**BOSCH**

Bosch Building Technologies Academy
**Training Catalogue 2020**

Dear Customer,

Within this catalogue you have access to an overview of the trainings that we, Bosch Security Systems, offer to our customers in the **central locations of Grasbrunn, Germany and Eindhoven, the Netherlands.**

Although the majority of the featured trainings are classroom trainings, we have also included any Online Trainings that are necessary as a prerequisite in order to attend a specific classroom training.

This catalogue includes a broad choice of all the classroom trainings that we offer in our locations of Grasbrunn (Munich), Germany and Eindhoven, The Netherlands and therefore each business domain is represented, thus within this catalogue you will find trainings in: Video, Intrusion, Access Control, Management Systems, Public Address, Conference and Fire.

As we offer both online and classroom trainings you will see these symbols within this catalogue:

This symbol represents the trainings that are online

This symbol represents the trainings that take place in the classroom

This symbol represents Virtual Classroom Trainings

Virtual Classroom Trainings are conducted by a senior trainer via an online classroom within the program **Adobe Connect**.

Each page includes a description of the training together with the learning targets, prerequisites and target groups.

Please note that all our classroom trainings are English unless explicitly specified otherwise.

All **online trainings are free**, classroom trainings in this catalogue include pricing based on pricing per student for the full course. All prices are Prices before VAT.

# Contents

**Security**

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| TRAINING | Months | | | | | |
|---|---|---|---|---|---|---|
| | January | February | March | April | May | June |
| **Video Recording Hands-On Workshop - Master Level** | | 18 Eindhoven (EN) | | | 26 Eindhoven (EN) | |
| **Video Analytics Hands-On Workshop - Master Level** | | 17 Eindhoven (EN) | | | 25 Eindhoven (EN) | |
| **Bosch Video Management Systems Expert** | | 17-19 Grasbrunn (EN) | 9-11 Eindhoven (EN) | | 11-13 Grasbrunn (EN) | 15-17 Eindhoven (EN) |
| **Bosch Video Management Systems Master** | | 20-21 Grasbrunn (EN) | 12-13 Eindhoven (EN) | | 14-15 Grasbrunn (EN) | 18-19 Eindhoven (EN) |
| **Bosch Video Management Systems Master SDK - For Integration Engineers** | On request only | | | | | |
| **Modular Alarm Platform 5000 - Expert Level** | | | 9-10 Grasbrunn (EN) 23-24 Grasbrunn (DE) | | 4-5 Grasbrunn (EN) | |
| **Modular Alarm Platform 5000 – Master Level** | | | 11 Grasbrunn (EN) 25 Grasbrunn(DE) | | 6 Grasbrunn (EN) | |
| **G-Series Control Panels - Expert Level** | | | 12-13 Grasbrunn (EN) | | 7-8 Grasbrunn (EN) | |
| **Access Management System** | | | 26-27 Grasbrunn (EN) | | 18-19 Grasbrunn (EN) | |
| **Access Professional Edition** | On request only | | | | | |
| **Bosch Building Integration System - Expert Level** | 20-24 Grasbrunn (EN) | | 16-20 Grasbrunn (EN) | 20-24 Grasbrunn (EN) | 25-29 Grasbrunn (EN) | 29.06.-03.07. Grasbrunn (EN) |
| **Bosch Building Integration System - Master Level (PLATFORM)** | | | | | | |
| **Bosch Building Integration System - Master Level (ACE)** | | | | | | |
| **Bosch Public Address PA basics – Professional** | 27 Eindhoven (EN) | | 2 Eindhoven (EN) 23 Eindhoven (EN) | 20 Eindhoven (EN) | 4 Eindhoven (EN) | 8 Eindhoven (EN) 29 Eindhoven (EN) |
| **Bosch Public Address PAVIRO (nw) - Technical Master** | | | 24-26 Eindhoven (EN) | | | 30.06.-02.07. Eindhoven (EN) |
| **IRIS-Net Technical Expert (GUI Basic)** | | | 26-27 Eindhoven (EN) | | | |
| **Praesideo - Technical Master** | | | | 21-23 Eindhoven (EN) | | |
| **Praesideo - System Maintenance and Basic Service for Masters** | | | | | | |
| **PRAESENSA Technical Master** | 28-30 Eindhoven (EN) | | 3-5 Eindhoven (EN) | | 5-7 Eindhoven (EN) | 9-11 Eindhoven (EN) |
| **Bosch Conference DICENTIS - Technical Master** | | | 17-19 Eindhoven (EN) | | 12-14 Eindhoven (EN) | |
| **Bosch Conference DICENTIS – Advanced System Design** | | | 20 Eindhoven (EN) | | 14 Eindhoven (EN) | |
| **Cyber Security for Video Systems** | | | 26-27 Eindhoven (EN) | | | |
| **Fire Alarm Panel FPA-5000 Technical Training – Expert** | 28-29 Grasbrunn (EN) | | | 27-28 Grasbrunn (DE) | | 22-23 Grasbrunn (EN) |
| **Fire Alarm Panel FPA-5000 Technical Training - Master** | 30-31 Grasbrunn (EN) | | | 29-30 Grasbrunn (DE) | | 24-25 Grasbrunn (EN) |

| TRAINING | Months | | | | | |
|---|---|---|---|---|---|---|
| | July | August | September | October | November | December |
| **Video Recording Hands-On Workshop - Master Level** | | | | 13 Eindhoven (EN) | | |
| **Video Analytics Hands-On Workshop - Master Level** | | | | 12 Eindhoven (EN) | | |
| **Bosch Video Management Systems Expert** | 6-8 Grasbrunn (EN) | | 14-16 Grasbrunn (EN) | 12-14 Grasbrunn (DE) | 23-25 Grasbrunn (EN)<br><br>2-4 Eindhoven (EN) | |
| **Bosch Video Management Systems Master** | 9-10 Grasbrunn (EN) | | 17-18 Grasbrunn (EN) | | 26-27 Grasbrunn (EN)<br><br>5-6 Eindhoven (EN) | |
| **Bosch Video Management Systems Master SDK - For Integration Engineers** | On request only | | | | | |
| **Modular Alarm Platform 5000 - Expert Level** | 13-14 Grasbrunn (EN) | | | | 9-10 Grasbrunn (EN) | |
| **Modular Alarm Platform 5000 – Master Level** | 15 Grasbrunn (EN) | | | | 11 Grasbrunn (EN) | |
| **G-Series Control Panels - Expert Level** | 23-24 Grasbrunn (EN) | | | | 12-13 Grasbrunn (EN) | |
| **Access Management System** | | | 10-11 Grasbrunn (EN) | | 19-20 Grasbrunn (EN) | |
| **Access Professional Edition** | On request only | | | | | |
| **Bosch Building Integration System - Expert Level** | 29.06.-03.07. Grasbrunn (EN) | | | 26-30 Grasbrunn (EN) | 30.11.-04.12. Grasbrunn (EN) | |
| **Bosch Building Integration System - Master Level (PLATFORM)** | 16-17 Grasbrunn (EN) | | | | | 7-8 Grasbrunn (EN) |
| **Bosch Building Integration System - Master Level (ACE)** | 20-22 Grasbrunn (EN) | | | | 16-18 Grasbrunn (EN) | |
| **Bosch Public Address PA basics – Professional** | 6 Eindhoven (EN) | | 7 Eindhoven (EN)<br>21 Eindhoven (EN) | 5 Eindhoven (EN)<br>26 Eindhoven (EN) | 2 Eindhoven (EN)<br>30 Eindhoven (EN) | |
| **Bosch Public Address PAVIRO (nw) - Technical Master** | 30.06.-02.07. Eindhoven (EN) | | | 27-29 Eindhoven (EN) | | |
| **IRIS-Net Technical Expert (GUI Basic)** | 2-3 Eindhoven (EN) | | | 29-30 Eindhoven (EN) | | |
| **Praesideo - Technical Master** | | | 22-24 Eindhoven (EN) | | | |
| **Praesideo - System Maintenance and Basic Service for Masters** | | | | | | |
| **PRAESENSA Technical Master** | | | 8-9 Eindhoven (EN) | 6-8 Eindhoven (EN) | 3-5 Eindhoven (EN) | |
| **Bosch Conference DICENTIS - Technical Master** | | | 1-3 Eindhoven (EN) | | 10-12 Eindhoven (EN) | 8-10 Eindhoven (EN) |
| **Bosch Conference DICENTIS – Advanced System Design** | | | 3 Eindhoven (EN) | | 12 Eindhoven (EN) | 10 Eindhoven (EN) |
| **Cyber Security for Video Systems** | | | | | | |
| **Fire Alarm Panel FPA-5000 Technical Training – Expert** | 27-28 Grasbrunn (DE) | | | 19-20 Grasbrunn (DE) | 2-3 Grasbrunn (EN) | |
| **Fire Alarm Panel FPA-5000 Technical Training - Master** | 29-30 Grasbrunn (DE) | | | 21-22 Grasbrunn (DE) | 4-5 Grasbrunn (EN) | |

# Booking Information:

### How to book a training:

In order to book a classroom training you need to go through the Bosch Building Technologies Academy and on the tab titled "registration" you are able to book yourself onto a training course. In order to access them you must first register an account, if you already have an account then you will be able to log straight on and access the trainings.

To partake in an online training you must register an account for the Bosch Building Technologies Academy, you will then be able to start the online training of your choice within the Bosch Building Technologies Academy, which you have access to at any time and can stop and start as you please.

### How to register for the Bosch Building Technologies Academy:

The address of the Bosch Building Technologies Academy is
https://academy.globalteach.com/ST/Login.aspx
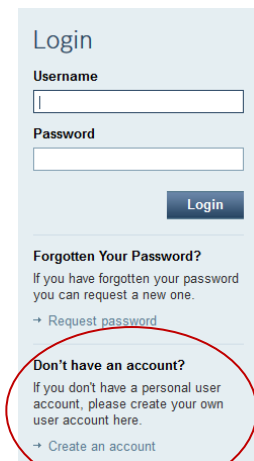
On this webpage you will find a link which says "create an account"

You will then be directed to the "Self Registration" page for new users

To complete the registration process please fill out all the necessary information

Please note that access to the Bosch Building Technologies Academy will be granted
within 48 business hours after the registration.

Login
Username
Password

Login

Forgotten Your Password?
If you have forgotten your password you can request a new one.
→ Request password

Don't have an account?
If you don't have a personal user account, please create your own user account here.
→ Create an account

### Further Questions:

Should you have any further questions regarding our trainings or problems with your account in the Bosch Building Technologies Academy please do not hesitate to contact us at:

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[training.emea@bosch.com](mailto:training.emea@bosch.com)

# CERTIFICATION:

Both online trainings and classroom trainings award the customer a certificate upon the successful completion of the course and online exam. These certificates are often prerequisites in order to progress further within a training plan to achieve the highest level.

Bosch  >  My profile ▸ Show certificate

> Change password
> Modify user profile
> Show skills
> **Show certificates**
> Training plan registrations
> Course registrations
> Virtual course registrations
> My files (File Sharing)
> Show declaration of consent

All of the certificates achieved by the customer can be found in one place on the Academy website. The certificates are available as PDF which the customer has the option to download and print.

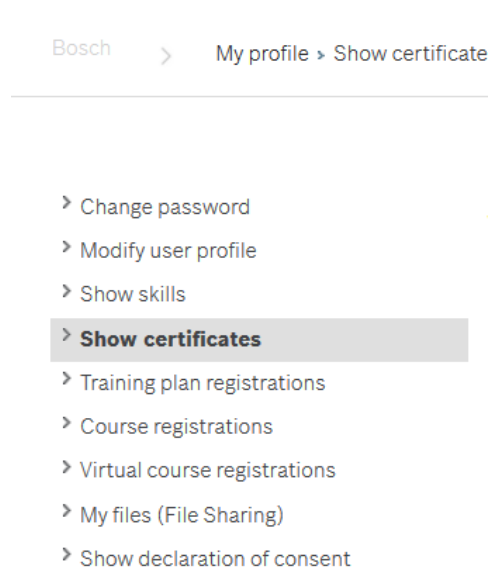The certificates can be seen and downloaded by selecting the **'my profile'** tab at the top of the screen. The customer is then directed to their profile which features their username, language settings and company on the first page. The customer will see that on the left hand side of the screen there is a tab named **'Show Certificates'** – this is where all certificates that customers have achieved through both Online Trainings and Classroom lessons can be found, downloaded and printed.

You invest a lot of time and effort into qualifying yourself, and we believe that your customers and partners should know about it. The more you learn, the higher the qualification you earn; all our certifications follow the steps from the level *professional* to the level *expert*, and finally to the highest level, *master*.

