhoven) (EN)	8-11 (Grasbrunn) (DE)	8-11 (Grasbrunn) (EN)	5-8 (Grasbrunn) (EN)	3-6 (Eindhoven) (EN)	28-30 (Grasbrunn) (EN)
				22-25 (Eindhoven) (EN)	22-25 (Eindhoven) (EN)	11-14 (Eindhoven) (EN)	17-20 (Grasbrunn) (DE)	
	BVMS Master	Link		23-25 (Virtual) (EN)				
	Video Analytics	Link		21-22 (Grasbrunn) (DE)	15-17 (Eindhoven) (EN)			8-10 (Eindhoven) (EN)
	Cyber Security	Link			2-4 (virtual) (EN)	20-22 (virtual) (EN)	10-12 (virtual) (EN)	21-23 (virtual) (EN)
FIR	AVENAR Panel Series Training - Expert	Link	19-20 (virtual) (EN)	14-15 (virtual) (DE)			9-10 (virtual) (EN)	
							30-31 (virtual) (DE)	
	AVENAR Panel Series Training - Master	Link	17-18 (virtual) (DE)	16-17 (virtual) (DE)			11-12 (virtual) (EN)	1-2 (virtual) (DE)
CO	Dynacord & Electro-Voice Install Training	Link		21-23 (virtual) (EN)			16-18 (virtual) (EN)	

	Course to register	Training Plan with prerequisites	January	February	March	April	May	June
CO	<u>Dynacord & Electro-Voice Retail Training (Loud & Clear Academy)</u>	<u>Link</u>					10-11 (Straubing) (EN)	
	<u>PROMATRIX 9000 Master</u>	<u>Link</u>			1-3 (virtual) (DE)	5-7 (virtual) (DE)		
	<u>PROMATRIX 6000 Master</u>	<u>Link</u>		22-24 (virtual) (DE)				21-23 (Straubing) (DE)
	<u>PROMATRIX 8000 Master</u>	<u>Link</u>						27-30 (Straubing) (DE)
	<u>PAVIRO Master</u>	<u>Link</u>			15-17 (virtual) (EN)	25-27 (virtual) (DE)		14-16 (Eindhoven) (EN)
	<u>IRIS-Net Expert</u>	<u>Link</u>			18 (virtual) (EN)	28 (virtual) (DE)		17 (Eindhoven) (EN)
	<u>PRAESIDEO Master</u>	<u>Link</u>				11-13 (Eindhoven) (EN)		
	<u>PRAESENSA Master</u>	<u>Link</u>		15-17 (virtual) (EN)	29-31 (virtual) (EN)		17-19 (Eindhoven) (EN)	28-29 (virtual) (EN)
	<u>DICENTIS Master</u>	<u>Link</u>			22-24 (Eindhoven) (EN)			21-23 (Eindhoven) (EN)
	<u>DICENTIS Advanced System Design</u>	<u>Link</u>			24 (Eindhoven) (EN)			23 (Eindhoven) (EN)

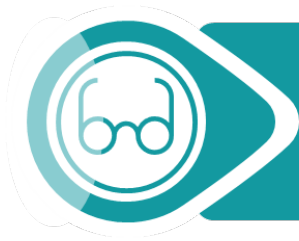
Training			2022					
	Course to register	Training Plan with prerequisites	July	August	September	October	November	December
AI	BIS Expert	Link	18-22 (virtual) (EN)					
	BIS Master	Link	25-29 (virtual) (EN)					
	AMS Expert	Link	6-7 (virtual) (EN)					
VS	BVMS Master	Link	13-15 (Grasbrunn) (EN)					
	Video Analytics	Link	11-12 (Grasbrunn) (DE)					
FIR	AVENAR Panel Series Training - Expert	Link			5-6 (virtual) (EN)		14-15 (virtual) (DE)	5-6 (virtual) (EN or DE)
	AVENAR Panel Series Training - Master	Link			7-8 (virtual) (EN)		16-17 (virtual) (EN)	7-8 (virtual) (EN or DE)
CO	Dynacord & Electro-Voice Install Training	Link			26-28 (virtual) (EN)		21-23 (virtual) (EN)	
	PRAESIDEO Master	Link	19-21 (Eindhoven) (EN)					

VIDEO SYSTEMS





VS


Learning path - Bosch Video Systems Commercial Certification



Professional Level

- The Power to Predict
- Portfolio Overview
- Exam

 **Issues Certificate**  **Online Training**

 **Training Time**
3h00m

Bosch Video Systems Commercial Certification

Short Description	This Training Plan includes Web Based Training Modules (WBT's) in order to gain essential knowledge about the Bosch Video camera portfolio.
Content	<ul style="list-style-type: none">▪ The power to predict▪ Portfolio overview▪ Exam
Target groups	<ul style="list-style-type: none">▪ Sales▪ Pre-Sales▪ Design specialists
Duration	<ul style="list-style-type: none">▪ 3 hours

Learning path - BVMS Commercial Certification



BVMS Commercial Certification

Short Description	<p>This Training Plan includes several online trainings to get an in depth overview of the BVMS key benefits and essential system knowledge. You will learn how to design a BVMS system during the online training of the Expert level.</p>
Content	<p>Professional level:</p> <ul style="list-style-type: none"> ▪ BVMS Key Benefits and Features ▪ BVMS Essentials ▪ Exam <p>Expert level:</p> <ul style="list-style-type: none"> ▪ BVMS Sales and System Design ▪ Exam
Target groups	<ul style="list-style-type: none"> ▪ Sales ▪ Pre-Sales ▪ Design specialists

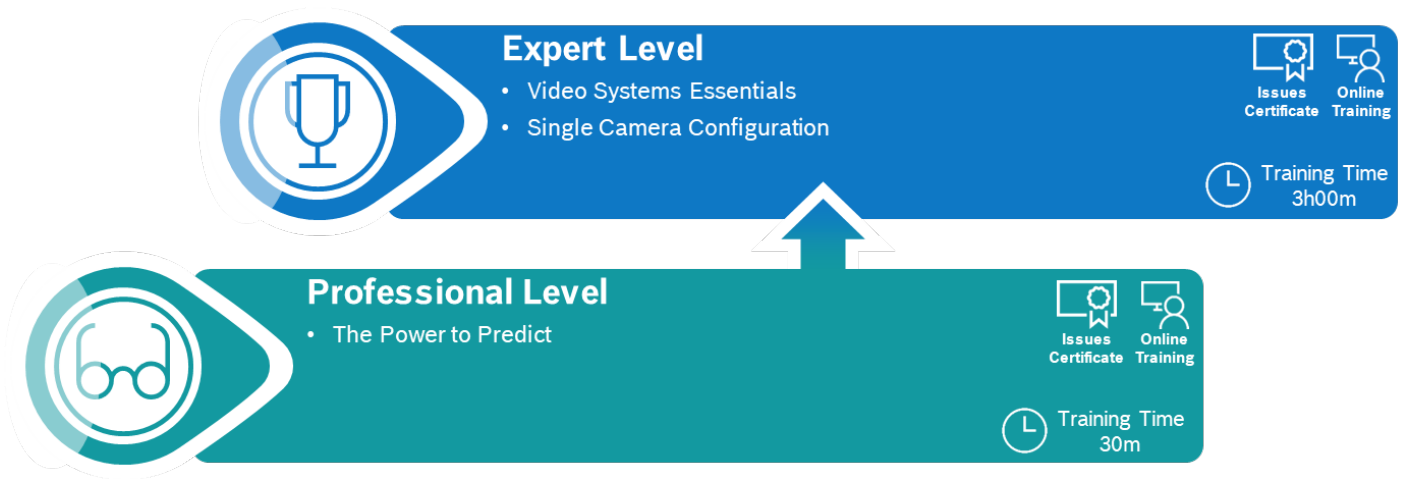
Learning path - BVMS Technical Certification



BVMS Technical Certification

Short Description	<p>This Training Plan includes several online trainings to get the required prior classroom knowledge about the BVMS core components. During the virtual or classroom sessions you will learn how to install, configure and operate BVMS with the configuration client/ operation client. On the next higher level training you will learn how to configure advanced BVMS features and deployment options.</p>
Content	<p>Professional level:</p> <ul style="list-style-type: none"> ▪ The power to predict ▪ BVMS Essentials ▪ Exam <p>Expert level:</p> <ul style="list-style-type: none"> ▪ BVMS Expert Certification Training Incl. Hands ON ▪ Exam <p>Master level:</p> <ul style="list-style-type: none"> ▪ BVMS Master Certification Training Incl. Hands ON ▪ Exam
Target groups	<ul style="list-style-type: none"> ▪ Technician ▪ installers

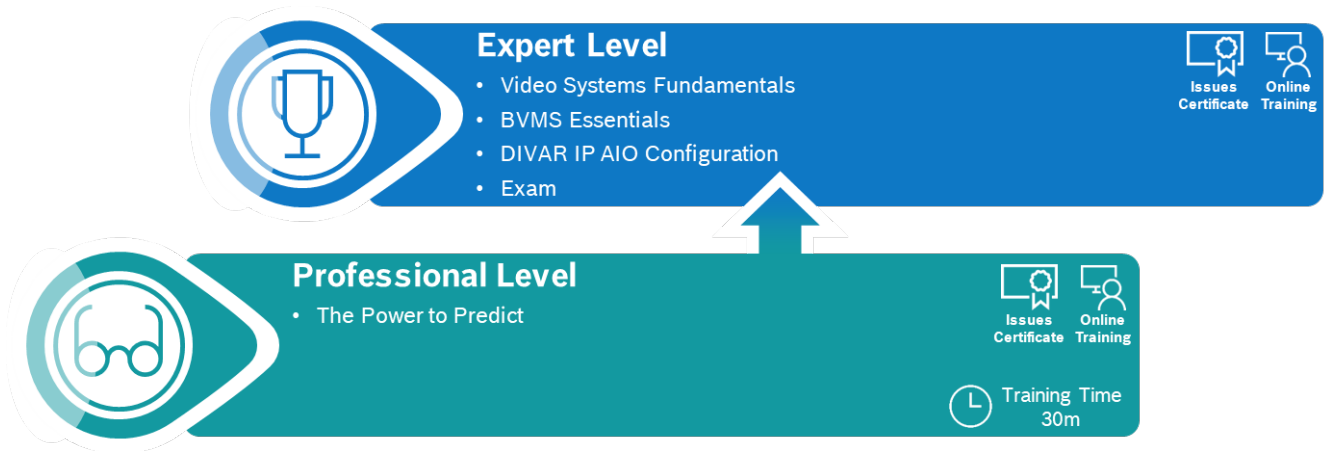
Learning path - BOSCH Video Camera Technical Certification



BOSCH Video Camera Technical Certification

Short Description	In this training we will explain how to configure a Bosch camera (single camera installation without use of a management software).
Content	Professional level: <ul style="list-style-type: none">▪ The Power to Predict Expert level: <ul style="list-style-type: none">▪ Video Camera Expert Training
Target groups	<ul style="list-style-type: none">▪ Technician▪ installers