**Professional:**
Online training on basic product features and system architecture

**Expert:**
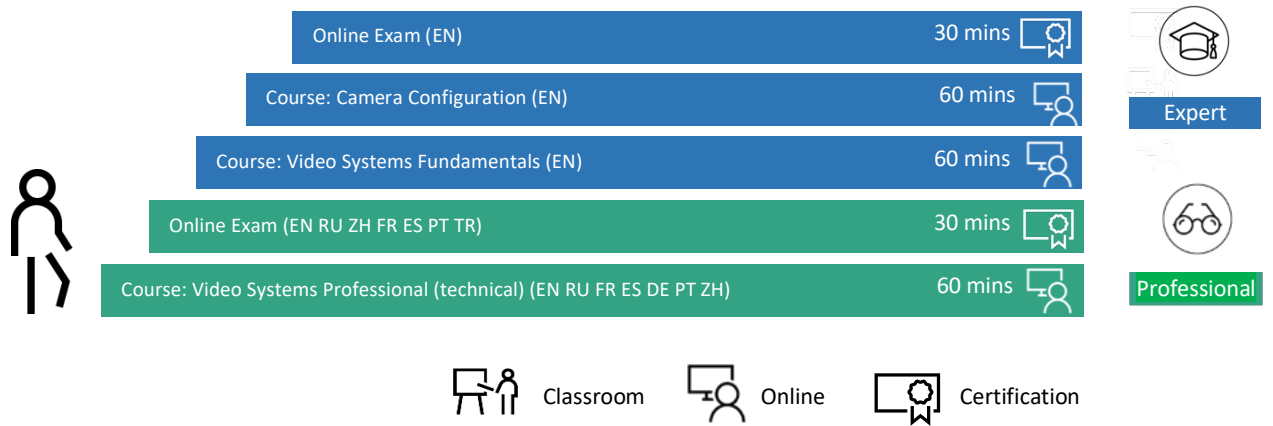Training on basic system design/configuration for lower complexity systems

**Master:**
Training on advanced System configuration/ integrated systems and in troubleshooting

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## Bosch Video Systems Professional (Technical & Commercial)

| | |
|---|---|
| **Short description** | In this training, the customer will receive an overview of the Bosch world in general and will be provided with the basic information concerning the Bosch Video Systems technologies. <br> The Technical module applies to all the Video Systems learning paths and the BVMS Technical learning path, whereas the Commercial module applies to The BVMS Commercial learning path. |
| **Content** | This training consists of 14 modules: <br><br> • Startup instruction <br> • Introduction <br> • Quality and Trust <br> • Easy installation <br> • Leading solutions <br> • Video Analytics <br> • In-Store Analytics <br> • Business Intelligence <br> • Shaping the future <br> • Fixed camera portfolio <br> • Thermal camera portfolio <br> • Moving camera portfolio <br> • Recorder portfolio <br> • End of training |
| **Learning targets** | This training will explain the Bosch philosophy and the technologies behind our products. <br> We will guide you through our different solutions and products that have been created for your needs. |
| **Prerequisites** | No prerequisites required |
| **Target groups** | Recommended for: <br> • System Engineers and Installers <br> • Sales Support Engineer |
| **Time estimation** | Technical: 60 mins <br> Commercial: 120 mins |

## Bosch Video Camera

| | | |
|---|---|---|
| Online Exam (EN) | 30 mins | 🏆 |
| Course: Camera Configuration (EN) | 60 mins | 🖥 |
| Course: Video Systems Fundamentals (EN) | 60 mins | 🖥 |
| Online Exam (EN RU ZH FR ES PT TR) | 30 mins | 🏆 |
| Course: Video Systems Professional (technical) (EN RU FR ES DE PT ZH) | 60 mins | 🖥 |

Expert
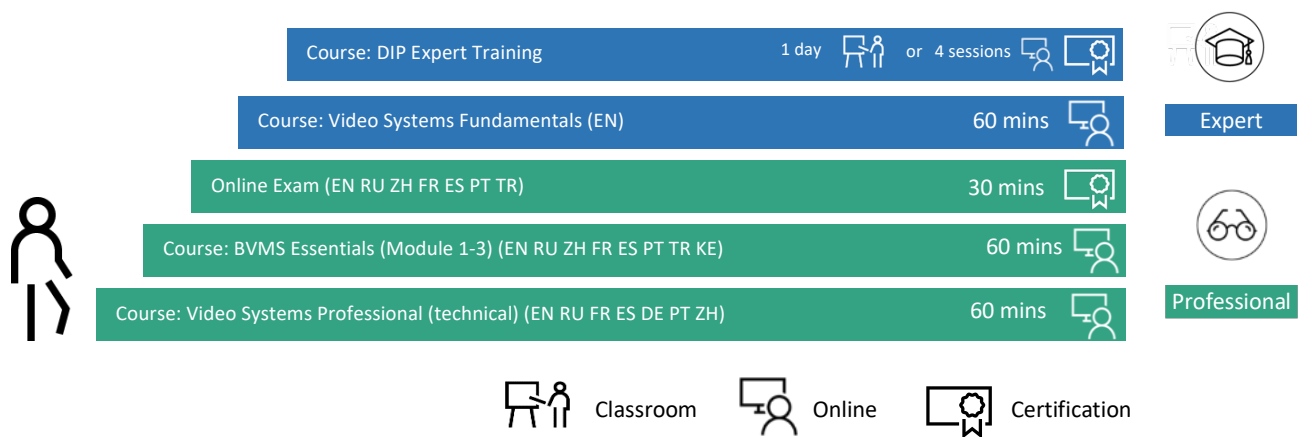
Professional

Classroom    Online    Certification

The learning path is also available in the Bosch Building Technologies Academy. You only need to click on the certification symbol and you will be routed directly to the correct learning path.

## Security

## Bosch Video Camera – Expert Level Training

| | |
|---|---|
| **Short description** | In this training we will explain how to choose the correct camera for your application and what needs to be taken in consideration in the design of your system.<br>We will then explain how to configure our camera via the different tools (Web GUI, configuration manager, project assistant) |
| **Content** | • Video systems fundamentals<br>• Camera configuration |
| **Learning targets** | By successfully completing this training the customer should be able to:<br>• Install by mounting and assembling each different camera type<br>• Understand how to configure the different camera settings<br>• Troubleshoot camera problems<br>• Get access to the camera from different client type |
| **Prerequisites** | • Students need to complete the Bosch Video Systems Professional (technical) training<br>(Refer to pg. 10) |
| **Target groups** | Recommended for:<br>• System Enginners and Installers<br>• Sales Support Engineer |

# Bosch DIVAR IP All-in-one

| | |
|---|---|
| Course: DIP Expert Training | 1 day 🗣️ or 4 sessions 🖥️ 🏅 |
| Course: Video Systems Fundamentals (EN) | 60 mins 🖥️ |
| Online Exam (EN RU ZH FR ES PT TR) | 30 mins 🏅 |
| Course: BVMS Essentials (Module 1-3) (EN RU ZH FR ES PT TR KE) | 60 mins 🖥️ |
| Course: Video Systems Professional (technical) (EN RU FR ES DE PT ZH) | 60 mins 🖥️ |

Expert

Professional

🗣️ Classroom   🖥️ Online   🏅 Certification

The learning path is also available in the Bosch Building Technologies Academy. You only need to click on the certification symbol and you will be routed directly to the correct learning path.

The languages supported for classroom trainings are subject to availability at the respective region.

## Security

## Bosch DIVAR IP All-in-one – Expert Level Training
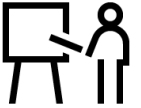
| | |
|---|---|
| **Short description** | In this training we will explain how to choose the correct DIVAR IP for your application and what needs to be taken in consideration in the design of your system.<br><br>We will then explain how to configure our DIVAR IP AIO for small size installations. |
| **Content** | • Video systems fundamentals<br>• DIVAR IP AIO hands-on training |
| **Learning targets** | By successfully completing this training the customer should be able to:<br><br>• Install & configure a Bosch Video solution |
| **Prerequisites** | Students need to complete the Bosch Video Systems Professional (technical) training. For deeper knowledge on our Bosch Video Management System (medium to big / complex installations) we advise to follow the Bosch Video Management System Expert Level training plan.<br>(Refer to pg. 10) |
| **Target groups** | Recommended for:<br>• System Engineers and Installers<br>• Sales Support Engineer |
| **Commercial Information:** | CTN number:<br>• Eindhoven: TRA-VIDESS-CM<br>Price: €300 per training per person (Price before VAT) |

## Bosch Video Analytics



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|---|---|---|---|
| Course: Video Analytics Master Training | 1 day ⛰️ or 4 sessions 💻 🏅 | 🏆 | Master |
| Course: Video Analytics Expert Training (EN) | 60 mins 💻 | 🎓 | Expert |
| Online Exam (EN RU ZH FR ES PT TR) | 30 mins 🏅 | 👓 | Professional |
| Course: Video Systems Professoinal (technical) (EN RU ZH FR ES DE PT ZH) | 60 mins 💻 | | |

⛰️ Classroom   💻 Online   🏅 Certification

The learning path is also available in the Bosch Building Technologies Academy. You only need to click on the certification symbol and you will be routed directly to the correct learning path.

The languages supported for classroom trainings are subject to availability at the respective region.

**Security**

**Bosch Video Analytics**

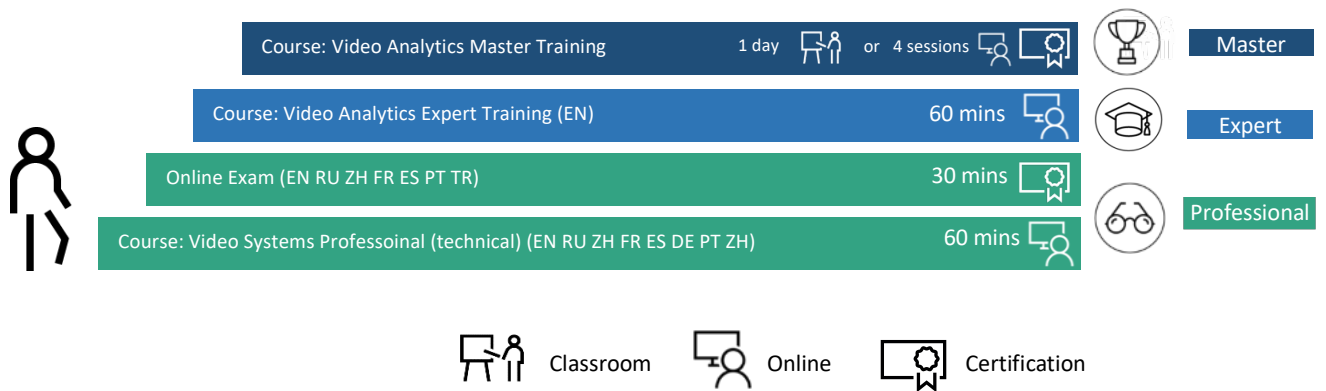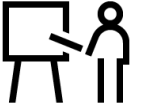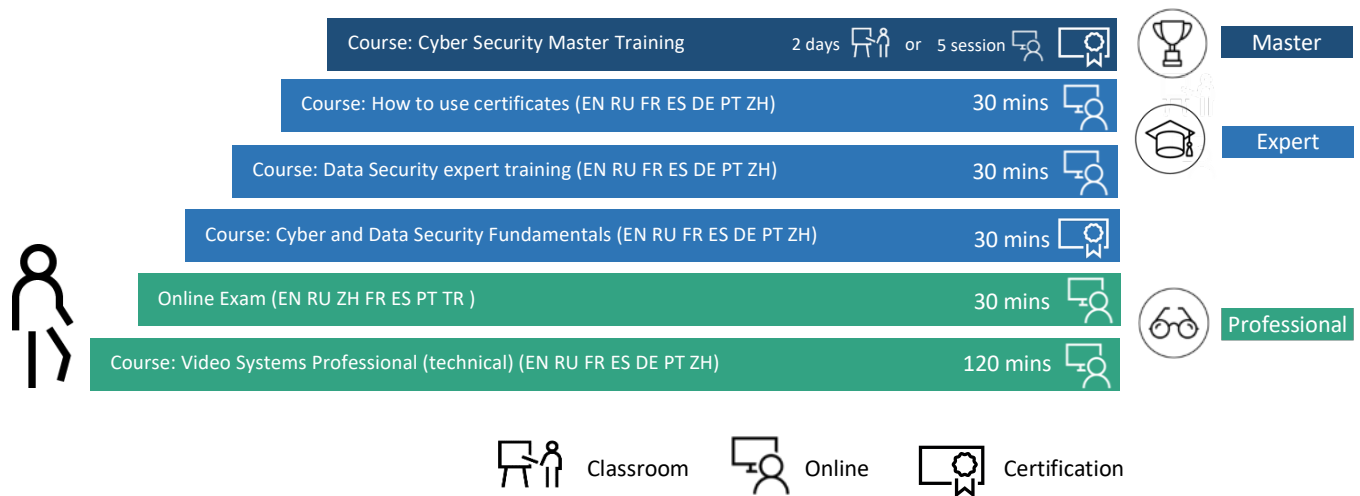| | |
|---|---|
| **Short description** | In this training we will go deeper into the difference between our Essentials and Intelligent Video Analytics.<br>We will then concentrate on the design and planning of a Video Analytics system.<br>Once finished with the design part we will see how to configure the camera Video Analytics.<br><br>And to finish we will concentrate on the Camera Trainer option of our Video Analytics. In which application can it be used and how to configure it. |
| **Content** | • Video analytics expert module<br>• Video analytics Face to Face training<br><br>Before participation to the face to face training, students are required to complete the different online modules of the training plan. |
| **Learning targets** | Upon successful completion of this training the student will be able to:<br><br>• Understand the differences between EVA and IVA<br>• Configure the proper task for each alarm type<br>• Calibrate the camera for the best alarm results<br>• Select the tracking mode that fits the application<br>• Configure special analytic types as flow control and face detection<br>• Set up recording of meta data and perform forensic search |
| **Prerequisites** | Students need to complete the Bosch Video Systems Professional (technical) training<br>(Refer to pg. 10) |
| **Target groups** | Recommended for:<br>• System Engineers and Installers<br>• Sales Support Engineer |
| **Commercial Information:** | CTN number:<br>• Eindhoven: TRA-VIDESS-CM<br>Price: €300 per training per person (Price before VAT) |

# Cyber Security for Video Systems



| | | |
|---|---|---|
| Course: Cyber Security Master Training | 2 days ☐ or 5 session ☐ ☐ | Master |
| Course: How to use certificates (EN RU FR ES DE PT ZH) | 30 mins ☐ | Expert |
| Course: Data Security expert training (EN RU FR ES DE PT ZH) | 30 mins ☐ | |
| Course: Cyber and Data Security Fundamentals (EN RU FR ES DE PT ZH) | 30 mins ☐ | |
| Online Exam (EN RU ZH FR ES PT TR ) | 30 mins ☐ | Professional |
| Course: Video Systems Professional (technical) (EN RU FR ES DE PT ZH) | 120 mins ☐ | |