Learning path - BOSCH DIVAR IP AIO Technical Certification



BOSCH DIVAR IP AIO Technical Certification

Short Description	In this training we will explain how to configure a basic BVMS installation. This training is mainly recommended for our DIVAR IP AIO 5000 that are used in small installations.
Content	Professional level: <ul style="list-style-type: none">▪ The Power to Predict Expert level: <ul style="list-style-type: none">▪ Video Systems Fundamentals▪ BVMS Essentials▪ DIVAR IP AIO Configuration▪ Exam
Target groups	<ul style="list-style-type: none">▪ Technician▪ installers

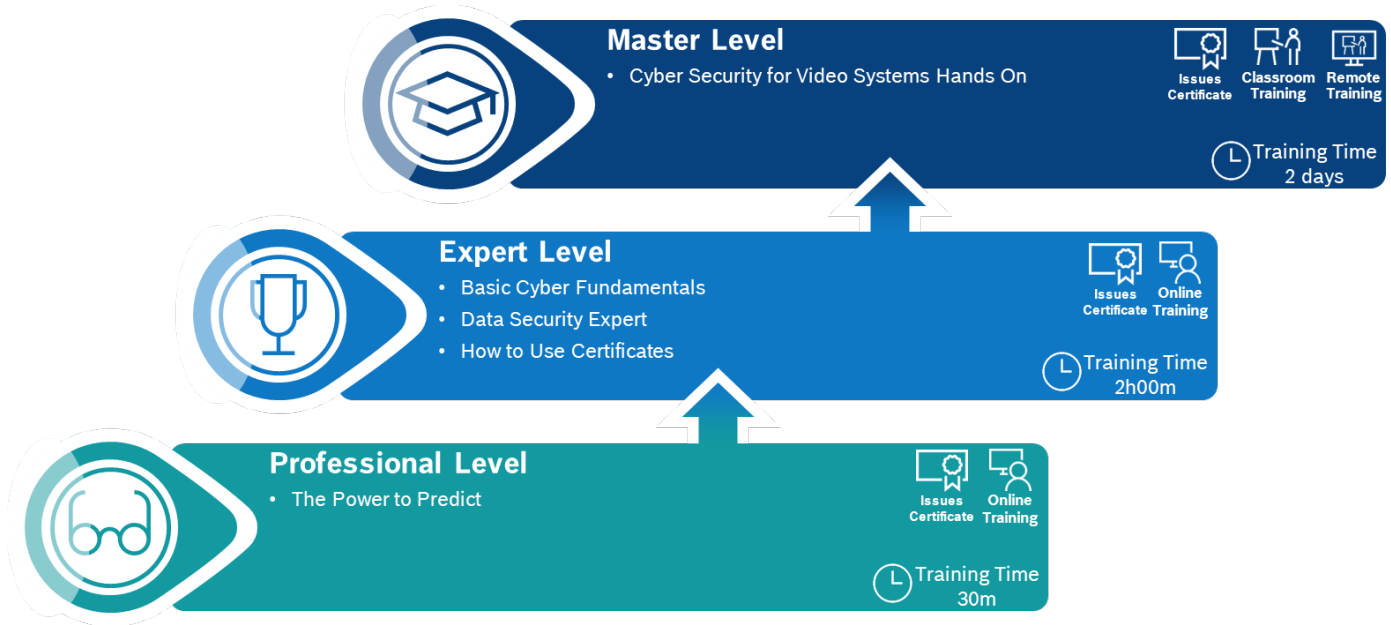
Learning path - BOSCH Video Analytics Technical Certification Training



BOSCH Video Analytics Technical Certification Training

Short Description	In this training we will explain how to design, setup and configure a video analytics solution from Bosch.
Content	Professional level: <ul style="list-style-type: none">▪ The Power to Predict Expert level: <ul style="list-style-type: none">▪ Video Analytics▪ Calibration Module▪ Intelligent Insights Introduction▪ Exam Master level: <ul style="list-style-type: none">▪ Video Analytics Hands On
Target groups	<ul style="list-style-type: none">▪ Technician▪ installers

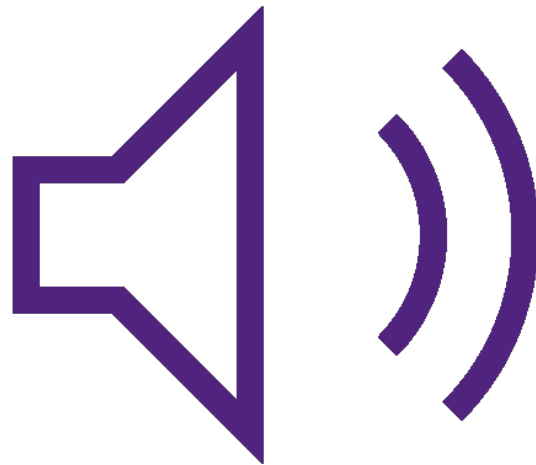
Learning path - Cyber (Data) Security Technical Certification Training



Cyber (Data) Security Technical Certification Training

Short Description	<p>This course introduces students to several aspects cyber security and how they pertain to IP Video systems today. Students will learn to analyze possible threats as well as how to lock down and reduce the attack surface of their IP video system.</p>
Content	<p>Professional level:</p> <ul style="list-style-type: none"> ▪ The power to predict <p>Expert level:</p> <ul style="list-style-type: none"> ▪ Basic Cyber Fundamentals ▪ Data Security Expert ▪ How to Use Certificates <p>Master level:</p> <ul style="list-style-type: none"> ▪ Cyber Security for Video Systems Hands On
Target groups	<ul style="list-style-type: none"> ▪ Technician ▪ installers

COMMUNICATION SYSTEMS



CO

Learning path – Acoustics Basics



Professional Level

- Acoustic Basics
- Acoustic Basics - Signal Chain
- Acoustic Basics - Room Acoustics
- Online Exam

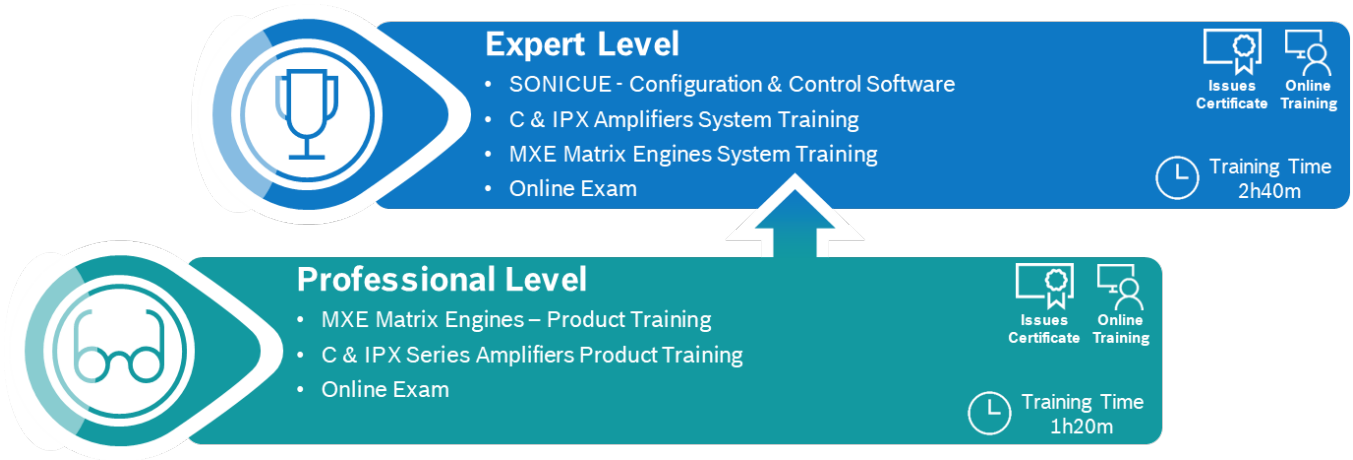


 Training Time
2h00m

Acoustics Basics – Professional Level

Short Description	<p>This online training consists of 3 modules and aims to provide you an overview about basic acoustics knowledge for professional audio projects. A Professional Level Certificate will be available upon successful completion of this online training and exam.</p>
Content	<p>The modules and topics that will be covered within this training certification level are:</p> <ul style="list-style-type: none"> ▪ Acoustic Basics ▪ Acoustic Basics - Signal Chain ▪ Acoustic Basics - Room Acoustics ▪ Online Exam – Professional Level
Learning targets	<p>By successfully completing this training the student will be able to:</p> <ul style="list-style-type: none"> ▪ Understand introductory concepts about acoustics and weight its importance in audio projects ▪ Perceive sound physics and its behaviors in enclosed rooms ▪ Identify all components in a professional audio signal chain
Prerequisites	<ul style="list-style-type: none"> ▪ There are no prerequisites for this certification level
Target groups	<ul style="list-style-type: none"> ▪ Customers, End Users Systems Engineers and Consultants
Duration	<ul style="list-style-type: none"> ▪ 2 hours

Learning path – Dyncord Install Electronics



Dynacord Install Electronics – Professional Level

Short Description	<p>This online training consists of multiple modules and provides you with introductory knowledge on Dynacord electronics hardware and software components relevant for install sound partners. A Professional Level Certificate will be available upon successful completion of this online training and exam.</p>
Content	<p>The modules and topics that will be covered within this training certification level are:</p> <ul style="list-style-type: none"> ▪ MXE Matrix Engines – Product Training ▪ Dynacord C Series Amplifiers Product Training ▪ Dynacord IPX Series Amplifiers Product Training ▪ Online Exam – Professional Level
Learning targets	<p>By successfully completing this training the student will be able to:</p> <ul style="list-style-type: none"> ▪ understand C and IPX series amplifiers key features and technical details ▪ identify elements on the MXE Matrix Mix Engine’s front and rear panel ▪ explain and use the semi-fixed Zone Mixer DSP signal flow
Prerequisites	<ul style="list-style-type: none"> ▪ There are no prerequisites for this certification level
Target groups	<ul style="list-style-type: none"> ▪ Customers, End Users, Sales Engineers & Consultants
Duration	<ul style="list-style-type: none"> ▪ 1h30m

Dynacord Install Electronics – Expert Level

Short Description	<p>The online modules for this training bring concepts about system design and configuration for Dynacord electronics for install sound projects, aiming to give a more complete overview about these components, with their key features and systems applications. An Expert Level Certificate will be available upon successful completion of this online training and exam.</p>
Content	<p>The modules and topics that will be covered within this training certification level are:</p> <ul style="list-style-type: none"> ▪ MXE Matrix Engines System Training ▪ Dynacord C Series Amplifiers System Training ▪ Dynacord IPX Series Amplifiers System Training ▪ SONICUE - Configuration & Control Software ▪ Online Exam – Expert Level
Learning targets	<p>By successfully completing this training the student will be able to:</p> <ul style="list-style-type: none"> ▪ choose the right Dynacord C & IPX Series amplifiers models projects ▪ design a highly economic, efficient and reliable sound system ▪ describe how to choose the correct amplifier models based on system design examples ▪ design a highly economic, efficient and reliable sound system with C series & IPX series amplifiers and MXE Matrix Mix Engine System ▪ recognize the principles of SONICUE, configuration and control software
Prerequisites	<ul style="list-style-type: none"> ▪ Dynacord Install Electronics – Professional Level
Target groups	<ul style="list-style-type: none"> ▪ Install Partners, Sales Engineers & System Technicians
Duration	<ul style="list-style-type: none"> ▪ 2h30m

Learning path - OMNEO / Dante Networking



OMNEO / Dante Networking – Professional Level

Short Description	<p>This training plan introduces IP networking on a basic level and gives an overview of OMNEO with its components and features. It will enable you to use the correct terminology when talking about networks and OMNEO. A professional Level Certificate will be available upon successful completion of this online training and exam.</p>
Content	<p>The modules and topics that will be covered within this training certification level are:</p> <ul style="list-style-type: none"> ▪ Addressing ▪ Topologies ▪ Cabling & Media ▪ OSI Model ▪ Unicast, Multicast and Broadcast ▪ Online Exam – Expert Level
Learning targets	<p>By successfully completing this training the student will be able to:</p> <ul style="list-style-type: none"> ▪ understand the difference between a MAC and an IP address ▪ understand the difference between broadcast, multicast and unicast data transmission ▪ understand the basic principle of the OSI Model and be able to explain the differences of Layer 2 and Layer 3 based protocols ▪ be able to identify and explain different network topologies ▪ know the differences and benefits of different CAT cables and fiber optic cables ▪ know which basic types of switches exist ▪ understand the need for media networking ▪ understand the benefits of open public standards ▪ be able to explain OMNEO components and features on a basic technical level

Prerequisites	<ul style="list-style-type: none">▪ There are no prerequisites for this certification level
Target groups	<ul style="list-style-type: none">▪ Customers, End Users, Sales Engineers & Consultants
Duration	<ul style="list-style-type: none">▪ 1h30m

OMNEO / Dante – Expert Level

Short Description	<p>This training plan offers an advanced introduction to IP addressing, TCP and UDP communication, OSI model, networking hardware and network configuration. Besides, it explains the three general OMNEO tools: OMNEO Control, OMNEO Firmware Upload Tool and Network Docent. An Expert Level Certificate will be available upon successful completion of this online training and exam.</p>
Content	<p>The modules and topics that will be covered within this training certification level are:</p> <ul style="list-style-type: none"> ▪ Addressing ▪ Topologies ▪ Cabling & Media ▪ OSI Model ▪ Unicast, Multicast and Broadcast ▪ Online Exam – Expert Level
Learning targets	<p>By successfully completing this training the student will be able to:</p> <ul style="list-style-type: none"> ▪ understand the principles of IP addressing, the function of the Subnet Mask, and the role of Network ID and Host ID ▪ learn which IP address classes, ranges and types exist ▪ learn what Subnetting is and how to apply it ▪ understand the functions of the OSI Layers ▪ understand the differences between TCP and UDP communication ▪ learn the most important switch configuration option ▪ learn which switch types exist, their features and their hardware and software configuration options ▪ learn how to use the OMNEO Control software ▪ learn how to use the OMNEO Firmware Upload Tool ▪ learn how to use the Network Docent software

Prerequisites	<ul style="list-style-type: none">▪ OMNEO / Dante Networking – Professional Level
Target groups	<ul style="list-style-type: none">▪ Customers, End Users, Sales Engineers & Consultants
Duration	<ul style="list-style-type: none">▪ 1h30m

Learning path – Retail Partner



Retail Partner - Professional Level

Short Description	<p>This online training consists of multiple modules and provides you with basic knowledge on Dynacord and Electro-Voice hardware components relevant for retail partners.</p>
Content	<p>The modules and topics that will be covered within this training certification level are:</p> <ul style="list-style-type: none"> ▪ Dynacord & Electro-Voice Professional Systems Acoustic Basics ▪ Dynacord & Electro-Voice Professional Systems Acoustic Basics Signal Chain ▪ Dynacord L Series Amplifiers Product Training ▪ EVOLVE 50 and EVOLVE 30M Introductions ▪ Portable Speakers Portfolio Overview
Learning targets	<p>By successfully completing this training the student will be able to:</p> <ul style="list-style-type: none"> ▪ understand introductory concepts about acoustics and weight its importance in audio projects ▪ perceive the particularities of signal chain in audio systems ▪ have a comprehensive view about Electro-Voice and Dynacord solutions for retail market
Prerequisites	<ul style="list-style-type: none"> ▪ There are no prerequisites for this certification level
Target groups	<ul style="list-style-type: none"> ▪ Retail Partners ▪ Sales managers with commercial & marketing focus
Additional Equipment Required	<ul style="list-style-type: none"> ▪ Headphones (use also in the WBT)

Retail Partner - Expert Level

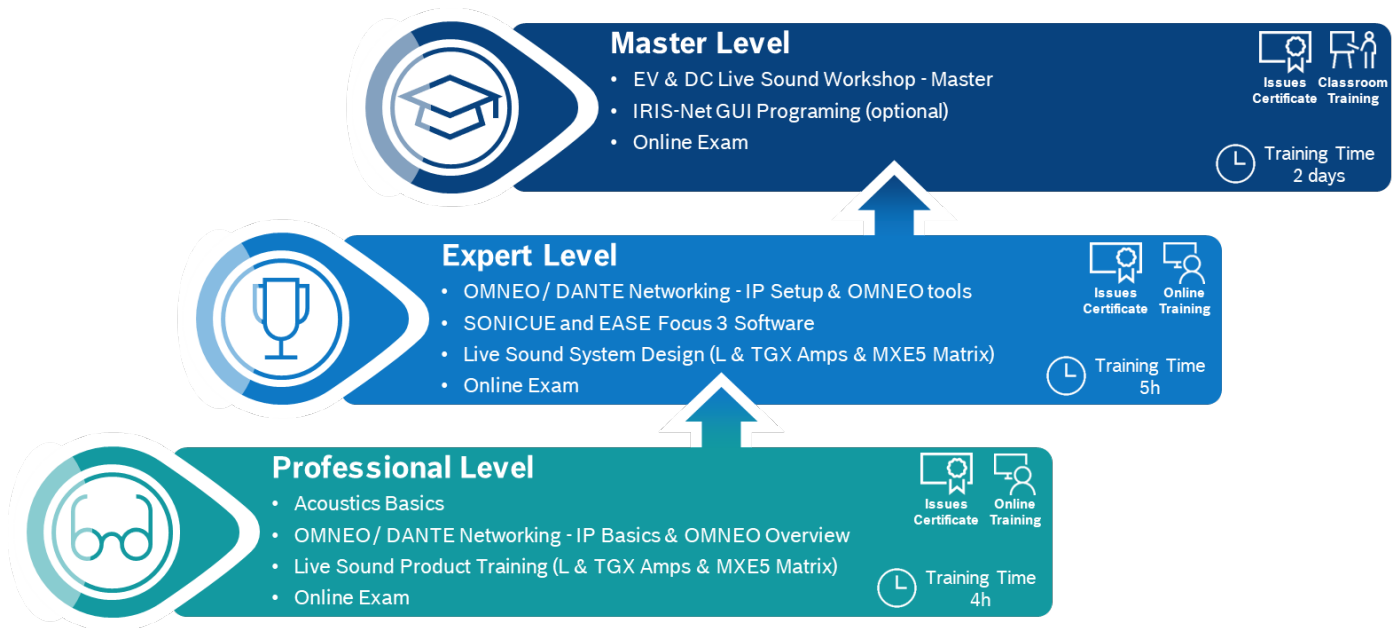
Short Description	<p>The online modules for this training bring concepts about system design for Electro-Voice portable speakers and for Dynacord L series amplifiers, aiming to give a more complete overview about these components with their key features and systems applications.</p> <p>The LOUD & CLEAR Academy (only available in Europe) is a classroom workshop that aims to give a more immersive experience to the participants with the Electro-Voice and Dynacord solutions for Retail Partners.</p>
Content	<p>The modules and topics that will be covered within this training certification level are:</p> <ul style="list-style-type: none"> ▪ Dynacord L Series Amplifiers System Training ▪ Electro-Voice ZLX + ELX200 Demo Guides and Set-Up Examples ▪ Electro-Voice EKX + ETX Demo Guides and Set-Up Examples ▪ Electro-Voice EVOLVE 50 Demo Guide and Set-Up Examples ▪ LOUD & CLEAR Academy
Learning targets	<p>By successfully completing this training the student will be able to:</p> <ul style="list-style-type: none"> ▪ contrast different applications for Electro-Voice portable speakers and Dynacord L-Series amplifiers ▪ describe to choose the correct L amplifiers models for a project, based on system design examples ▪ understand how to demonstrate Electro-Voice speakers and Dynacord L series amplifiers to various audiences ▪ create different strategies to approach the customer with the solution which best suits their needs
Prerequisites	<ul style="list-style-type: none"> ▪ Retail Partner Training – Professional Level Certificate
Target groups	<ul style="list-style-type: none"> ▪ Retail Partners ▪ Sales managers with commercial & marketing focus

Retail Partner - Master Level*

Short Description	<p>This classroom training brings an immersive and unique opportunity to increase the personal sales skills and to get more effective on the point of sale.</p> <p>The training will be conducted by a professional sales trainer.</p>
Content	<p>The modules and topics that will be covered within this training certification level are:</p> <ul style="list-style-type: none"> ▪ Motivational introduction to the theory and models within the sales process ▪ Group discussions to deepen the knowledge ▪ Individual exercises and group tutorials to transfer the theory into the practice
Learning targets	<p>By successfully completing this training the student will be able to:</p> <ul style="list-style-type: none"> ▪ learn the communication rules at the point sale, ▪ to guide the sales process, ▪ to get more satisfied customer by avoiding the advisor trap ▪ and to get positive re-confirmations for the buying decision of the customers
Prerequisites	<ul style="list-style-type: none"> ▪ Retail Partner – Expert Level
Target groups	<ul style="list-style-type: none"> ▪ Retail Partners ▪ Sales managers with commercial & marketing focus

***This training level is only available in Europe**

Learning path – Live Sound Partner



Live Sound Partner - Professional Level

Short Description	<p>This online training consists of multiple modules and provides you with basic knowledge on Dynacord and Electro-Voice hardware and software components relevant for live sound partners.</p>
Content	<p>The modules and topics that will be covered within this training certification level are:</p> <ul style="list-style-type: none"> ▪ Dynacord & Electro-Voice Professional Systems Room Acoustics, Acoustic Basics & Signal Chain ▪ Live Sound System Introduction and Portfolio ▪ Dynacord L and TGX Series Amplifiers Product Training ▪ Dynacord MXE5 Matrix Mix Engine Product Training ▪ OMNEO / DANTE Networking – Professional Level (IP-Basics & DANTE / OMNEO overview)
Learning targets	<p>By successfully completing this training the student will be able to:</p> <ul style="list-style-type: none"> ▪ understand introductory concepts about room acoustics and weight its importance in audio projects ▪ perceive the particularities of signal chain in audio systems ▪ understand EV & DC Live Sound Systems portfolio ▪ identify EV & DC electronics and software components applied for Live Sound Partners ▪ show basic knowledge on IP Networks and Audio Networks and to know their relevance for live sound system applications ▪ recognize OMNEO / DANTE features and advantages in the audio IP world
Prerequisites	<ul style="list-style-type: none"> ▪ There are no prerequisites for this certification level
Target groups	<ul style="list-style-type: none"> ▪ Live Sound Partners ▪ Sound engineers & system technicians