☐ Classroom      ☐ Online      ☐ Certification

The learning path is also available in the Bosch Building Technologies Academy. You only need to click on the certification symbol and you will be routed directly to the correct learning path.
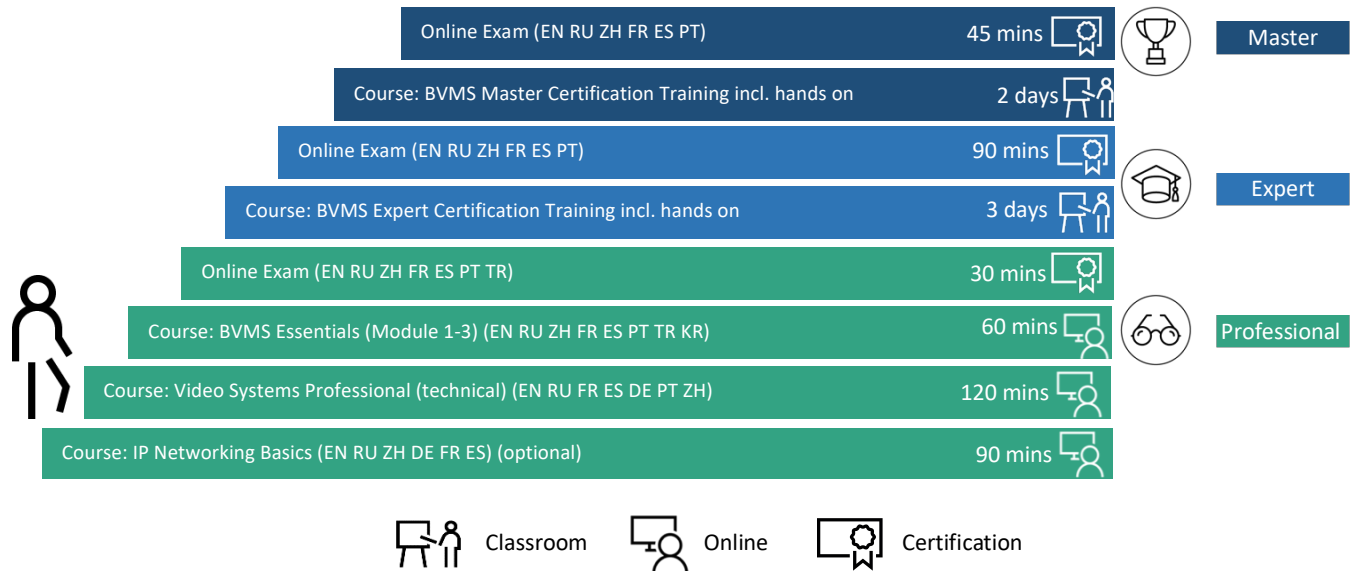
The languages supported for classroom trainings are subject to availability at the respective region.

**Security**

## Cyber Security for Video Systems

| | |
|---|---|
| **Short description** | 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. Emphasis is given to the legal aspects of vulnerability analysis as well as handling of evidentiary material.<br><br>This course requires a minimum of 2 students for the course to take place. |
| **Content** | • Basic cyber security fundamentals<br>• Data security expert training<br>• How to use certificates<br>• Cyber Data Security Face to Face training<br><br>Before participation to the face to face training, students are required to complete the different online modules of the training plan. |
| **Learning targets** | To be able to predict, analyze and troubleshoot possible threats with Bosch product. |
| **Prerequisites** | • Medium-high level knowledge of IP and Networking and you need to have completed the Bosch Video Systems Professional (technical) training (Refer to pg. 10)<br>• Recommended: BVMS Professional online and Expert classroom certifications. |
| **Target groups** | Technicians, Project Managers and IT Professionals |
| **Duration** | 2 days (for Master Level Classroom Training) |
| **Commercial Information:** | Location wise CTN numbers:<br>• Eindhoven: TRA-CYDASE-VM<br>Price: €600 per training per person (Price before VAT) |

## BVMS OVERVIEW – Technical Certification

| | | | |
|---|---|---|---|
| Online Exam (EN RU ZH FR ES PT) | 45 mins | | Master |
| Course: BVMS Master Certification Training incl. hands on | 2 days | | |
| Online Exam (EN RU ZH FR ES PT) | 90 mins | | Expert |
| Course: BVMS Expert Certification Training incl. hands on | 3 days | | |
| Online Exam (EN RU ZH FR ES PT TR) | 30 mins | | Professional |
| Course: BVMS Essentials (Module 1-3) (EN RU ZH FR ES PT TR KR) | 60 mins | | |
| Course: Video Systems Professional (technical) (EN RU FR ES DE PT ZH) | 120 mins | | |
| Course: IP Networking Basics (EN RU ZH DE FR ES) (optional) | 90 mins | | |

Classroom    Online    Certification

The learning path is also available in the Bosch Building Technologies Academy. You only need to click on the certification symbol and you will be routed directly to the correct learning path.
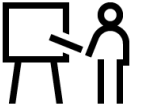
The languages supported for classroom trainings are subject to availability at the respective region.

# Security

## Bosch Video Management System (BVMS) – Professional Level Online Training Plan: Technical

| | |
|---|---|
| **Short description** | When completing this Training Plan you will be able to register for an Expert Level classroom Training offered in different countries across the globe.<br>It includes Online Training Modules in order to gain essential knowledge about BVMS and the related environment.<br>Completing this Professional Level Training Plan is the prerequisite to continue with the Expert Level Training plan including classroom based trainings.<br>Please register to the Training Plan and open it afterwards in order to see the assigned individual Online Training offering. |
| **Content** | • Understand the functionality of the BVMS core components (Management Server, Video Recording Administrator, Operation Client, Configuration Client).<br>• Install, configure and operate the BVMS with the configuration client and the operation client<br>• Understand the fundamentals of Video Recording Manager and configure the main functions of VRM<br>• Perform basic operations and maintenance tasks |
| **Learning targets** | By successfully completing this training the customer should be able to:<br><br>• Understand the basic functionality of the main BVMS system components<br>• Understand the basic interaction between the main BVMS components<br>• Understand the basic functionality of the additional BVMS system components |
| **Prerequisites** | • none |
| **Target groups** | Recommended for:<br>• System Engineers, Administrators and Installers |

**Security**

**Bosch Video Management System (BVMS)**

**– Expert Level Classroom Training Plan: Technical**

| | |
|---|---|
| **Short description** | This Training Plan offers a collection of classroom based training courses. Please register to the Training Plan and open it afterwards in order to see the individual classroom lesson offered. Registration to this Training Plan is always possible, there is no prerequisite. However, registering to the classroom training which is offered inside this Training Plan requires the successful completion of the BVMS Professional level Training plan including the Professional Level Exam. A pass rate of 75% of the BVMS Professional Level Exam is required in order to register for the Expert Level classroom training.<br><br>When completing this Training Plan you will be able to reach the Expert Level Certificate for the Bosch VMS. |
| **Content** | The modules and topics that will be covered in this training are:<br><br>• BVMS technical overview and main components (MS, VRM, Operator and Configuration Client)<br>• Installation, time synchronization of system components and license activation<br>• Configuration client: Overview, initial device configuration (cameras, monitor walls and other devices)<br>• Configuration client: Logical tree, schedules, streams and configuration of recording<br>• Configuration Client: Events and alarm handling, user groups and permissions<br>• Video Recording Manager (VRM) fundamentals and detailed configuration<br>• Overview of Bosch iSCSI storage arrays in Bosch VMS environment<br>• Usage of Operator Client features in detail<br>• System design overview: Requirements, licensing options, scalability, resilience and storage estimation<br>• Operation and maintenance: Recording, monitoring, system backup and configuration collector |
| **Learning targets** | By successfully completing this training the customer should be able to:<br>• Explain the functionality of the main BOSCH VMS components (Management Server, Video Recording Manager, Operator Client, Configuration Client)<br>• Install, configure and operate the Bosch VMS with the Configuration Client and Operator Client<br>• Understand the Video Recording Manager fundamentals and configure main VRM features<br>• Name the Bosch iSCSI storage arrays and explain the main characteristics and selection criteria in Bosch VMS environment |

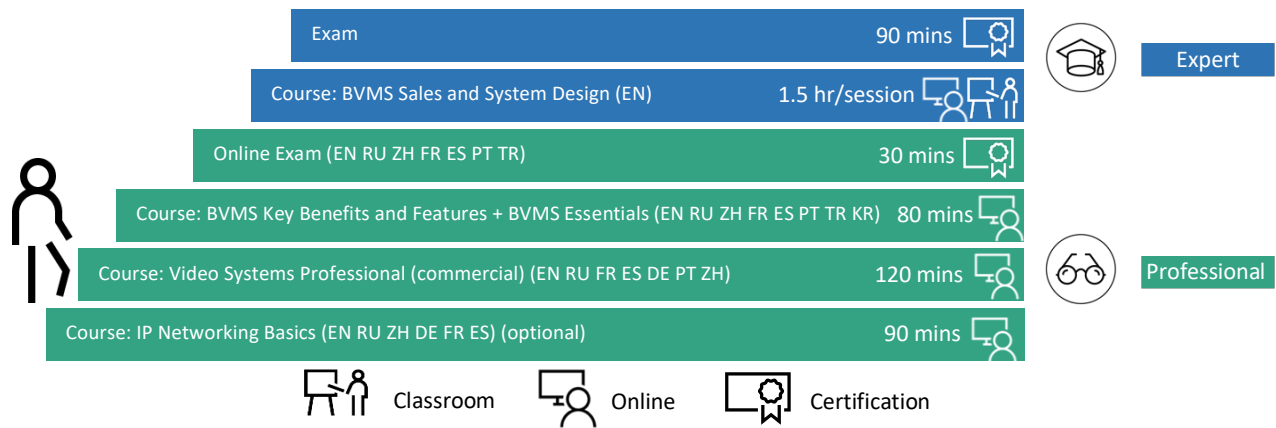| | |
|---|---|
| | • Understand the principles of how to do system design and storage estimate<br>• Execute some basic operation and maintenance tasks |
| **Prerequisites** | • Successful completion of the BVMS Professional Level training plan and exam (A passing rate of 75% of the BVMS Professional Level Exam is required in order to register for an Expert Level Classroom Training.) |
| **Target groups** | Recommended for:<br>• System Engineers, Administrators and Installers who frequently work with BVMS (hands on)<br>• Project Engineers, Sales Support Engineer & System Architects who want to gain practical (hands on) experience with BVMS |
| **Training Duration** | 3 Days |
| **Commercial Information:** | Location wise CTN numbers:<br>• Grasbrunn: TRA-BVMS-EE<br>• Eindhoven: TRA-BVMS-CE<br><br>Price: €1200 per training per person (Price before VAT) |

**Security**
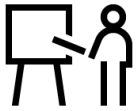
**Bosch Video Management System (BVMS)**

**– Master Level Classroom Training Plan: Technical Focus**

| | |
|---|---|
| **Short description** | Please register to the Training Plan and open it afterwards in order to see the assigned individual classroom lesson offerings. |
| **Content** | The modules and topics that will be covered in this training are:<br><br>• Additional components of BVMS (Video Streaming Gateway, Mobile Video Service, Enterprise Management Server<br>• Introduction to advanced functions and how to configure them:<br>    • Integration of third party cameras: ONVIF, RTSP, MJPEG<br>    • VRM deployment options: Duplicate (duplicate) and failover<br>    • Large or distributed employment options: Enterprise System, live and play sites<br>    • Remote access settings<br>    • LDAP, SNMP<br>    • Introduction to scripting (BVMS SDK)<br>    • Automatic network replenishment (ANR)<br>    • Advanced operation and maintenance: recording supervision, basic troubleshooting<br>    • Other topics: Introduction to server virtualisation options (HyperV and VMWware) and Bosch VMS scripting options |
| **Learning targets** | By successfully completing this training the customer should be able to:<br><br>• Explain the functionality of the Bosch VMS additional components: Video Streaming Gateway, Mobile Video Service, Enterprise Management Software,<br>• Understand and configure advanced Bosch VMS features and deployment options;<br>    • 3rd Party Camera Integration: ONVIF, RTSP, MJPEG<br>    • VRM deployment options: Dual (mirrored) and failover recording<br>    • Large or distributed deployment options: Enterprise System, live and playback sites<br>• Understand Remote access configuration;<br>    • Simple Network Management Protocol (SNMP)<br>    • Automatic Network Replenishment (ANR)<br>    • Operation and Maintenance: Recording monitoring, basic trouble shooting<br>• Understand the purpose of the following topics in relation to Bosch VMS:<br>    • Server virtualization options (HyperV and VMware)<br>    • Scripting (BVMS SDKs) |
| **Prerequisites** | • Pass the BVMS Professional Level Exam<br>• Pass the BVMS Expert Level Exam |

|  |  |
|---|---|
|  | • Attendance of both Master classroom training days |
| **Target groups** | Recommended for:<br>• System Engineers, Administrators and Installers who frequently work with BVMS (hands on)<br>• Project Engineers, Sales Support Engineer & System Architects who want to gain practical (hands on) experience with BVMS |
| **Training Duration** | 2 Days |
| **Commercial Information:** | Location wise CTN numbers:<br>• Grasbrunn: TRA-BVMS-EM<br>• Eindhoven: TRA-BVMS-CM<br>Price: €800 per training per person (Price before VAT) |

## BVMS OVERVIEW – Commercial Certification

| Course/Exam | Duration | Type |
|---|---|---|
| Exam | 90 mins | Certification |
| Course: BVMS Sales and System Design (EN) | 1.5 hr/session | Online + Classroom |
| Online Exam (EN RU ZH FR ES PT TR) | 30 mins | Certification |
| Course: BVMS Key Benefits and Features + BVMS Essentials (EN RU ZH FR ES PT TR KR) | 80 mins | Online |
| Course: Video Systems Professional (commercial) (EN RU FR ES DE PT ZH) | 120 mins | Online |
| Course: IP Networking Basics (EN RU ZH DE FR ES) (optional) | 90 mins | Online |

Expert

Professional

Classroom    Online    Certification

The learning path is also available in the Bosch Building Technologies Academy. You only need to click on the certification symbol and you will be routed directly to the correct learning path

**Security**

**Bosch Video Management System Professional Level "Online" Training Plan: Commercial**

| | |
|---|---|
| **Short description** | When completing this Training Plan you will be able to register for a Sales/Pre-Sales/Design oriented Expert Level virtual classroom training offered from Bosch Security Systems in English. |
| | This Training Plan includes Online Training Modules in order to gain essential knowledge about BVMS and the related environment. In addition the 6 BVMS Key Benefits and the related features are presented. |
| | Please register to the Training Plan and open it afterwards in order to see the assigned individual Online Training offering. |
| | Registration to the Training Plan is for free (no cost). |

| | |
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| **Content** | The modules and topics that will be covered in this training are: |

- 01 IP-Networking basics (Online Training)
- Video Systems Professional (commercial) Training (Refer to pg. 10)
- 02 BVMS Key Benefits and Features (Online Training including audio)
- 03 BVMS Essentials Module 1: Main system components and building blocks (Online Training including audio)
- 04 BVMS Essentials Module 2: Basic interaction between system components (Online Training including audio)
- 05 BVMS Essentials Module 3: Additional system components (Online Training including audio)
- 06 Professional Level Exam

| | |
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| **Learning targets** | By successfully completing this training the customer should be able to: |

- Understand the basic functionality of the main BVMS System components
- Understand the basic interaction between the main BVMS components
- Understand the basic functionality of the additional system components

| | |
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| **Prerequisites** | - none |

| | |
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| **Target groups** | Recommended for: |

- Sales/Commercial/Pre-sales/Design oriented experts
- Project Managers, Architects & Engineers

**Security**

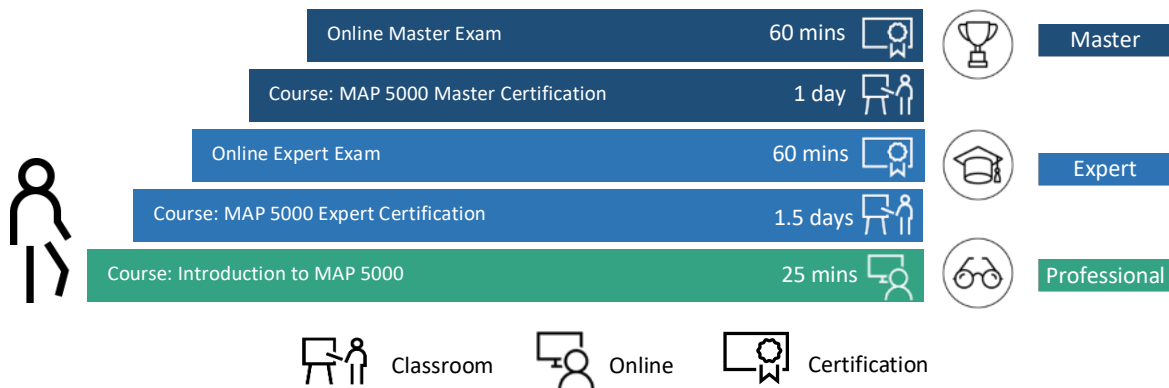**Bosch Video Management Systems - Expert Level Training**

**Training Plan: Commercial**

| | |
|---|---|
| **Short description** | This Training Plan includes a "Virtual classroom" Training for Sales/Pre-Sales/Design specialists.<br>Please register to the Training Plan and open it afterwards in order to see the individual lesson offered. When completing this Training Plan you will be able to reach the Expert Level Certificate for the Bosch VMS with focus on Sales/Pre-Sales/Design. |
| **Content** | During this training the customer will learn:<br><br>To explain and understand the following topics from sales/design point of view:<br><br>• Unique selling points<br>• Resilience concept<br>• Video Recording Management<br>• Important features (Enterprise, MVS, Dual/Failover Recording, GPU decoding, panoramic cameras, logbook, forensic search, etc.)<br>BVMS Design options:<br>• Remote/Multiple site concepts<br>• BVMS Licensing options<br>• System limits<br>• Execute a storage calculation and select the best option for the customers out of the Bosch storage portfolio<br>• Create a bill of material for ordering<br>• Complex design: Enterprise system, Dual Recording, Failover VRM<br>• Integration options (SDK, SNMP, ONVIF, etc.) |
| **Learning targets** | By successfully completing this training the customer should be able to:<br>• Understand and explain the key features and unique selling points of BVMS<br>• Design a BVMS solution including:<br>   • Storage Calculation<br>   • Bill of Material<br>   • Licensing |
| **Prerequisites** | • A successful completion of the BVMS Professional level training plan including the BVMS Professional Level Exam is required. |
| **Target groups** | Recommended for:<br>• Sales Specialists<br>• Sales Support Engineers<br>• System Architects<br>• Project Managers |

**Intrusion**

**MAP 5000**
**Bosch Intrusion MAP 5000**

| | | | |
|---|---|---|---|
| Online Master Exam | 60 mins | | Master |
| Course: MAP 5000 Master Certification | 1 day | | |
| Online Expert Exam | 60 mins | | Expert |
| Course: MAP 5000 Expert Certification | 1.5 days | | |
| Course: Introduction to MAP 5000 | 25 mins | | Professional |

Classroom   Online   Certification

The learning path is also available in the Bosch Building Technologies Academy. You only need to click on the certification symbol and you will be routed directly to the correct learning path

The following languages* are supported by
MAP 5000:
Expert Level: EN DE FR ES PL RU
Master Level: EN
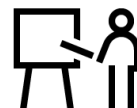*Subject to availability (Phased approach)

## Security

## MAP 5000 System Professional – Introduction to MAP 5000 (Online)

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|---|---|
| **Short description** | An Online Training which provides an overview of the Modular Alarm Platform 5000 system. |
| **Content** | The modules and topics that will be covered within this training plan are:<br><br>• System Overview<br>• Map 5000 components<br>• Options |
| **Learning targets** | By successfully completing this training the customer should be able to:<br><br>• Identify the benefits of using the MAP 5000 system<br>• Explain the purpose of the Bosch Open Intrusion Interface (OII)<br>• List the main components of the MAP 5000 system and describe their functions<br>• Identify the main uses of Bosch's Remote Programming Software (RPS) |
| **Prerequisites** | • None |
| **Target groups** | Recommended for:<br>• Installers<br>• System Designers<br>• Technicians<br>• Sales Support Engineers |

## Security

## Bosch Modular Alarm Platform 5000 System Expert (Classroom Training)

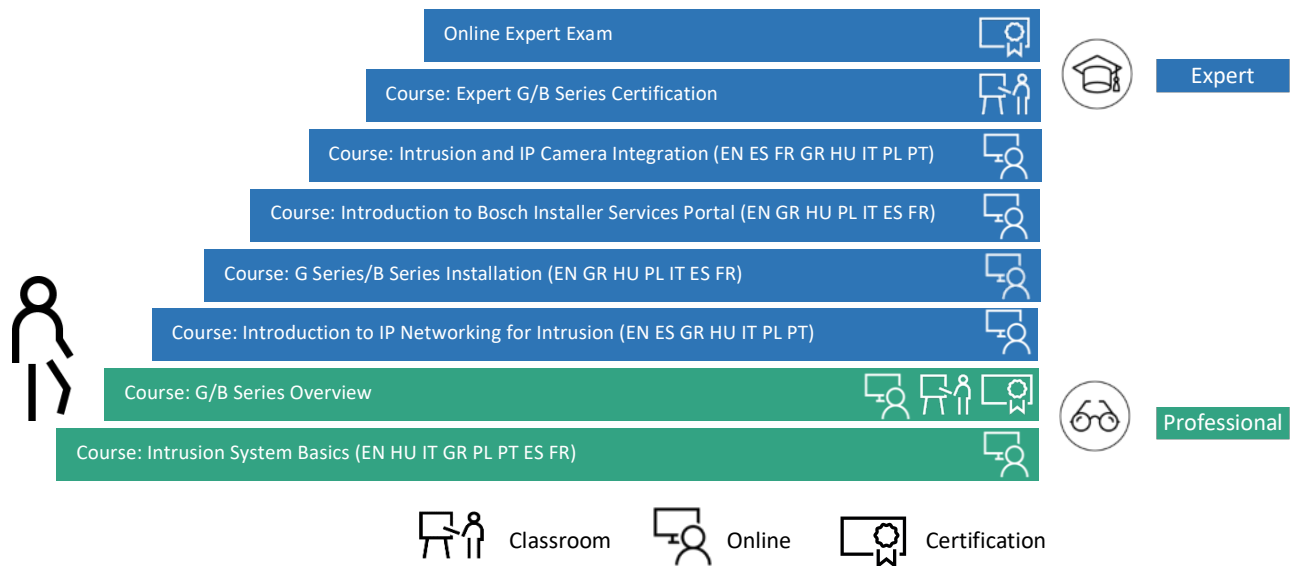| | |
|---|---|
| **Short description** | During this training the customer will receive: <br><br> • An in-depth instruction on the installation, programming, and operation of the Modular Alarm Platform (MAP) 5000 system. |
| **Content** | The modules and topics that will be covered within this training plan are: <br><br> • System Structure / Power Management <br> • Enclosure and Mounting Concept <br> • Remote Programming Software (RPS) for MAP <br> • Control Centre <br> • Handling of Alarms <br> • View States <br> • Creation of Accounts <br> • Integration of LSN Elements <br> • Integration of Conventional Elements <br> • Configuration of Inputs and Outputs <br> • Area Management <br> • User Management <br> • Firmware Update <br> • System Diagnostics |
| **Learning targets** | By successfully completing this training the customer should be able to: <br> • Know the basic features of the MAP 5000 System <br> • Set up, configure and operate a MAP 5000 System <br> • Have an overview about peripheral devices <br> • Understand the Bosch Local Security Network and its use in MAP 5000 <br> • Master the diagnostic options <br> • Update the firmware of MAP 5000 modules |
| **Prerequisites** | • Basic Intrusion knowledge is recommended <br> • MAP 5000 Professional (WBT) |
| **Target groups** | Recommended for: <br> • Installers <br> • System Designers <br> • Technicians |
| **Training Duration** | 1.5 Days |
| **Commercial Information:** | CTN number: <br> • Grasbrunn: TRA-MAP500-IE <br> Price: €450 per training per person (Price before VAT) |

**Security**

## Bosch Modular Alarm Platform 5000 System Master (Classroom Training)

| | |
|---|---|
| **Short description** | During this training the customer will receive:<br><br>• An in-depth instruction of advanced configuration of the Modular Alarm Platform (MAP) 5000 system. |
| **Content** | The modules and topics that will be covered within this training plan are:<br><br>• IP Communicator<br>  Configuration and Alarm transmission<br>• User Management<br>  Access Profiles, Area and Time Models, Time Models and Permission Sets<br>• Area Management<br>  Area Relationships and advanced options<br>• Custom Point Types, change point responses<br>• Virtual Devices<br>  Customize system, Creation of own features |
| **Learning targets** | By successfully completing this workshop the student should know about the advanced features of the MAP 5000 system<br>• Set up, configure and operate MAP 5000 IP communicator<br>• Use of area relationships and advanced options to customize the working with areas<br>• Assign users to Access Profiles and configure Area and Time Models, Permission Sets and Time Models to specify the scope of user rights<br>• Knowledge and Use of Virtual Devices to create own solutions and to customize the MAP 5000 system |
| **Prerequisites** | • MAP 5000 Expert Level |
| **Target groups** | Recommended for:<br>• Installers<br>• System Designers<br>• Technicians |
| **Training Duration** | 1 Day |
| **Commercial Information:** | CTN number:<br>• Grasbrunn: TRA-MAP500-IM<br>Price: €300 per training per person (Price before VAT) |

**Intrusion**

**G-Series and B-Series**



Online Expert Exam

Course: Expert G/B Series Certification

Course: Intrusion and IP Camera Integration (EN ES FR GR HU IT PL PT)

Course: Introduction to Bosch Installer Services Portal (EN GR HU PL IT ES FR)

Course: G Series/B Series Installation (EN GR HU PL IT ES FR)

Course: Introduction to IP Networking for Intrusion (EN ES GR HU IT PL PT)

Course: G/B Series Overview

Course: Intrusion System Basics (EN HU IT GR PL PT ES FR)

Expert

Professional

Classroom    Online    Certification

The learning path is also available in the Bosch Building Technologies Academy. You only need to click on the certification symbol and you will be routed directly to the correct learning path

The languages supported for classroom trainings are subject to availability at the respective region.
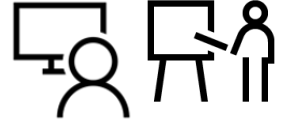
**Security**

# G-Series and B-Series – Professional Training Plan (Online)

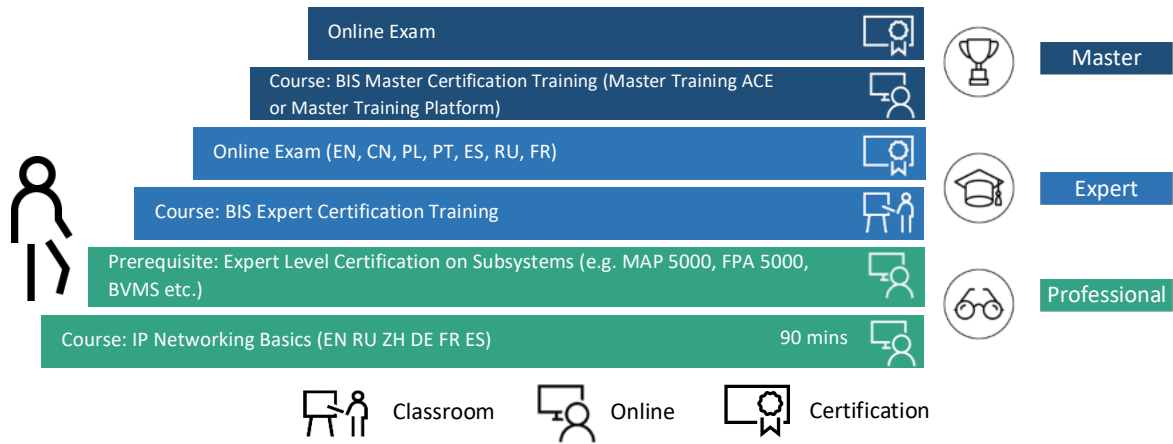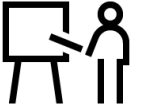| | |
|---|---|
| **Short description** | During this training the customer will learn about:<br><br>• The basic components of an intrusion alarm system and understand the features and benefits of the G Series and B Series Integrated System.<br><br>This training is available in the following languages:<br><br>English / Polish / Italian / Hungarian / Greek / Spanish / French / Portuguese |
| **Content** | The modules and topics that will be covered within this training plan are:<br><br>• Intrusion System Fundamentals<br>• Integrated Intrusion Systems Overview<br>    • Control Panel and Hardware Devices<br>    • System Integration and Features |
| **Learning targets** | By successfully completing this training the customer should be able to:<br>• Identify the components of an intrusion alarm system<br>• Determine which G-Series or B-Series control panel model is right for each application, based on the features and benefits |
| **Prerequisites** | • No Prerequisites for this course. |
| **Target groups** | Recommended for:<br>• Installers<br>• System Programmers<br>• Service Technicians<br>• Project Managers<br>• Sales |