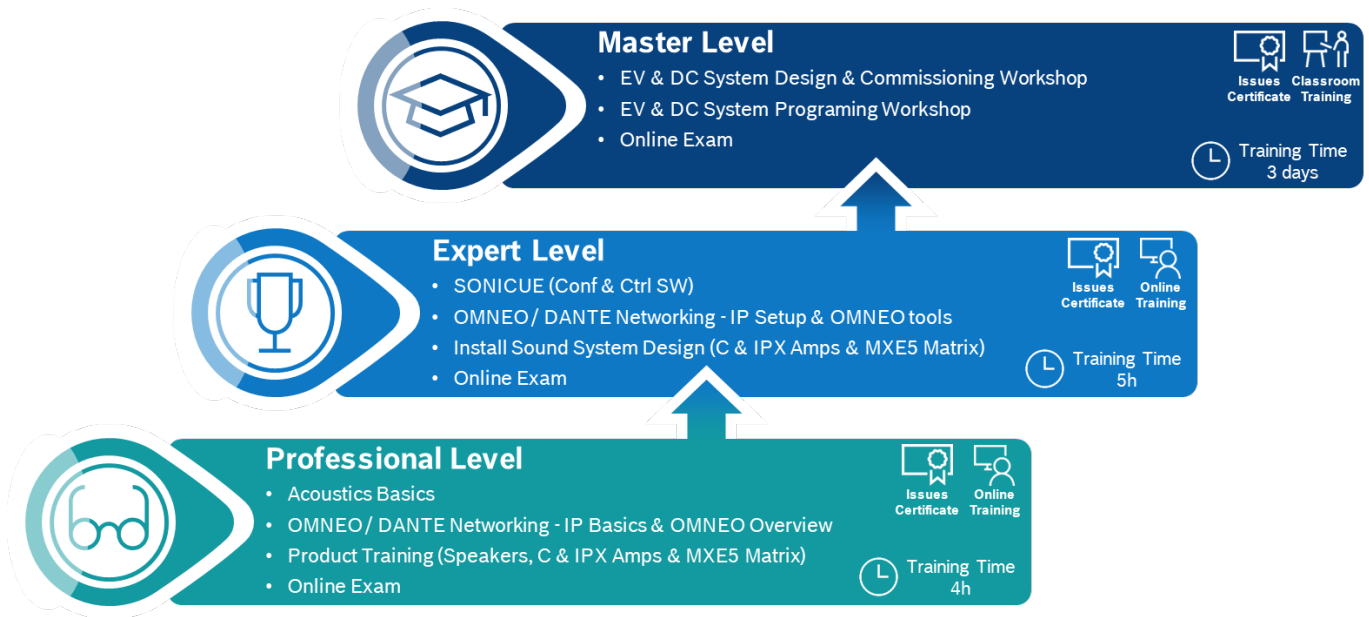
Live Sound Partner - Expert Level

Short Description	<p>The online modules for this training bring concepts about system design and configuration for Electro-Voice and Dynacord Live Sound solutions, aiming to give a more complete overview about these components, with their key features and systems applications.</p>
Content	<p>The modules and topics that will be covered within this training certification level are:</p> <ul style="list-style-type: none"> ▪ EASE Focus 3 Quick Start Guide ▪ Configuration and Control software introduction ▪ Acoustic prediction software introduction ▪ OMNEO / DANTE Networking – Expert Level (IP-Advanced & OMNEO tools) ▪ System Design Examples with Dynacord L & TGX Series Amplifiers and MXE5 Matrix Mix Engine
Learning targets	<p>By successfully completing this training the student will be able to:</p> <ul style="list-style-type: none"> ▪ explain how to choose the correct amplifier models based on system design examples. ▪ design a highly economic, efficient and reliable sound system with L series & TGX series amplifiers and MXE5 Matrix Mix Engine ▪ understand principles of IP addressing, subnet masks and the role of network and host IDs in IP based networks ▪ describe how to use and setup OMNEO / DANTE tools ▪ recognize the principles of SONICUE (configuration and control software) ▪ create a basic EASE Focus 3 project
Prerequisites	<ul style="list-style-type: none"> ▪ There are no prerequisites for this certification level
Target groups	<ul style="list-style-type: none"> ▪ Customers, End Users, Sales Engineers & Consultants

Live Sound Partner - Master Level

Short Description	<p>This workshop brings an immersive and unique opportunity to master Electro-Voice & Dynacord Live Sound systems for live sound partners, including hands on experience on all hardware & software offerings for this audience.</p>
Content	<p>The modules and topics that will be covered within this training certification level are:</p> <ul style="list-style-type: none"> ▪ Electro-Voice and Dynacord Live Sound system setup and configuration ▪ Electro-Voice and Dynacord Live Sound system tuning ▪ Electro-Voice and Dynacord Live Sound advanced system operation ▪ Electro-Voice and Dynacord Live Sound system examples ▪ Electro-Voice and Dynacord Live Sound system troubleshooting
Learning targets	<p>By successfully completing this training the student will be able to:</p> <ul style="list-style-type: none"> ▪ commission an Electro-Voice and Dynacord Live Sound system ▪ show how to troubleshoot an Electro-Voice and Dynacord Live Sound system ▪ recognize the particularities and characteristics of Live Sound systems ▪ explain the best practices to setup and configure a Live Sound system ▪ understand the importance and complexity of tuning Live Sound systems
Prerequisites	<ul style="list-style-type: none"> ▪ Live Sound Training – Expert Level Certificate (Online) ▪ Own Laptop-PC with administration rights to be brought along to the training course
Target groups	<ul style="list-style-type: none"> ▪ Live Sound Partners ▪ Sound engineers & system technicians

Learning path – Install Partner



Install Partner - Professional Level

Short Description	<p>This online training consists of multiple modules and provides you with basic knowledge on Dynacord and Electro-Voice hardware and software components relevant for install partners.</p>
Content	<p>The modules and topics that will be covered within this training certification level are:</p> <ul style="list-style-type: none"> ▪ Dynacord & Electro-Voice Professional Systems Room Acoustics, Acoustic Basics & Signal Chain ▪ OMNEO / DANTE Networking – Professional Level (IP-Basics & OMNEO overview) ▪ Install Sound System introduction ▪ Dynacord C Series Amplifiers Product Training ▪ Dynacord IPX Series Amplifiers Product Training ▪ Dynacord MXE Matrix Mix Engines Product Training
Learning targets	<p>By successfully completing this training the student will be able to:</p> <ul style="list-style-type: none"> ▪ understand introductory concepts about room acoustics and weight its importance in audio projects ▪ perceive the particularities of signal chain in audio systems ▪ describe the Dynacord and Electro-Voice electronics and software components designed for Install partners ▪ recognize basic knowledge on IP Networks and Audio Networks ▪ explain OMNEO / DANTE features and advantages in the audio IP world
Prerequisites	<ul style="list-style-type: none"> ▪ There are no prerequisites for this certification level
Target groups	<ul style="list-style-type: none"> ▪ Install Partners ▪ Sales engineers & system technicians

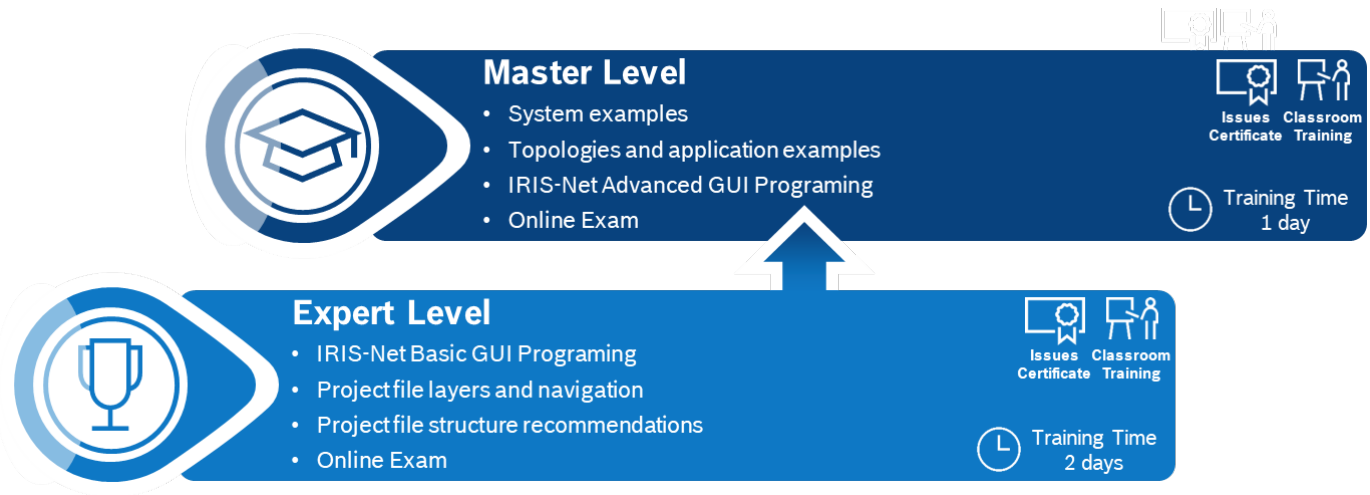
Install Partner - Expert Level

Short Description	<p>The online modules for this training bring concepts about system design and configuration for Electro-Voice and Dynacord Install solutions, aiming to give a more complete overview about these components, with their key features and systems applications.</p>
Content	<p>The modules and topics that will be covered within this training certification level are:</p> <ul style="list-style-type: none"> ▪ OMNEO / DANTE Networking – Expert Level (IP-Advanced & OMNEO tools) ▪ Dynacord C Series Amplifiers System Training ▪ Dynacord IPX Series Amplifiers System Training ▪ Dynacord SONICUE Introduction ▪ Dynacord MXE Matrix Mix Engines System Training
Learning targets	<p>By successfully completing this training the student will be able to:</p> <ul style="list-style-type: none"> ▪ describe how to choose the correct amplifier models based on system design examples. ▪ design a highly economic, efficient and reliable sound system with C series & IPX series amplifiers and MXE Matrix Mix Engine System ▪ understand principles of IP addressing, subnet masks and the role of network and hosts IDs ▪ use and setup OMNEO / DANTE tools ▪ recognize the principles of SONICUE, configuration and control software
Prerequisites	<ul style="list-style-type: none"> ▪ Install Partner Training – Professional Level Certificate
Target groups	<ul style="list-style-type: none"> ▪ Install Partners ▪ Sales engineers & system technicians

Install Partner - Master Level

Short Description	<p>The System Design and Commissioning workshop as well as the System Programming workshop will bring an immersive and unique opportunity to master Electro-Voice & Dynacord System Design for install partners, including hands on experience on all hardware & software offerings for this audience.</p>
Content	<p>The modules and topics that will be covered within this training certification level are:</p> <ul style="list-style-type: none"> ▪ Electro-Voice and Dynacord system design and examples ▪ Electro-Voice and Dynacord advanced system operation ▪ Electro-Voice and Dynacord system programming and configuration ▪ Electro-Voice and Dynacord system commissioning and tuning
Learning targets	<p>By successfully completing this training the student will be able to:</p> <ul style="list-style-type: none"> ▪ design an Electro-Voice and Dynacord fixed installed system ▪ understand the importance and complexity of tuning fixed installation systems ▪ show the best practices to program and configure a fixed installation system ▪ determine the best practices for commissioning a installed system
Prerequisites	<ul style="list-style-type: none"> ▪ Install Partner Training – Expert Level Certificate (Online) ▪ Own Laptop-PC with administration rights to be brought along to the training course
Target groups	<ul style="list-style-type: none"> ▪ Install Partners ▪ Sales engineers & system technicians

Learning path - IRIS-Net Basic GUI Programming



IRIS-Net Basic GUI Programming – Expert

Short Description	<p>The comprehensive classroom training on basic GUI programming builds on IRIS-Net hardware classroom trainings and is applicable for customers who have attended such a training within the last 2 years.</p>
Content	<p>This training will include:</p> <ul style="list-style-type: none"> ▪ Repetition of important IRIS-Net basics ▪ Object List ▪ Devices and Interfaces ▪ Programming of IRIS-Net graphical user interfaces with standard controls like Button, Fader, LED etc. or alternatively User Controls ▪ Usage of Groups ▪ Project file layers and navigation ▪ Project file structure recommendations ▪ User and Password handling ▪ Custom graphics
Learning targets	<p>By successfully completing this training the student will be able to:</p> <ul style="list-style-type: none"> ▪ understand the programming of IRIS-Net user interfaces using standard IRIS-Net elements (Controls/User Controls) and observing basic project design rules. (Layer/Navigation/User)
Prerequisites	<ul style="list-style-type: none"> ▪ IRIS-Net Professional Level by participating in a IRIS-Net hardware training within the last 2 years (DC& EV Live Sound or Install Master, PROMATRIX6000, PROMATRIX8000) ▪ Own Laptop according to the IRIS-Net requirements with latest IRIS-Net system requirements with latest IRIS-Net version pre-installed and admin rights to be brought along to the training course
Target groups	<ul style="list-style-type: none"> ▪ EVAC Partners ▪ Sound engineers & system technicians

IRIS-Net Advanced GUI Programming – Master

Short Description	<p>The Dynacord PROMATRIX 8000 Master classroom training provides the right environment to get the skills for advanced system programming and operation.</p>
Content	<p>The modules and topics that will be covered within this training certification level are:</p> <ul style="list-style-type: none"> ▪ PROMATRIX 8000 component and system overview ▪ System examples ▪ Topologies and application examples ▪ Firmware Update ▪ Monitoring and spare function examples ▪ Working with 100/70V relays, speaker zones, groups and audio signal priorities ▪ Networked PROMATRIX 8000 systems
Learning targets	<p>By successfully completing this training the student will be able to:</p> <ul style="list-style-type: none"> ▪ understand, design, install and operate a PROMATRIX 8000 public address system ▪ upgrade the system software ▪ commission a PROMATRIX 8000 public address system
Prerequisites	<ul style="list-style-type: none"> ▪ Promatrix 8000 Training – Professional Level ▪ Own laptop with admin rights and installed IRIS-Net and Configuration Wizard Software have to be brought along to the training. ▪ For students with low Public Address knowledge we recommend the PA Basics Classroom
Target groups	<ul style="list-style-type: none"> ▪ EVAC Partners ▪ Sound engineers & system technicians

Learning path – PRAESENSA



*No need to redo the Online Training if already made in PRAESENSA Professional and Expert Levels

PRAESENSA – Professional Level

Short Description	<p>This online training consists of multiple modules and aims to provide you an overview about Bosch PRAESENSA Public Address & Voice Alarm System hardware and software components. A Professional Level Certificate will be available upon successful completion of this online training and exam.</p>
Content	<p>The modules and topics that will be covered within this training certification level are:</p> <ul style="list-style-type: none"> ▪ OMNEO Networking – Professional Level (IP-Basics & OMNEO overview) ▪ The PRAESENSA System – What’s New? ▪ System controller ▪ Amplifiers ▪ Multifunction power supply ▪ Call stations ▪ Software ▪ Accessories
Learning targets	<p>By successfully completing this training the student will be able to:</p> <ul style="list-style-type: none"> ▪ identify system hardware and software components ▪ understand system connectivity and features ▪ perceive the unique particularities which makes PRAESENSA a state of the art and future proof Public Address & Voice Alarm System ▪ explain Network & Power design consideration ▪ show knowledge on IP Networks and Audio Networks
Prerequisites	<ul style="list-style-type: none"> ▪ Bosch Public Address PA basics – Professional Training
Target groups	<ul style="list-style-type: none"> ▪ Systems Integrators, Distributors, Installers, Specifiers, Consultants, Sales and Marketing & End Users

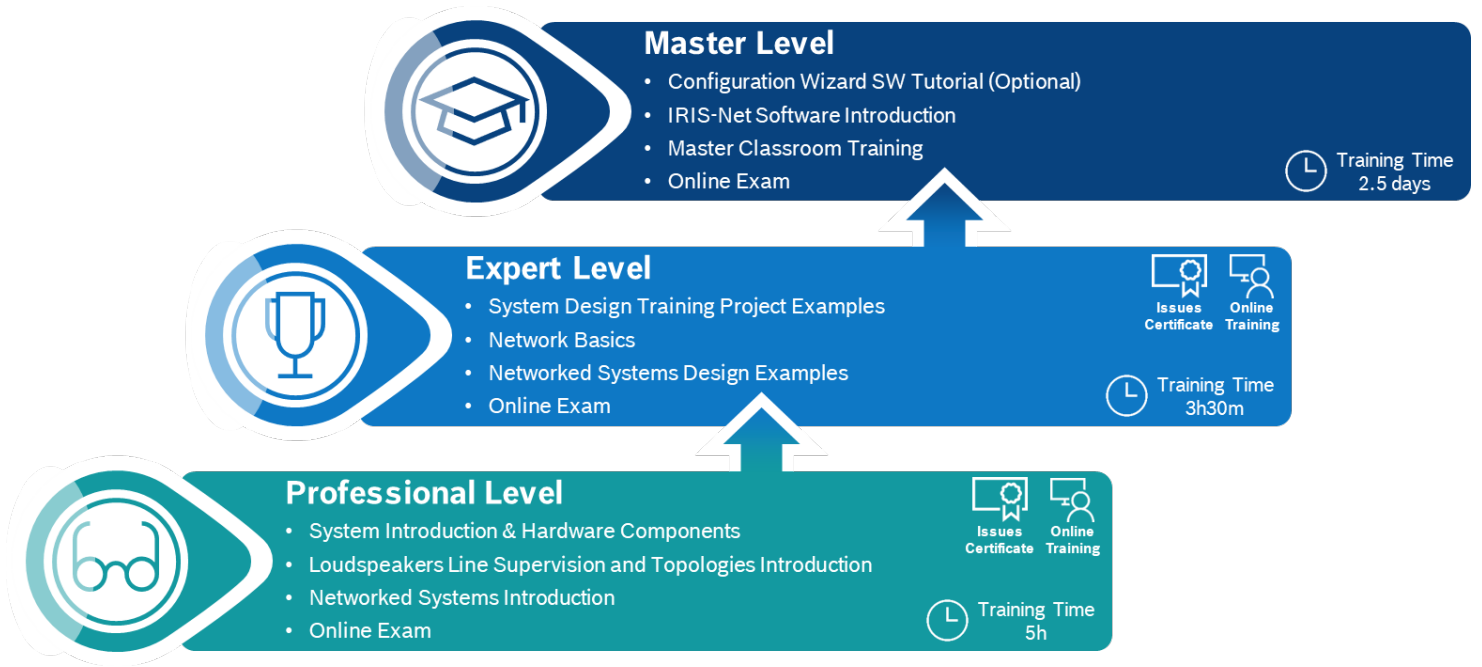
PRAESENSA – Expert Level

Short Description	<p>This online training brings concepts about system design and configuration for Bosch PRAESENSA Public Address & Voice Alarm System, aiming to give a more complete overview about these components, with their key features and systems applications, using project examples to show how to build up a Bill of Materials according to the project requirements. An Expert Level Certificate will be available upon successful completion of this online training and exam.</p>
Content	<p>The modules and topics that will be covered within this training certification level are:</p> <ul style="list-style-type: none"> ▪ OMNEO Networking – Expert Level (IP-Advanced & OMNEO tools) ▪ System design approach ▪ System planning tool ▪ Amplifier selection ▪ Power design ▪ Network design ▪ 3rd party network devices ▪ System design examples
Learning targets	<p>By successfully completing this training the student will be able to:</p> <ul style="list-style-type: none"> ▪ recognize and be able to use broader and more in depth knowledge on IP Networks and Audio Networks ▪ show how to use and setup OMNEO tools ▪ understand the particularities of designing a Public Address System and Voice Evacuation System ▪ specify a PRAESENSA system according to the project requirements and turn this specification into a Bill of Material
Prerequisites	<ul style="list-style-type: none"> ▪ Bosch PRAESENSA Public Address & Voice Alarm System – Professional Level (online training)
Target groups	<ul style="list-style-type: none"> ▪ Systems Integrators, Distributors, Installers, Specifiers, Consultants, Sales and Marketing

PRAESENSA – Master Level

Short Description	<p>This classroom or remote training brings an immersive and unique opportunity to master Bosch PRAESENSA Public Address & Voice Alarm System, including hands on experience on all hardware & software offerings for complete programming and operation of the system. A Master Level Certificate will be available upon successful completion of this classroom training and online exam.</p>
Content	<p>The modules and topics that will be covered within this training certification level are:</p> <ul style="list-style-type: none"> ▪ System components ▪ Installation and uploading of the Firmware ▪ Configuration and hands-on ▪ PRAESENSA network basics
Learning targets	<p>By successfully completing this training the student will be able to:</p> <ul style="list-style-type: none"> ▪ configure and commission a Bosch PRAESENSA Public Address & Voice Alarm System ▪ recognize how to update system firmware for the respective hardware components ▪ setup all Hardware and Software components simulating real live system for different projects
Prerequisites	<ul style="list-style-type: none"> ▪ PRAESENSA Public Address & Voice Alarm System – Professional Level (online training) ▪ PRAESENSA Public Address & Voice Alarm System – Expert Level (online training)
Target groups	<ul style="list-style-type: none"> ▪ Systems Integrators, Distributors, Installers and Consultants

Learning path - PAVIRO



PAVIRO - Professional Level

Short Description	<p>This Web-Based Training contains an introduction to the PAVIRO system and its hardware components as well as the Loudspeaker and topologies and networking functions.</p>
Content	<p>The modules and topics that will be covered within this training certification level are:</p> <ul style="list-style-type: none"> ▪ PAVIRO System Introduction (V2) ▪ PAVIRO Controller, Amplifier, Router & Call Station ▪ PAVIRO Loudspeaker Topologies Introduction & Line Supervision ▪ PAVIRO Networked Introduction
Learning targets	<p>By successfully completing this training the student will be able to:</p> <ul style="list-style-type: none"> ▪ give an overview of the PAVIRO system ▪ describe the hardware setup and the application of the PAVIRO devices ▪ understand terms like CAN bus and CST bus ▪ choose between the different types of loudspeaker line supervision according to application requirements ▪ draft a simple PAVIRO system setup ▪ understand different topologies and relation to router clusters ▪ select the right number of routers and amplifiers ▪ understand speaker line power allocation ▪ understand the signal flow between the system components ▪ understand the PAVIRO networking functions and features
Prerequisites	<ul style="list-style-type: none"> ▪ There are no prerequisites for this certification level
Target groups	<ul style="list-style-type: none"> ▪ EVAC Partners ▪ Sales and marketing staff of customers, consultants, specifiers