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**Security**

**G-Series and B-Series – Expert Training Plan**

| | |
|---|---|
| **Short description** | This Training Plan is made up of **1 Online Training** and a **2 day Classroom Training Course** |
| **Content** | The Online Training featured in this Training Plan is made up of 5 modules:<br><br>• Introduction to IP Networking for Intrusion<br>• G-Series Installation with Wired Devices<br>• B-Series Installation with Wireless Devices<br>• Introduction to Installer App Programming<br>• Intrusion and IP Camera Integration |
| **Learning targets** | By successfully completing this training the customer should be able to:<br>• Explain the benefits and operation of G-Series Control Panels for commercial use<br>• Mount and install peripheral devices to work with the Control Panel<br>• Perform basic programming options in Bosch's Remote Programming Software (RPS), as well as via the Keypad. |
| **Prerequisites** | • Successful completion of the G-Series and B-Series Professional Training Plan |
| **Target groups** | Recommended for:<br>• Installers<br>• Engineers<br>• System Designers<br>• Sales Support Engineers |
| **Training Duration** | 2 days |
| **Commercial Information:** | CTN number:<br>• Grasbrunn: TRA-GBSE-IE<br>Price: €600 per training per person (Price before VAT) |

## Bosch Building Integration Systems (BIS) Overview



The learning path is also available in the Bosch Building Technologies Academy. You only need to click on the certification symbol and you will be routed directly to the correct learning path.

The languages supported for classroom trainings are subject to availability at the respective region.
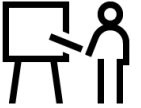
## Security

## Bosch Building Integration System (BIS) – Expert Level Training

| | |
|---|---|
| **Short description** | A Training Plan which consists of a **4.5 day Classroom Training**.<br>During this training the customer will learn how to properly install and configure BIS for basic functions.<br>Furthermore, through practical examples, modifications on the Graphical User Interface (GUI) a solid knowledge should be gathered to operate and customize the system.<br>Each chapter of the training contains hands-on practice either on the BIS SW or on related software, like hardware and OPC configuration Software. |
| **Content** | The modules and topics that will be covered within this training plan are:<br><br>• Bosch BIS Server installer and configuration<br>• BIS Client installation and GUI customization<br>• Access Engine configuration and operation<br>• Creating door models, change parameters of doors and readers<br>• Creating cardholders, authorizations, profiles, Time Models<br>• Integration with Bosch Fire and Intrusion panels<br>• Create associations to show alarm messages<br>• Send commands from BIS to subsystems based on event(s)<br>• BVMS integration and Video Engine basics<br>• Displaying alarm related cameras and remove them when the alarm is cleared<br>• Basic BIS Troubleshooting<br>• Logging and reading/understanding the log files and the use of configuration collector<br>• Use of AutoCAD in order to prepare ACAD drawings for BIS<br>• Fundamental practical Hands-On exercises<br>• Licensing of the individual connections<br>• Operation and maintenance: automated event log backup, configuration backup and migration |
| **Learning targets** | By successfully completing this training the customer should be able to:<br><br>• Explain the functionality of BIS and properly allocate BIS to projects<br>• Install, configure and operate BIS<br>• Provide pre-sales demonstrations for end-users and for investors<br>• Provide customized end-user operator training<br>• Customize the AutoCAD drawing and BIS GUI<br>• Create price quotations and license BIS properly<br>• Execute basic operation and maintenance tasks<br>• Import cardholders' data from an existing access control system<br>• Backup/Restore event log DB<br>• Backup/Restore and migrate configuration |
| **Prerequisites** | • IP networking fundamentals including IP addressing schemes, subnet mask settings and basic troubleshooting<br>• Knowledge of Microsoft Windows like changing values in the Registry, usage of the command prompt |

| | |
|---|---|
| | • The knowledge of Access Control product portfolio according to the "Professional Level" training<br>• Expert Level Certificate for the following Bosch products (configuration and operation):<br>    ○ Fire FPA5000 and/or FPA1200<br>    ○ Intrusion Panel MAP5000<br>    ○ Intrusion Panel B/G-Series<br>  Bosch VMS and Bosch Video over IP devices<br>• Participants will only be accepted onto the course if they have completed the IP Networking Basics Online Training. |
| **Target groups** | Recommended for:<br>• System Integrators, Project Engineers, Administrators and Installers who are responsible for installing, commissioning and for maintenance of the BIS system<br>• Project Engineers, Sales Support Engineers, System Architects who want to gain practical experience with BIS and have responsibility in system design and quotations<br>• NOTE: This training cannot be considered as a suitable training for Operators who should work on a daily basis with the BIS operator client. |
| **Training Duration** | 4.5 Days |
| **Commercial Information:** | CTN number:<br>• Grasbrunn: TRA-BIS-EE<br>Price: €1800 per training per person (Price before VAT) |

## Security

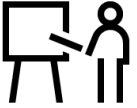## Bosch Building Integration System (BIS PLATFORM TRAINING)

## - Master Level Training

| | |
|---|---|
| **Short description** | A Training Plan which comprises of **1 Classroom Training**<br><br>This training will teach you advanced configuration possibilities of BIS Platform. Furthermore, it will cover features and functionalities which are required in multi-site BIS projects, and also in projects, where the customization of the Graphical User Interface is necessary.<br>Additionally, this training teaches you to connect PRAESIDEO and Conettix subsystems to BIS, and also the use of Template Jobs. |
| **Content** | The modules and topics that will be covered within this training plan are:<br><br>• AUE-PRAESIDEO connection (How to set up PRAESIDEO; installation and configuration of PRAESIDEO OPC; configuring PA Manager; customizing PA-related detector type commands; interconnection with other subsystems; licensing)<br>• AUE-Connetix connection (How to set up D6600 for BIS Connection; installation and configuration of D6600 OPC; Customizing Connetix-related points; limitations; licensing)<br>• Multi-site BIS configuration (set up consumer server; set up provider server; connect servers to each other)<br>• OPC Connector (when it should be used; configuring it)<br>• BIS Proxy OPC-DA (when it should be used; configuring it)<br>• Analog Values in BIS<br>• Customizing detector symbols<br>• Use of template jobs<br>• Graphical User Interface customization (use of object models; auto delete; multiple message inbox; use of multiple monitors; message inbox customization; subscription control) |
| **Learning targets** | By successfully completing this training the customer should be able to:<br><br>• Connect a PRAESIDEO system to BIS, and set up its special HTML page for easier control of the integrated system<br>• Connect a Bosch Connetix receiver to BIS<br>• Configure consumer and provider servers for Multi-Site BIS systems and establish the communication between these serves<br>• Create new – project specific – detector symbols<br>• Configure the OPC connector and the BIS Proxy OPC-DA OPC Server<br>• Carry out advanced customization tasks on the BIS Graphical User Interface |
| **Prerequisites** | • Participation in the Bosch BIS Expert Level Training (4,5 Days)<br>• Practical (project-site) experience with BIS<br>• Configuration knowledge of both the PRAESIDEO and Connetix systems |
| **Target groups** | Recommended for:<br>• System Integrators<br>• Project Engineers |

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| | |
|---|---|
| | • Administrators<br>• Installers who are responsible for installing, commissioning and maintenance of the BIS system |
| **Training Duration** | 2 Days |
| **Commercial Information:** | CTN number:<br>• Grasbrunn: TRA-BIS-EM<br>Price: €800 per training per person (Price before VAT) |

## Security

## Building Integration System (BIS) Master Level – BIS ACE

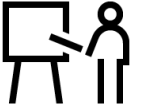| | |
|---|---|
| **Short description** | A Training Plan which consists of **1 Classroom Training**<br>This training will teach the customer advanced configuration possibilities of BIS Access Engine. Furthermore, it will cover features and functionalities which are required in multi-MAC and remote SQL database BIS projects. |
| **Content** | The modules and topics that will be covered within this training plan are:<br>• Multi-MAC configuration<br>• Remote SQL ACE database configuration<br>• Practice on Elevator and DM10 Door Models<br>• Configuring the Report Builder<br>• Setting up Divisions<br>• Configuring and use of fingerprint readers<br>• Configuring and use of Deister key cabinet |
| **Learning targets** | By successfully completing this training the customer should be able to:<br>• Set up a BIS access control system with multiple MACs<br>• Configure a system, in which the Access database is located on a remote SQL machine<br>• Design and configure Door Model 10<br>• Configure and use fingerprint readers<br>• Configure and use Deister key cabinet |
| **Prerequisites** | • Participation in the Bosch BIS Expert Level Training<br>• Practical (project-site) experience with BIS |
| **Target groups** | Recommended for:<br>• System Integrators and Project Engineers<br>• Administrators<br>• Installers who are responsible for installing, commissioning and for maintenance of the BIS system, especially when access control is included |
| **Training Duration** | 3 days |
| **Commercial Information:** | CTN number:<br>• Grasbrunn: TRA-BIS-EM<br>Price: €1200 per training per person (Price before VAT) |

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## Security

## Access Professional Edition (APE)

| | |
|---|---|
| **Short description** | A Training Plan which comprises of **1 Classroom Training** During this training the customer is introduced to the Bosch APE Software and to the AMC controller Product Family |
| **Content** | The modules and topics that will be covered within this training plan are: <br><br>• Basic Introduction to the Access Professional Edition Software <br>• Introduction to AMC Controller Programming <br>• Practical Programming of AMC2 hardware & APE software <br>• APE integration to Milestone XProtect |
| **Learning targets** | By successfully completing this training the customer should be able to: <br>• Work with and set up an Access Control System based on Bosch AMC hardware and Access Professional Edition Software |
| **Prerequisites** | • Basic network knowledge <br>• To participate in this training the customer should have some previous experience in Access Control Systems, Installation and Configuration <br>• Milestone XProtect knowledge is beneficial but not required |
| **Target groups** | Recommended for: <br>• Installers <br>• Project Engineers <br>• Service Engineers |
| **Training Duration** | 2 Days |
| **Commercial Information:** | CTN number: <br>• Grasbrunn: TRA-APE-EP <br>Price: €600 per training per person (Price before VAT) |

# Communication

## Bosch Public Address PA basics – Professional Training (Online)

| | |
|---|---|
| **Short description** | **Online Training**<br>In this training we will provide you with the basic information concerning audio and public address technologies. |
| **Content** | The modules that will be part of this online training is:<br><br>• Public Address basics<br>• 100Volt Basics<br>• Microphones<br>• Loudspeakers<br>• Amplifiers<br>• Mixing Amplifiers<br>• Application of characteristics of Public Address Systems |
| **Learning targets** | By successfully completing this training the students will be able to:<br><br>• Show basic understanding of the principles of operation of public address<br>• Recognize the different components and techniques used in a public address<br>• Understand basic applications and markets of public address<br>• Follow more advance and specific Public Address trainings in this catalog |
| **Prerequisites** | • Basic knowledge of electricity / electronics |
| **Target groups** | • Employees, commercial and technical, with no or limited experience in PA<br>• Beginners who hardly have experience in the Public Address business and want to attend other Public Address trainings |