PAVIRO - Expert Level

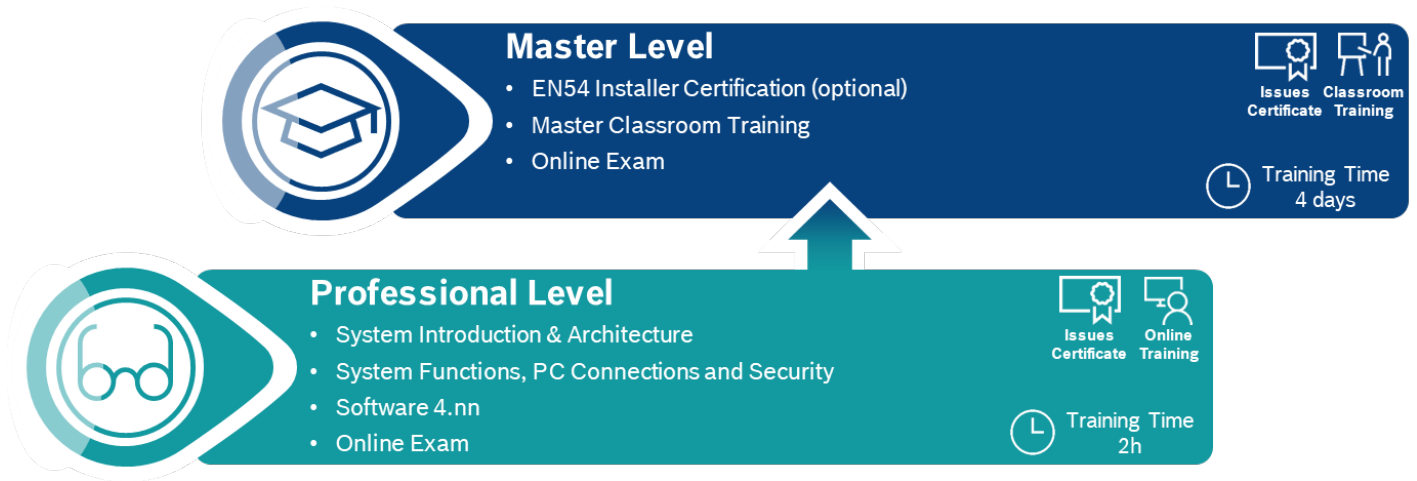
Short Description	<p>The PAVIRO – from spec to BOM trainings will give the customer several project examples to show how to build up a PAVIRO system BOM according to the project requirements. A certificate will be available upon completion of the training plan.</p>
Content	<p>This training plan will include 5 project design examples from Spec to BOM:</p> <ul style="list-style-type: none"> ▪ Shopping Centre ▪ School ▪ Hotel ▪ Sports Centre ▪ Networked Systems <p>It also includes a Network Basics WBT</p>
Learning targets	<p>By successfully completing this training the student will be able to:</p> <ul style="list-style-type: none"> ▪ transfer technical and functional project requirement specifications into a correct system design and turn it into a Bill of Materials
Prerequisites	<ul style="list-style-type: none"> ▪ PAVIRO Training - Professional Level
Target groups	<ul style="list-style-type: none"> ▪ EVAC Partners ▪ Consultants, System Designers

PAVIRO - Master Level

Short Description	<p>The PAVIRO Master Training course on advanced system programming and operation is the highest qualification level available on this product line. This training plan consists of Web-Based Trainings and 1 Classroom Training. This training also qualifies you as an IRIS-Net Technical Professional</p>
Content	<p>The modules and topics that will be covered within this training certification level are:</p> <ul style="list-style-type: none"> ▪ PAVIRO component and system overview ▪ Configuration Wizard ▪ System examples ▪ Introduction into IRIS-Net for PAVIRO ▪ Topologies and application examples ▪ Firmware Update ▪ IRIS-Net configuration software and its features ▪ System configuration examples in IRIS-Net ▪ Monitoring and spare function examples ▪ Working with 100/70V relays, speaker zones, groups and audio signal priorities ▪ IRIS-Net utility tools and export functions ▪ Working with Task Engine, Calendar and Integrated Message Manager ▪ Networked PAVIRO systems
Learning targets	<p>By successfully completing this training the student will be able to:</p> <ul style="list-style-type: none"> ▪ full understand design, install and operate a PAVIRO public address system ▪ upgrade the system software ▪ commission a PAVIRO public address system

Prerequisites	<ul style="list-style-type: none">▪ PAVIRO Training - Expert Level▪ Own laptop with admin rights and installed IRIS-Net and Configuration Wizard Software have to be brought along to the training.
Target groups	<ul style="list-style-type: none">▪ EVAC Partners▪ Installers

Learning path – PRAESIDEO



PRAESIDEO – Professional Level

Short Description	<p>This web-based training plan gives you an overview on the PRAESIDEO system and its main functions.</p> <p>This course is pre-requisite to attend a classroom training.</p>
Content	<p>The modules and topics that will be covered within this training certification level are:</p> <ul style="list-style-type: none"> ▪ PRAESIDEO Introduction ▪ PRAESIDEO Architecture ▪ PRAESIDEO Priorities ▪ PRAESIDEO Call Station Keypad Functions ▪ PRAESIDEO Control input functions ▪ PRAESIDEO Control output functions ▪ PRAESIDEO Key characteristics ▪ PRAESIDEO Call macro's ▪ PRAESIDEO PC connection ▪ PRAESIDEO Security ▪ PRAESIDEO Software 4.nn
Learning targets	<p>By successfully completing this training the student will be able to:</p> <ul style="list-style-type: none"> ▪ Understand the basics of the PRAESIDEO system and should be ready to participate in the PRAESIDEO Classroom Training
Prerequisites	<ul style="list-style-type: none"> ▪ Basic knowledge of electronics, acoustics and public address systems. ▪ Optional: PA Basics Online Training

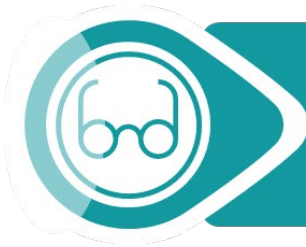
PRAESIDEO – Master Level

Short Description	<p>Technical Master Classroom Training on PRAESIDEO System Programming and Operation.</p> <p>The course is applicable for students who have already reached Professional Level.</p>
Content	<p>The modules and topics that will be covered within this training certification level are:</p> <ul style="list-style-type: none"> ▪ Operating Principles ▪ Install and upgrade to the latest SW release + Off-line configuration tool ▪ Configuring the PRAESIDEO System ▪ Messages and assembling message sets ▪ Powering, back-up powering, power consumption and battery charger ▪ Ethernet connection and local/remote access ▪ Storing vital system data. Fault, Call and Event logging ▪ PC Call station and Telephone interface ▪ IP-Audio Interface, Cobra Net / OMNEO principles and the PRAESIDEO solution using Cobra Net / OMNEO ▪ Designing a PRAESIDEO System ▪ Hands-on configuring a PRAESIDEO System
Learning targets	<p>By successfully completing this training the student will be able to:</p> <ul style="list-style-type: none"> ▪ Know the PRAESIDEO product range ▪ Select PRAESIDEO products and make a system design ▪ Upgrade system software ▪ Configure a PRAESIDEO System ▪ Use the additional SW packages for PRAESIDEO ▪ Commission a system

Prerequisites

- The WBT included in the Master certification Training plan need to be completed prior to the training start
- Broad experience in PA is required.
- For Persons with limited experience, who are active in PA business the PA-Basics Classroom and Web-based trainings are strongly recommended

Learning path – PLENA MATRIX



Professional Level

- System Introduction & HW Installation
- Matrix Mixer PC Graphical User Interface
- Amplifier Graphical User Interface
- Online Exam

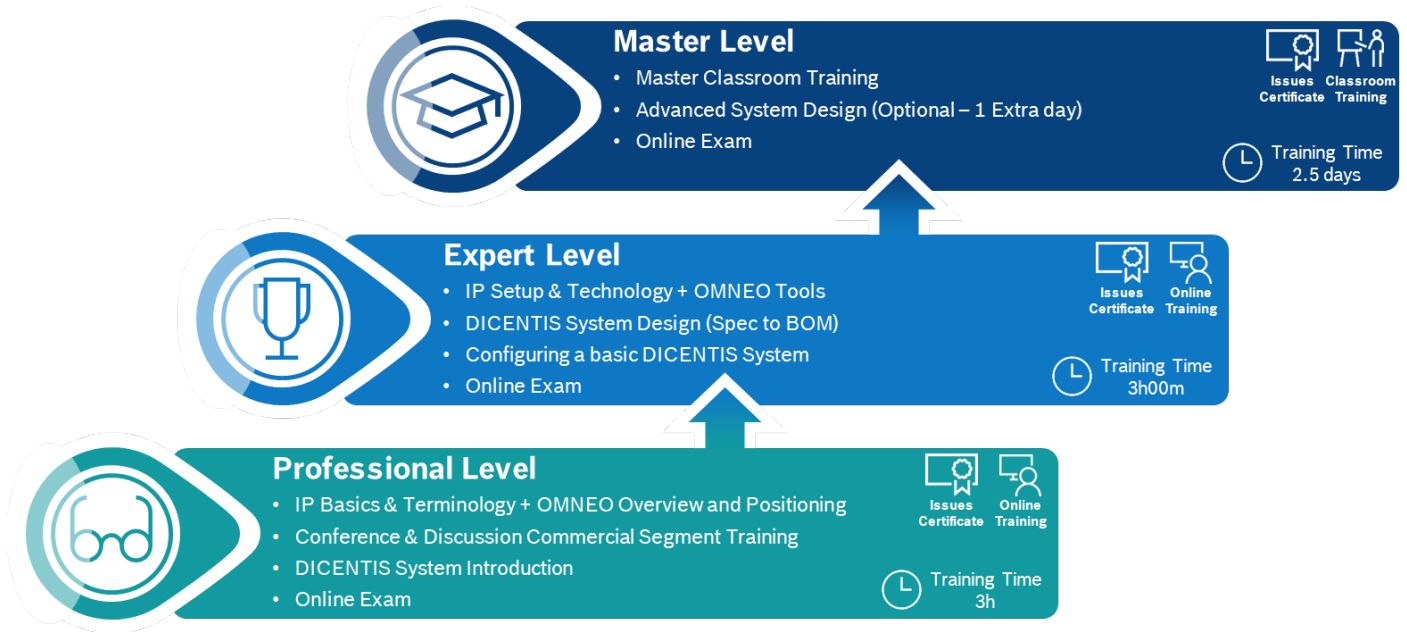


 Training Time
2h

PLENA MATRIX – Professional Level

Short Description	<p>This Web-Based Training contains an introduction to the PLENA Matrix system and its hardware components as well as the Loudspeaker and topologies and networking functions.</p>
Content	<p>The modules and topics that will be covered within this training certification level are:</p> <ul style="list-style-type: none"> ▪ PLENA Matrix System Introduction ▪ Hardware Installation Introduction ▪ Matrix Mixer PC Graphic User Interface (GUI) ▪ Amplifier, Graphic User Interface (GUI) ▪ System Knowledge Assessment
Learning targets	<p>By successfully completing this training the student will be able to:</p> <ul style="list-style-type: none"> ▪ give an overview of the PLENA Matrix system ▪ describe the hardware setup and the application of the PLENA Matrix devices ▪ understand how to setup and operate the Matrix Mixer PC Graphic User Interface
Prerequisites	<ul style="list-style-type: none"> ▪ There are no prerequisites for this certification level
Target groups	<ul style="list-style-type: none"> ▪ EVAC Partners ▪ Sales and marketing staff of customers, consultants, specifiers
Duration	<ul style="list-style-type: none"> ▪ 2 hours

Learning path – DICENTIS



DICENTIS – Professional Level

Short Description	<p>This online training consists of multiple modules and aims to provide you an overview about Bosch DICENTIS Conference & Discussion System hardware and software components. A Professional Level Certificate will be available upon successful completion of this online training and exam.</p>
Content	<p>The modules and topics that will be covered within this training certification level are:</p> <ul style="list-style-type: none"> ▪ OMNEO Networking – Professional Level (IP-Basics & OMNEO overview) ▪ The DICENTIS System – applications ▪ Central equipment ▪ Discussion devices ▪ Microphones ▪ Interpreter desks ▪ Software ▪ Accessories and Installation Equipment ▪ Basic system overview
Learning targets	<p>By successfully completing this training the student will be able to:</p> <ul style="list-style-type: none"> ▪ Recognize system hardware and software components ▪ Understand system & components features ▪ Identify system connectivity ▪ Describe a basic system overview ▪ Show knowledge on IP Networks and Audio Networks
Prerequisites	<ul style="list-style-type: none"> ▪ There are no prerequisites for this certification level
Target groups	<ul style="list-style-type: none"> ▪ Systems Integrators, Distributors, Installers, Specifiers, Consultants, Sales and Marketing & End Users

DICENTIS – Expert Level

Short Description	<p>This online training brings concepts about system design and configuration for Bosch DICENTIS conference system, aiming to give a more complete overview about these components, with their key features and systems applications, using examples to show how to build up a Bill of Materials according to the project requirements. An Expert Level Certificate will be available upon successful completion of this online training and exam.</p>
Content	<p>The modules and topics that will be covered within this training certification level are:</p> <ul style="list-style-type: none"> ▪ OMNEO Networking – Expert Level (IP-Advanced & OMNEO tools) ▪ System design approach ▪ System calculation tool ▪ Device selection ▪ Network design ▪ System design examples
Learning targets	<p>By successfully completing this training the student will be able to:</p> <ul style="list-style-type: none"> ▪ recognize and be able to use broader and more in depth knowledge on IP Networks and Audio Networks ▪ show how to use and setup OMNEO tools ▪ understand the particularities of designing a DICENTIS Conference System ▪ specify a DICENTIS system according to the project requirements and turn this specification into a Bill of Material
Prerequisites	<ul style="list-style-type: none"> ▪ Bosch DICENTIS Conference System – Professional Level (online training)
Target groups	<ul style="list-style-type: none"> ▪ Systems Integrators, Distributors, Installers, Specifiers, Consultants, Sales and Marketing

DICENTIS – Master Level

Short Description	<p>This classroom training brings an immersive and unique opportunity to master Bosch DICENTIS Conference & Discussion System, including system design, hands on experience on all hardware & software offerings for complete programming and operation of the system. An Master Level Certificate will be available upon successful completion of this classroom training and online exam.</p> <p>Note: parts of this training will be transferred to an web based training in the course of the year.</p>
Content	<p>The modules and topics that will be covered within this training certification level are:</p> <ul style="list-style-type: none"> ▪ System design approach ▪ System calculation tool ▪ System Licensing ▪ Discussion device selection ▪ Network design ▪ System design exercises ▪ System components ▪ Installation and uploading of the Firmware ▪ Configuration and hands-on ▪ Explanation and hands-on on all available functions
Learning targets	<p>By successfully completing this training the student will be able to:</p> <ul style="list-style-type: none"> ▪ configure a Bosch DICENTIS Conference System ▪ recognize how to update system firmware for the respective hardware components ▪ setup all Hardware and Software components simulating real live system for different projects and scenarios
Prerequisites	<ul style="list-style-type: none"> ▪ Bosch DICENTIS Conference System – Expert Level (online training)
Target groups	<ul style="list-style-type: none"> ▪ Systems Integrators, Distributors, Installers and Consultants

Learning path - RTS Intercom Full Range Training



Master Level

- RTS Full Range Classroom Training - Master
- Commercial Sales Training (optional)
- Online Exam

 
Issues Certificate Classroom Training

 Training Time 2 days



Professional Level

- Intercom Basics + RTS Intercom Portfolio
- OMNEO/ DANTE Networking - IP Basics & OMNEO Overview
- RTS Configuration Software Overview
- Online Exam

 
Issues Certificate Online Training

 Training Time 2h30m

RTS Intercom Full Range Training - Professional Level

Short Description	<p>This online training consists of multiple modules and aims to provide you an overview about RTS Intercom hardware and software components. A Professional Level Certificate will be available upon successful completion of this online training and exam.</p>
Content	<p>The modules and topics that will be covered within this training certification level are:</p> <ul style="list-style-type: none"> ▪ Intercom basics ▪ RTS Intercom Product Portfolio ▪ OMNEO Networking - Professional Level (IP Basics & OMNEO Overview) ▪ RTS Configuration Software Overview ▪ Online Exam – Professional Level
Learning targets	<p>By successfully completing this training the student will be able to:</p> <ul style="list-style-type: none"> ▪ Understand the basic concepts about Intercom system ▪ Recognize RTS Intercom product family and its applications ▪ Explain OMNEO features and advantages in the audio IP world ▪ Recognize basic knowledge on IP Networks and Audio Networks ▪ Understand RTS Configuration Software suite key features to setup RTS Intercom Digital Matrixes Systems
Prerequisites	<ul style="list-style-type: none"> ▪ There are no prerequisites for this certification level
Target groups	<ul style="list-style-type: none"> ▪ Broadcast & Theatre audio engineers + Intercom users

RTS Intercom Full Range Training - Master Level

Short Description	<p>This classroom training brings an immersive and unique opportunity to master RTS systems, including hands on experience on all hardware & software offerings for different audiences. As an optional module, this classroom training provides a Commercial Sales Training</p>
Content	<p>The modules and topics that will be covered within this training certification level are:</p> <ul style="list-style-type: none"> ▪ Hands on different RTS Intercom Matrices ▪ RTS Intercom Keypansels ▪ IPEdit and AZEdit setup on live systems ▪ ADAM and ADAM-M cards ▪ Port Allocation ▪ RTS Trunking ▪ RTS Intercom Accessories ▪ Integration with third party system ▪ Commercial Sales Training: <ul style="list-style-type: none"> ▪ RTS Intercom System differentiators ▪ How to beat competition ▪ RTS Intercom Innovations and opportunities
Learning targets	<p>By successfully completing this training the student will be able to:</p> <ul style="list-style-type: none"> ▪ Commissioning of Full Range RTS Intercom Systems ▪ Show RTS Intercom system integration with third party systems ▪ Understand different system sizes and complexities ▪ Describe RTS Intercom system positioning in the market
Prerequisites	<ul style="list-style-type: none"> ▪ RTS Intercom - Expert Level Certificate (Online)
Target groups	<ul style="list-style-type: none"> ▪ Sales engineers & systems technicians

Learning path - TELEX Radio Dispatch



Master Level

- Telex Dispatch Classroom Training – Master
- Telex Dispatch Practical Exam



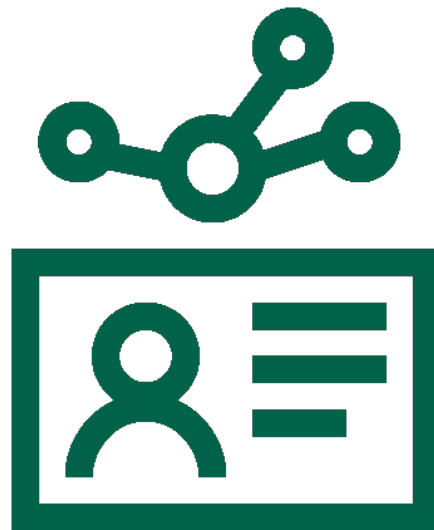
 Training Time
2 days

TELEX Radio Dispatch - Master Level

Short Description	This classroom training brings an immersive and unique opportunity to master TELEX Radio Dispatch systems, including hands on experience on a wide variety of hardware & software offerings.
Content	The modules and topics that will be covered within this training certification level are: <ul style="list-style-type: none">▪ Review of networking terms, protocols, architecture, and security▪ Review of networking requirements and considerations for TELEX Radio Dispatch systems▪ Review design and layout considerations for C-Soft dispatch screens▪ Review system design considerations and best practices▪ Hands on system programming, hardware configuration and setup▪ Hands on system troubleshooting▪ Practical Exam – Master Level

<p>Learning targets</p>	<p>By successfully completing this training the student will be able to:</p> <ul style="list-style-type: none"> ▪ Setup an RoIP network including application and use case considerations ▪ Demonstrate an understanding of direct IP interfaces for P25 DFSI/CSSI, NEXEDGE, and DMR/AIS along with encryption options ▪ Demonstrate an understanding of control station interfaces including supported radios, features, and signaling ▪ Demonstrate radio gateway modes of operation (local, console, tone and crosspatch) ▪ Demonstrate management of hardware devices, including firmware upgrades, using Telex System Manager (TSM) ▪ Correctly setup radio gateway(s) and audio interfaces ▪ Correctly identify requirements, install, and license C-Soft including options ▪ Correctly design and program a C-Soft based system including the SIP interface ▪ Correctly align and test a dispatch system using Telex hardware and software ▪ Demonstrate knowledge of radio system troubleshooting including IP network and C-Soft programming
<p>Prerequisites</p>	<ul style="list-style-type: none"> ▪ RTS Intercom - Expert Level Certificate (Online)
<p>Target groups</p>	<ul style="list-style-type: none"> ▪ Sales engineers & systems technicians

ACCESS CONTROL AND INTRUSION SYSTEMS



AI

Quick note:

G Series and MAP will only be available on demand and therefore will not be on this catalog.