## PAVIRO Overview
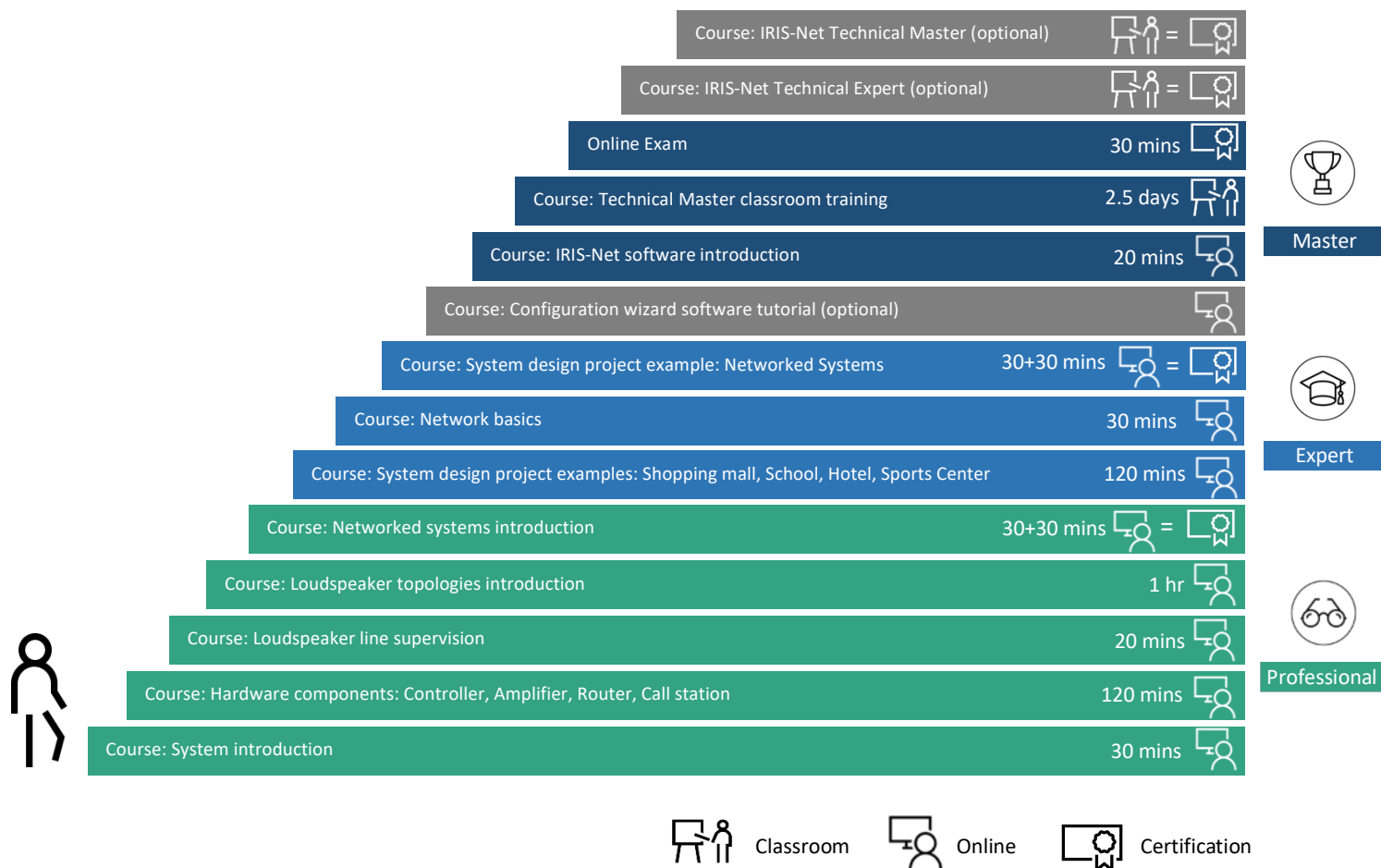


The learning path is also available in the Bosch Building Technologies Academy. You only need to click on the certification symbol and you will be routed directly to the correct learning path.

The following languages* are supported by Communication Systems:
EN, DE, FR, IT, ES, PT, RU
*Subject to availability (Phased approach)

## Public Address

## Bosch Public Address PAVIRO (networked) – Technical Professional (Online)

| | |
|---|---|
| **Short description** | This **Online Training** contains an introduction to the PAVIRO networked system and its hardware components as well as the Loudspeaker and topologies and networking functions. |
| **Content** | The modules that will be part of this Online training are:<br><br>• Bosch Public Address PAVIRO System Introduction (V2)<br>• Bosch Public Address PAVIRO Controller<br>• Bosch Public Address PAVIRO Amplifier<br>• Bosch Public Address PAVIRO Router<br>• Bosch Public Address PAVIRO Call Station<br>• Bosch Public Address PAVIRO Loudspeaker Line Supervision<br>• Bosch Public Address PAVIRO Loudspeaker Topologies Introduction<br>• Bosch Public Address PAVIRO Networked Introduction<br>• Bosch Public Address PAVIRO Networked Introduction - Assessment |
| **Learning targets** | By successfully completing this training the customer should be able to:<br><br>• Give an overview of the PAVIRO system<br>• Describe the hardware setup and the application of the PAVIRO devices<br>• Understand terms like CAN BUs and CST BUs<br>• Choose between the different types of loudspeaker line supervision<br>• Draft a simple PAVIRO system setup<br>• Understand different topologies and relation to router clusters<br>• Select the right number of routers and amplifiers<br>• Understand speaker line power allocation<br>• Understand the signal flow between the system components<br>• Understand the PAVIRO networking functions and features |
| **Prerequisites** | • Basic knowledge of public address<br>• Bosch Public Address PA Basics- Professional Training (Online) |
| **Target groups** | • Sales and Marketing |

## Public Address

## Bosch Public Address PAVIRO (networked) – Technical Expert (Online)

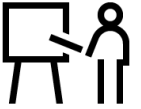| | |
|---|---|
| **Short description** | **Online Training**<br>The PAVIRO – from spec to BOM trainings will give the customer several project examples to show how to build up a PAVIRO networked system BOM according to the project requirements.<br><br>A certificate will be available upon completion of the training plan. |
| **Content** | This training plan will include 5 project design examples from Spec to BOM:<br><br>• Shopping Centre<br>• School<br>• Hotel<br>• Sports Centre<br>• Networked Systems<br><br>It also includes an optional Network Basics WBT |
| **Learning targets** | By successfully completing this training the customer should be able to:<br>• Specify a system and turn it into a Bill of Material |
| **Prerequisites** | • Bosch Public Address PA basics- Professional Training (Online)<br>• Bosch Public Address PAVIRO- Technical Professional (Online) |
| **Target groups** | • Sales and Marketing , System Design Engineers |

# Public Address

## Bosch Public Address PAVIRO (networked)

## – Technical Master Training Plan

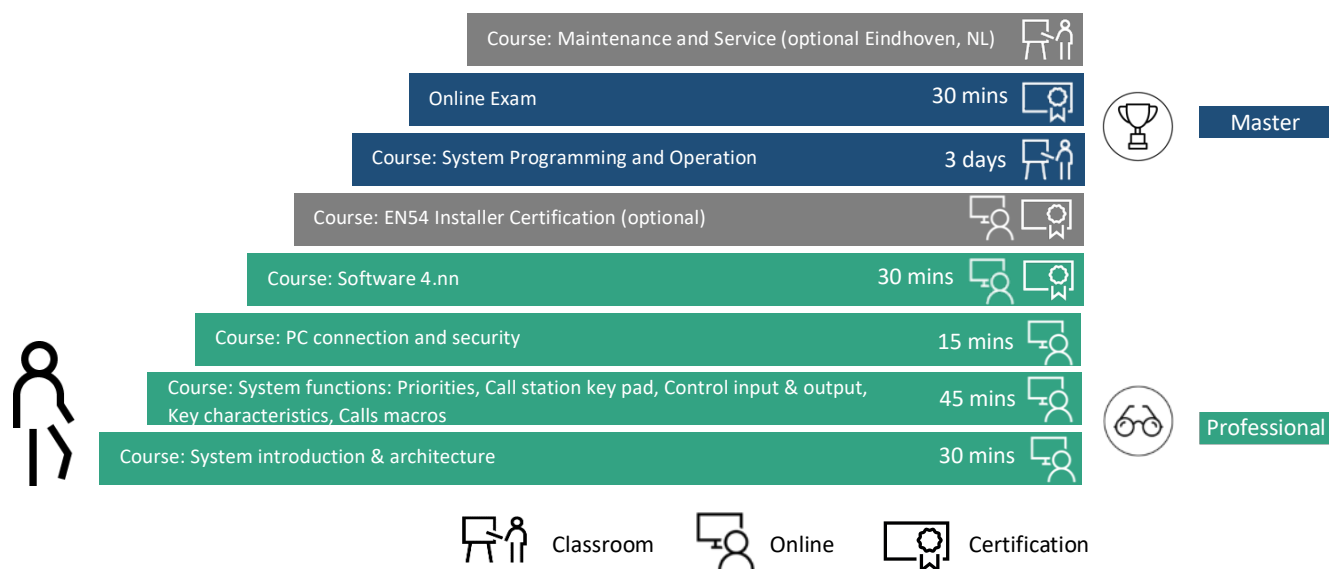| | |
|---|---|
| **Short description** | The PAVIRO Master Training course on advanced system programming and operation is the highest qualification level available on this product line.<br><br>This training plan consists of **Online Trainings** and **1 Classroom Training**<br><br>This training also qualifies you as an IRIS-Net Technical Professional |
| **Content** | This training plan will include:<br><br>• PAVIRO component and system overview<br>• Configuration Wizard<br>• System examples<br>• Introduction into IRIS-Net for PAVIRO<br>• Topologies and application examples<br>• Firmware Update<br>• IRIS-Net configuration software and its features<br>• System configuration examples in IRIS-Net<br>• Monitoring and spare function examples<br>• Working with 100V relays, speaker zones, groups and audio signal priorities<br>• IRIS-Net utility tools and export functions<br>• Working with Task Engine, Calendar and Integrated Message Manager<br>• Networked PAVIRO systems |
| **Learning targets** | By successfully completing this training the student will be able to<br>• Fully understand design, install and operate a Bosch PAVIRO Public Address System<br>• Upgrade the system software<br>• Commission a Bosch PAVIRO Public Address System |
| **Prerequisites** | • The Online Training modules that are stated in the Master Certification Training Plan need to be completed before the Classroom Training (See Bosch Building Technologies Academy)<br>• Own laptop with admin rights and installed IRIS-Net and Configuration Wizard Software have to be brought along to the training.<br>• For students with low Public Address knowledge we recommend the PA Basics Classroom Training in Eindhoven |
| **Target groups** | • Distributors, Integrators, Installers, Systems Engineers |
| **Training Duration** | 2,5 days |
| **Commercial Information:** | CTN number:<br>• Eindhoven: TRA-PVA-CM<br>• Kassel: TRA-PVA-COM<br>Price: €750 per training per person (Price before VAT) |

## Public Address

## IRIS-Net – Technical Expert (GUI Basic)

| | |
|---|---|
| **Short description** | **A Classroom Training**<br>Builds on IRIS-Net hardware classroom trainings (PAVIRO) and is applicable for customers who have attended such a training within the last 2 years.<br>In order to achieve the Technical Expert qualification the customer must pass an Online Exam after the Trainings. |
| **Content** | This training plan will include:<br>• Repetition of important IRIS-Net basics<br>• Object List<br>• Devices and Interfaces<br>• Programming of IRIS-Net graphical user interfaces with standard controls like Button, Fader, LED etc. or alternatively User Controls<br>• Usage of Groups<br>• Project file layers and navigation<br>• Project file structure recommendations<br>• User and Password handling<br>• Custom graphics |
| **Learning targets** | By successfully completing this training the customer should be able to:<br>• 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** | • IRIS-Net Professional Level by participating in a IRIS-Net hardware training within the last 2 years<br>• 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** | • Distributors, Integrators, Installers, System Engineers |
| **Training Duration** | 1 Day |
| **Commercial Information:** | CTN number:<br>• Eindhoven: TRA-IRIS-COE<br>Price: €300 per training per person (Price before VAT) |

# PRAESIDEO Overview



| | |
|---|---|
| Course: Maintenance and Service (optional Eindhoven, NL) | |
| Online Exam | 30 mins |
| Course: System Programming and Operation | 3 days |
| Course: EN54 Installer Certification (optional) | |
| Course: Software 4.nn | 30 mins |
| Course: PC connection and security | 15 mins |
| Course: System functions: Priorities, Call station key pad, Control input & output, Key characteristics, Calls macros | 45 mins |
| Course: System introduction & architecture | 30 mins |

Master

Professional

Classroom    Online    Certification

The learning path is also available in the Bosch Building Technologies Academy. You only need to click on the certification symbol and you will be routed directly to the correct learning path

The following languages* are supported by Communication Systems:
EN, DE, F, IT, ES, POR, RU.
*Subject to availability (Phased approach)

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**Public Address**

## PRAESIDEO – Technical Professional (Online)

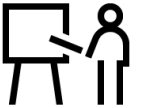| | |
|---|---|
| **Short description** | An **Online Training** which should provide an overview on the PRAESIDEO system and its main functions. <br><br> • This course is made up of 11 modules <br> • This course will prepare the customer for participation in the PRAESIDEO Classroom Training |
| **Content** | The modules and topics that will be covered within this Online Training are: <br><br> • PRAESIDEO Introduction <br> • PRAESIDEO Architecture <br> • PRAESIDEO Priorities <br> • PRAESIDEO Call Station Keypad Functions <br> • PRAESIDEO Control input functions <br> • PRAESIDEO Control output functions <br> • PRAESIDEO Key characteristics <br> • PRAESIDEO Call macro's <br> • PRAESIDEO PC connection <br> • PRAESIDEO Security <br> • PRAESIDEO Software 4.nn |
| **Learning targets** | By successfully completing this training the customer should be able to: <br> • Understand the basics of the PRAESIDEO system and should be ready to participate in the PRAESIDEO Classroom Training |
| **Prerequisites** | • Basic knowledge of electronics, acoustics and public address systems <br> • Bosch Public Address PA Basics- Professional Training (Online) |
| **Target groups** | • Engineers, Installers, Sales and Marketing, Specifiers |

## Public Address

## PRAESIDEO – Technical Master

| | |
|---|---|
| **Short description** | Technical Master **Classroom Training** on PRAESIDEO System Programming and Operation. The course is applicable for customers who have already reached Professional Level. |
| **Content** | The modules and topics that will be covered within this training plan are:<br><br>• Operating Principles<br>• PRAESIDEO Components<br>• Install and upgrade to the latest SW release<br>• Configuring the PRAESIDEO System<br>• Messages and assembling message sets<br>• Be able to work with the off-line configuration tool<br>• Storing vital system data<br>• Powering, back-up powering and power consumption<br>• Ethernet connection and local/remote access<br>• Fault, Call and Event logging<br>• PC Call station and Telephone interface<br>• IP-Audio Interface<br>• Cobra Net / OMNEO principles and the PRAESIDEO solution using Cobra Net / OMNEO<br>• Battery Charger<br>• Designing a PRAESIDEO System<br>• Hands-on configuring a PRAESIDEO System |
| **Learning targets** | By successfully completing this training the customer should be able to:<br><br>• Show the PRAESIDEO product range<br>• Select PRAESIDEO products and make a system design<br>• Upgrade the software<br>• Configure a PRAESIDEO System<br>• Use the additional SW packages for PRAESIDEO<br>• Commission a system |
| **Prerequisite** | • Bosch Public Address PA basics- Professional Training (Online)<br>• PRAESEDIO- Technical Professional (Online)<br>• Broad experience in PA is required |
| **Target groups** | • Distributors, Integrators, Installers, System Engineers |
| **Training Duration** | 3 days |
| **Commercial Information:** | CTN number:<br>• Eindhoven: TRA-PRS-COM<br>Price: €900 per training per person (Price before VAT) |