Learning path - Bosch Building Integration System (BIS) technical certification



Bosch Building Integration System (BIS) technical certification

Short Description	<p>Completing this Training Plan, you will be able to work with a BIS system as administrator and carry out several customizations of the system in order to serve the majority of individual end-user requirements.</p>
Content	<p>Professional level:</p> <ul style="list-style-type: none"> ▪ IP Networking basics ▪ Access Modular Controller (AMC) ▪ Access control readers and credentials ▪ BIS Engines <p>Expert level:</p> <ul style="list-style-type: none"> ▪ BIS Expert training ▪ Exam <p>Master level:</p> <ul style="list-style-type: none"> ▪ BIS Master training ▪ Exam
Target groups	<ul style="list-style-type: none"> ▪ Technician ▪ installers

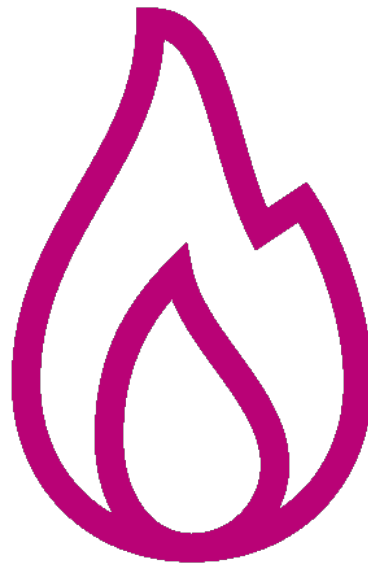
Learning path - Bosch Access Control Systems Technical Certification



Bosch Access Control Systems Technical Certification

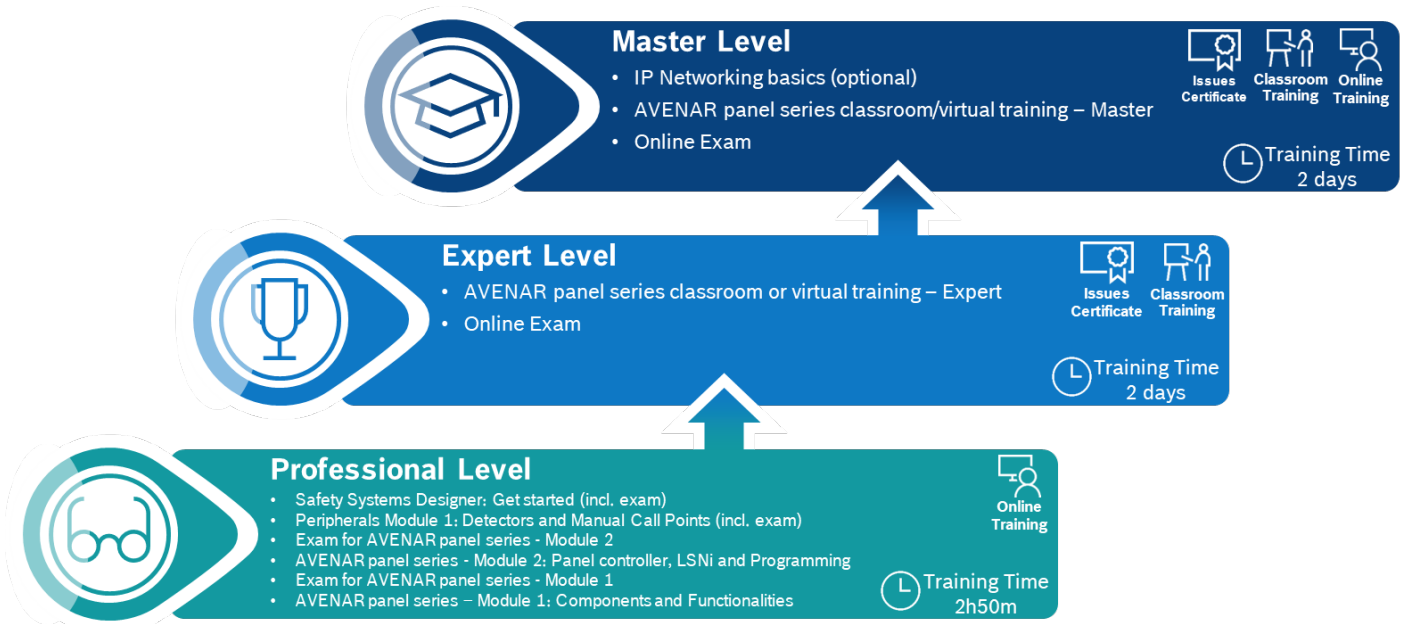
Short Description	<p>Completing this Training Plan, you will be able to work with a BIS system as administrator and carry out several customizations of the system in order to serve the majority of individual end-user requirements.</p>
Content	<p>Professional level:</p> <ul style="list-style-type: none"> ▪ IP Networking basics ▪ Access Modular Controller (AMC) ▪ Access control readers and credentials ▪ Technical introduction WBT's <p>Expert level:</p> <ul style="list-style-type: none"> ▪ AMS Expert training ▪ Exam
Target groups	<ul style="list-style-type: none"> ▪ Technician ▪ installers

FIRE ALARM SYSTEMS



FIR

Learning path - AVENAR panel series



* also applicable for FSO-4000

AVENAR panel series Technical Certification, Professional Level

<p>Short Description</p>	<p>The online modules of the Professional level will give you an overview about:</p> <ul style="list-style-type: none"> - The basic components of the Bosch AVENAR panel series; - Different technologies and applications for Bosch Fire Detectors; - Different types of manual call points. <p>You will also learn how to use the Bosch Safety Systems Designer in your daily work.</p> <p>Completing the Professional online modules is the prerequisite to continue with your AVENAR panel series Expert Certification including classroom or virtual trainings.</p> <p>Upon passing, you will receive a confirmation of completion.</p>
<p>Content</p>	<p>Modules included:</p> <ol style="list-style-type: none"> 1) AVENAR panel series <ul style="list-style-type: none"> ▪ Module 1: Components and Functionalities ▪ Exam for Module 1 ▪ Module 2: Panel Controller, LSNI and Programming ▪ Exam for Module 2 2) Bosch Fire Peripherals <ul style="list-style-type: none"> ▪ Module 1: Detectors and Manual Call Points (this module already contains an exam) 3) Bosch Safety Systems Designer <ul style="list-style-type: none"> ▪ Bosch Safety Systems Designer: Get started (this module already contains an exam)
<p>Learning targets</p>	<p>By successfully completing this training the customer should be able to:</p> <ul style="list-style-type: none"> ▪ Understand the modular concept of the AVENAR panel series ▪ Get familiar with functional concept of LSN and basic structure of RPS ▪ Understand features and differences of Bosch products and learn about their technical data
<p>Prerequisites</p>	<ul style="list-style-type: none"> ▪ Basic Fire Knowledge
<p>Target groups</p>	<ul style="list-style-type: none"> ▪ System Integrators

AVENAR panel series Technical Certification, Expert Level

Short Description	<p>The Expert level modules include a 2-day classroom or virtual training and an online exam.</p> <p>You will learn about basic programming and diagnostics procedures for the AVENAR panel series. This level does not include networking capabilities of the AVENAR panel series. Please refer to the Master level modules for this topic.</p> <p>Upon passing, you will achieve the AVENAR panel series Certification on the level Expert.</p>
Content	<p>Topics included in the classroom / virtual trainings:</p> <ul style="list-style-type: none"> ▪ Recap of Modular Concept ▪ Recap LSNi Basics ▪ LSN Advanced ▪ LSNi Test Tool ▪ “Do’s and Don’ts” Installation ▪ Maintenance ▪ Redundancy ▪ Programming with RPS ▪ Troubleshooting ▪ Simple Networking ▪ Hands-on sessions
Learning targets	<p>By successfully completing this training the customer should be able to:</p> <ul style="list-style-type: none"> ▪ have a general understanding of the AVENAR panel series and ▪ design install and program an AVENAR panel 2000 or 8000 system in stand-alone set-up.
Prerequisites	<ul style="list-style-type: none"> ▪ Basic Fire Knowledge ▪ Completed AVENAR panel series Professional level
Target groups	<ul style="list-style-type: none"> ▪ Installers ▪ System Integrators
Duration	<ul style="list-style-type: none"> ▪ 2 days

AVENAR panel series Technical Certification, Master Level

Short Description	<p>The Master level modules include an optional online training (IP Networking Basics), a 2-day classroom or virtual training and an online exam.</p> <p>You will learn about the networking of the AVENAR panel series.</p> <p>Upon passing, you will achieve the AVENAR panel series Certification on the level Master.</p>
Content	<p>Topics included in the classroom / virtual trainings:</p> <ul style="list-style-type: none"> ▪ Complex networks (CAN, IP, OPC) ▪ Connection to FSM ▪ Smart Safety Link (Integration to Praesideo, Paviro) ▪ RPS Programming advanced: application of rules over AVENAR panel series network ▪ Hands-on sessions
Learning targets	<p>By successfully completing this training the customer should be able to:</p> <ul style="list-style-type: none"> ▪ understand the basics of AVENAR panel networking ▪ to install, configure and commission an AVENAR panel series network and ▪ establish a connection to AVENAR panel-OPC, Praesideo/Paviro and/or FSM-2500.
Prerequisites	<ul style="list-style-type: none"> ▪ Completed AVENAR panel series Professional and Expert modules
Target groups	<ul style="list-style-type: none"> ▪ Experienced Electrical Design Engineers
Duration	<ul style="list-style-type: none"> ▪ 2 days

AVENAR panel series: What's new – for certified FPA-5000 users

This training plan is for customers with a profound knowledge of and experience with the FPA-5000 fire alarm panel. The **pre-requisite is an FPA-5000 training certificate** from the Bosch Building Technologies Academy.

<p>Short Description</p>	<p>This training plan gives an overview of the new features and characteristics of the AVENAR panel series compared to the FPA-5000 fire alarm panel.</p> <p>It contains an online training and an online exam about the new AVENAR panel series.</p> <p>Upon passing, you will receive the AVENAR panel series Certificate on the level Expert.</p>
<p>Content</p>	<p>Modules included:</p> <ol style="list-style-type: none"> 1) Online training: AVENAR panel series: What's new - for certified FPA-5000 users. <ul style="list-style-type: none"> ▪ Gives an overview of the new features and characteristics of the AVENAR panel series, consisting of the AVENAR panel 2000 and AVENAR panel 8000. <p>This module is for experienced and certified FPA-5000 users only!</p> 2) Online Exam
<p>Learning targets</p>	<p>By successfully completing this training the customer should be able to:</p> <ul style="list-style-type: none"> ▪ understand the main differences between AVENAR panel series and predecesing FPA panel series ▪ know the new and updated features and functionalities of the new series ▪ understand the user interface (UI) of the new panel controller ▪ learn about the new settings of the programming software FSP-5000-RPS
<p>Prerequisites</p>	<ul style="list-style-type: none"> ▪ FPA-5000 Expert training certificate from the Bosch Building Technologies Academy. <p>If you do not have an updated certificate, please contact your local Bosch sales office. Or e-mail us at TrainingFire.ST@de.bosch.com to learn how to obtain an updated certificate.</p>
<p>Target groups</p>	<ul style="list-style-type: none"> ▪ System Integrators

Additional online trainings

You can find more comprehensive tutorials and online trainings under the category Fire Alarm Systems in the Bosch Building Technologies Academy on topics like:

- Video based fire detection
- Remote Services
- Safety Systems Designer

Make sure that you do not miss the online training “**Basics of video fire detection**” to learn about our innovative fire and smoke detection camera – **AVIOTEC IP starlight 8000**.