# Public Address

## PRAESIDEO – Bosch Public Address

## PRAESIDEO System Maintenance and Basic Service (for Masters)

| | |
|---|---|
| **Short description** | Master **Classroom Training** on PRAESIDEO Maintenance and Service.<br><br>Advanced qualification on the PRAESIDEO system applicable for customers who have already reached Master Level. |
| **Content** | The modules and topics that will be covered within this training are:<br><br>• Preventive Maintenance<br>• Problems at an installation (system diagnostics)<br>• Fault events and indications<br>• Firmware download recovery<br>• PC to NCO connection<br>• Software version related problems<br>• PRAESIDEO warranty, repair and spare parts |
| **Learning targets** | By successfully completing this training the customer should be able to:<br><br>• Apply service on a PRAESIDEO system<br>• Diagnose if a unit is faulty<br>• Solve application / installation related problems<br>• Recover a download failed unit |
| **Prerequisites** | • Bosch Public Address PA Basics- Professional Training (Online)<br>• PRAESIDEO – Technical Professional (Online)<br>• PRAESIDEO – Technical Master |
| **Target groups** | Recommended for:<br>• Service Engineers |
| **Training Duration** | 1 day |
| **Commercial Information:** | CTN number:<br>• Eindhoven: TRA-PRSBAS-COM<br>Price: €300 per training per person (Price before VAT) |

## PLENA Overview
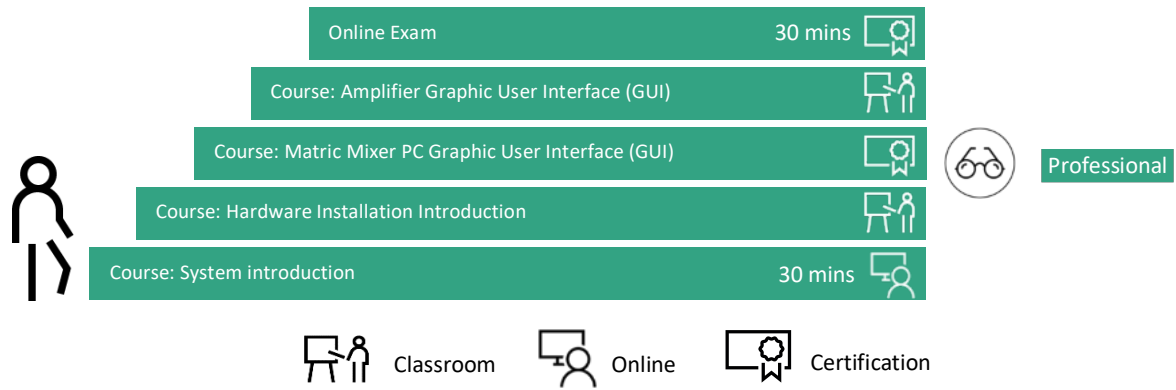


The learning path is also available in the Bosch Building Technologies Academy. You only need to click on the certification symbol and you will be routed directly to the correct learning path

The following languages* are supported by Communication Systems:
EN, DE, F, IT, ES, POR, RU
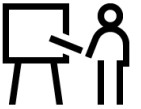*Subject to availability (Phased approach)

## Public Address

### Bosch Public Address PLENA Matrix – Technical Professional

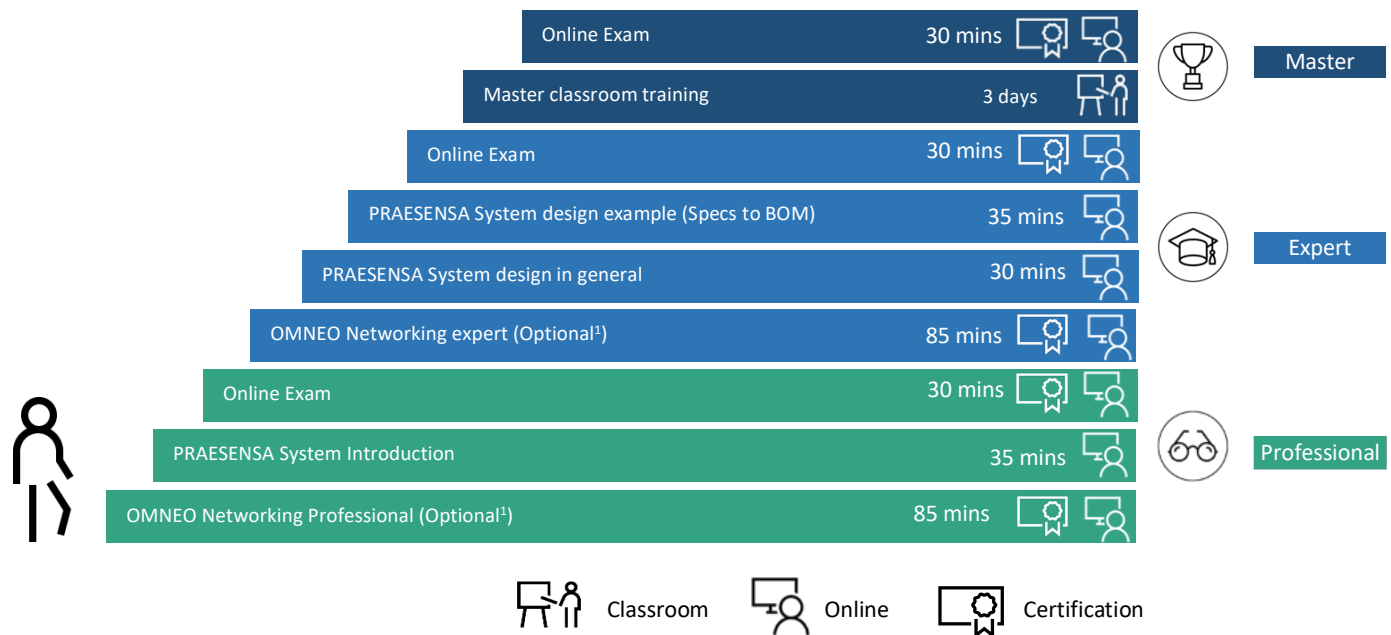| | |
|---|---|
| **Short description** | This Online training plan consists of four studying modules before an assessment module.<br><br>You are invited to have a look at the PLENA video tutorial compilation which we added as an optional module supporting this training plan. |
| **Content** | The content that will be part of this Online training is:<br><br>• System Introduction<br>• Hardware Installation Introduction<br>• Matrix Mixer PC Graphic User Interface (GUI)<br>• Amplifier, Graphic User Interface (GUI)<br>• System Knowledge Assessment |
| **Learning targets** | By successfully completing this training the customer should be able to:<br><br>• Describe advantages and capabilities of the PLENA Matrix System<br>• Identify individual components<br>• List features of PLENA matrix hardware products<br>• Identify components on front and back panels<br>• Describe the feature and benefits of the Call Station and Wall Control Panel<br>• Install all five hardware components<br>• Bridge amplifier channels<br>• Set the amplifier input sensitivity<br>• Utilize amplifier standby settings<br>• Describe the override and emergency tones functionality<br>• Review PC GUI user interface levels<br>• GUI installation, interface, controls and configuration<br>• Connecting to a device<br>• Administrator settings<br>• Firmware updates<br>• Amplifier PC GUI user screen<br>• Work with standby settings and DSP Setup<br>• iOs App user screen, menu screen and global device settings |
| **Prerequisites** | • None |
| **Target groups** | • Engineers, Installers, Sales and Marketing and Specifiers |

# Public Address

## Bosch Public Address PLENA and PLENA Voice Alarm – Technical Expert

| | |
|---|---|
| **Short description** | Product training on the PLENA and PLENA VAS product range.<br>The qualification as Technical Expert is achieved by:<br><br>• Attending all training days of the classroom training and<br>• Passing an Online Exam after the training. |
| **Content** | The content that will be part of this Training is:<br>• Market and product positioning<br>• Features, benefits, do's and don'ts of individual PLENA hardware and software products<br>• Installation, setup and operation of latest hardware and software (including hands-on)<br>• Extending installed PA systems<br>• System architecture and system integration (e.g. with Fire FPA5000)<br>• Overall field knowledge -> transferred to practical solutions (including Hands-on)<br>• Out of the "product" box thinking & building |
| **Learning targets** | By successfully completing this training the customer should be able to:<br>• Understand the application areas and targeted markets<br>• Show the relation between the benefits and features of each product.<br>• Make a system design<br>• Combine and to install and configure the correct system components<br>• Upgrade the PLENA solutions and PLENA Voice Alarm Systems<br>• Be able to make a competent report & presentation to customers<br>• Be able to support and train wholesalers and installers<br>• Be able to think & build "out of the product box" |
| **Prerequisites** | • Bosch Public Address PA Basics- Professional Training (Online) |
| **Target groups** | • Sales, Sales Engineer, Project Engineer and System Integrator |
| **Training Duration** | 2 days |
| **Commercial Information:** | CTN numbers<br>• Eindhoven: TRA-PLN-COE<br>Price: €600 per training per person (Price before VAT) |

## PRAESENSA Overview



| | | |
|---|---|---|
| Online Exam | 30 mins | Master |
| Master classroom training | 3 days | |
| Online Exam | 30 mins | |
| PRAESENSA System design example (Specs to BOM) | 35 mins | Expert |
| PRAESENSA System design in general | 30 mins | |
| OMNEO Networking expert (Optional[1]) | 85 mins | |
| Online Exam | 30 mins | |
| PRAESENSA System Introduction | 35 mins | Professional |
| OMNEO Networking Professional (Optional[1]) | 85 mins | |

Classroom — Online — Certification

[1] OMNEO Networking Modules are optional for Professional and Expert Level Learning Path, but mandatory for the Master level.

The learning path is also available in the Bosch Building Technologies Academy. You only need to click on the certification symbol and you will be routed directly to the correct learning path.

The following languages* are supported by Communication Systems:
EN, DE, F, IT, ES, POR, RU.
*Subject to availability (Phased approach)

## Public Address

### Bosch Public Address PRAESENSA – Professional (Online)

| | |
|---|---|
| **Short description** | 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. |
| **Content** | The modules and topics that will be covered within this training certification level are:<br><br>• OMNEO Networking – Professional Level (IP-Basics & OMNEO overview)<br>• The PRAESENSA System – What's New?<br>• System controller<br>• Amplifiers<br>• Multifunction power supply<br>• Call stations<br>• Software<br>• Accessories |
| **Learning targets** | By successfully completing this online training the student will be able to:<br><br>• Identify system hardware and software components<br>• Understand system connectivity and features<br>• Perceive the unique particularities which makes PRAESENSA a state of the art and future proof Public Address & Voice Alarm System<br>• Explain Network & Power design consideration<br>• Show knowledge on IP Networks and Audio Networks |
| **Prerequisites** | • Bosch Public Address PA basics – Professional Training (online training) |
| **Target groups** | • Systems Integrators, Distributors, Installers, Specifiers, Consultants, Sales and Marketing & End Users |

# Public Address

## Bosch Public Address PRAESENSA– Expert (Online)

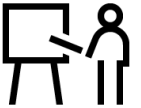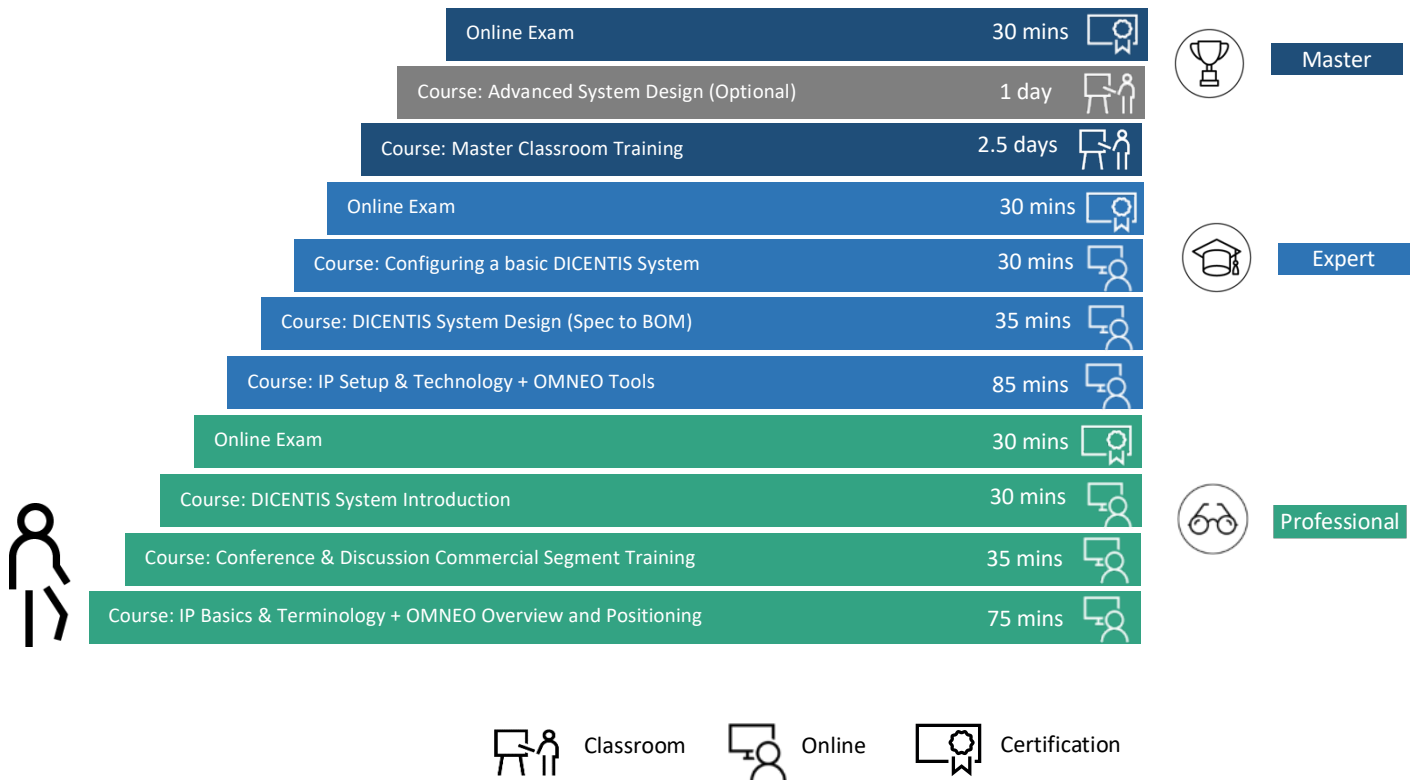| | |
|---|---|
| **Short description** | This online training brings concepts about system design and configuration for Bosch PRAESENSA Public Address & Voice Alarm System, aiming to give a more complete overview about these components, with their key features and systems applications, using project 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. |
| **Content** | The modules and topics that will be covered within this Expert Level Certification are:<br>• OMNEO Networking – Expert Level (IP-Advanced & OMNEO tools)<br>• System design approach<br>• System planning tool<br>• Amplifier selection<br>• Power design<br>• Network design<br>• 3rd party network devices<br>• System design examples |
| **Learning targets** | By successfully completing this online training the student will:<br>• Recognize and be able to use broader and more in depth knowledge on IP Networks and Audio Networks<br>• Learn how to use and setup OMNEO tools<br>• Understand the particularities of designing a Public Address System and Voice Evacuation System<br>• Be able to specify a PRAESENSA system according to the project requirements and turn this specification into a Bill of Material |
| **Prerequisites** | • Bosch PRAESENSA Public Address & Voice Alarm System – Professional Level (online training) |
| **Target groups** | • Systems Integrators, Distributors, Installers, Specifiers, Consultants, Sales and Marketing |

# Public Address

## Bosch Public Address PRAESENSA– Master

| | |
|---|---|
| **Short description** | This classroom 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 programing and operation of the system. A Master Level Certificate will be available upon successful completion of this classroom training and online exam. |
| **Content** | The modules and topics that will be covered within this training certification level are:<br><br>• System components<br>• Installation and uploading of the Firmware<br>• Configuration and hands-on<br>• PRAESENSA network basics |
| **Learning targets** | By successfully completing this online training the student will be able to:<br>• Configure and commission a Bosch PRAESENSA Public Address & Voice Alarm System<br>• Recognize how to update system firmware for the respective hardware components<br>• Setup all Hardware and Software components simulating real live system for different projects |
| **Prerequisites** | • PRAESENSA Public Address & Voice Alarm System – Professional Level (online training)<br>• PRAESENSA Public Address & Voice Alarm System – Expert Level (online training) |
| **Target groups** | • Systems Integrators, Distributors, Installers and Consultants |
| **Training Duration** | 3 days |
| **Commercial Information:** | CTN number:<br>• Eindhoven: TRA-PRA-COM<br>Price: €900 per training per person (Price before VAT) |

## DICENTIS Overview

| | | |
|---|---|---|
| Online Exam | 30 mins | Master |
| Course: Advanced System Design (Optional) | 1 day | |
| Course: Master Classroom Training | 2.5 days | |
| Online Exam | 30 mins | Expert |
| Course: Configuring a basic DICENTIS System | 30 mins | |
| Course: DICENTIS System Design (Spec to BOM) | 35 mins | |
| Course: IP Setup & Technology + OMNEO Tools | 85 mins | |
| Online Exam | 30 mins | Professional |
| Course: DICENTIS System Introduction | 30 mins | |
| Course: Conference & Discussion Commercial Segment Training | 35 mins | |
| Course: IP Basics & Terminology + OMNEO Overview and Positioning | 75 mins | |

Classroom    Online    Certification

The following languages*are supported by Communication Systems:
EN, DE, FR, IT, ES, PT, RU
*Subject to availability (Phased approach)

## Conference and Discussion

## Bosch Conference DICENTIS – Technical Professional

| | |
|---|---|
| **Short description** | 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. |
| **Content** | The modules and topics that will be covered within this training certification level are: <br>• OMNEO Networking – Professional Level (IP-Basics & OMNEO overview) <br>• The DICENTIS System – applications <br>• Central equipment <br>• Discussion devices <br>• Microphones <br>• Interpreter desks <br>• Software <br>• Accessories and Installation Equipment <br>• Basic system overview |
| **Learning targets** | By successfully completing this training the student will be able to <br>• Recognize system hardware and software components <br>• understand system & components features <br>• Identify system connectivity <br>• Describe a basic system overview <br>• show knowledge on IP Networks and Audio Networks |
| **Prerequisites** | • There are no prerequisites for this certification level |
| **Target groups** | • System Integrators, Distributors, Installers, Specifiers, Consultants, Sales and Marketing and End Users |

# Conference and Discussion

## Bosch Conference DICENTIS – Technical Expert

| | |
|---|---|
| **Short description** | 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. |
| **Content** | The modules and topics that will be covered within this training certification level are:<br>• OMNEO Networking – Expert Level (IP-Advanced & OMNEO tools)<br>• System design approach<br>• System calculation tool<br>• Device selection<br>• Network design<br>• System design examples |
| **Learning targets** | By successfully completing this training the student will be able to<br>• recognize and be able to use broader and more in depth knowledge on IP Networks and Audio Networks<br>• show how to use and setup OMNEO tools<br>• understand the particularities of designing a DICENTIS Conference System<br>• specify a DICENTIS system according to the project requirements and turn this specification into a Bill of Material |
| **Prerequisites** | • Bosch DICENTIS Conference System – Professional Level (online training) |
| **Target groups** | • System Integrators, Distributors, Installers, Specifiers, Consultants, Sales and Marketing |

# Conference and Discussion

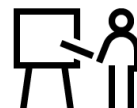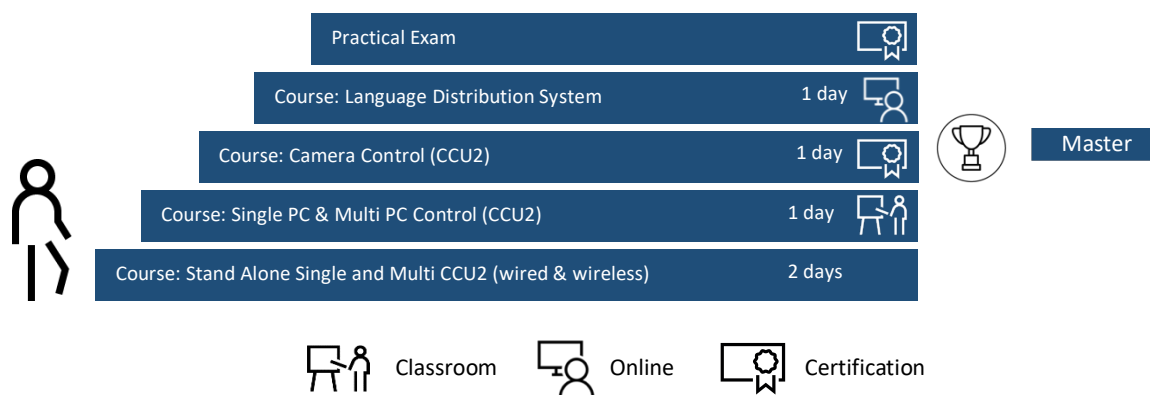## DICENTIS – Technical Master

| | |
|---|---|
| **Short description** | 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 programing and operation of the system. A Master Level Certificate will be available upon successful completion of this classroom training and online exam.<br>**Note**: parts of this training will be transferred to a web based training in the course of the year. |
| **Content** | The modules and topics that will be covered within this training certification level are:<br>• System design approach<br>• System calculation tool<br>• System Licensing<br>• Discussion device selection<br>• Network design<br>• System design exercises<br>• System components<br>• Installation and uploading of the Firmware<br>• Configuration and hands-on<br>• Explanation and hands-on on all available functions |
| **Learning targets** | By successfully completing this training the student will be able to<br>• configure a Bosch DICENTIS Conference System<br>• recognize how to update system firmware for the respective hardware components<br>• setup all Hardware and Software components simulating real live system for different projects and scenarios<br>• |
| **Prerequisites** | • Bosch DICENTIS Conference System – Expert Level (online training) |
| **Target groups** | • Systems Integrators, Distributors, Installers and Consultants |
| **Training Duration** | 2.5 + 1(optional) days |
| **Commercial Information:** | CTN numbers:<br>• Eindhoven: TRA-DCN-COM<br>Price: €750 + €300 (optional) per training per person (Price before VAT) |

## Conference and Discussion

**Bosch Conference DCN Next Generation**

| | |
|---|---|
| Practical Exam | |
| Course: Language Distribution System | 1 day |
| Course: Camera Control (CCU2) | 1 day |
| Course: Single PC & Multi PC Control (CCU2) | 1 day |
| Course: Stand Alone Single and Multi CCU2 (wired & wireless) | 2 days |

Master

Classroom     Online     Certification

The learning path is also available in the Bosch Building Technologies Academy. You only need to click on the certification symbol and you will be routed directly to the correct learning path.
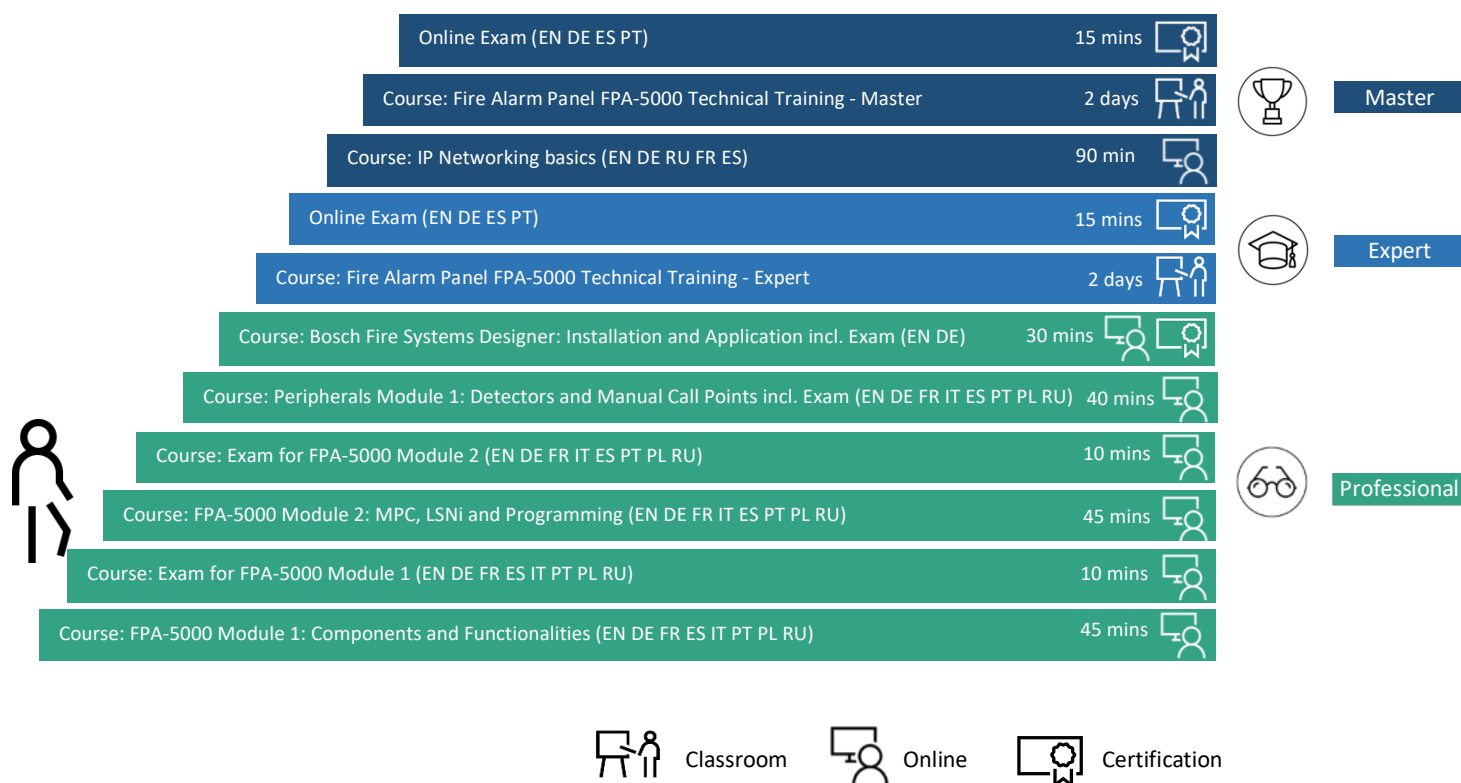
## Conference and Discussion

### Bosch Conference DCN Next Generation – Technical Master

| | |
|---|---|
| **Short description** | Comprehensive DCN Next Generation Master 5 day classroom training in Eindhoven, Netherlands, covering:<br><br>• Stand Alone Single and Multi CCU2 (wired & wireless)<br>• Single PC & Multi PC Control (CCU2)<br>• Camera Control (CCU2)<br>• Integrus Language Distribution System<br><br>There will be an individual knowledge questionnaire after each training module |
| **Content** | The modules and topics that will be covered within this training certification level are:<br><br>• DCN Conference Solutions without PC Control<br>• Single-CCU2<br>• Multi-CCU2<br>• DCN Conference Solutions with PC Control<br>• DCN-SWSMV<br>• DCN-SW<br>• HD Camera Control Solutions<br>• DCN Conference Solutions third party interface possibilities<br>• INTEGRUS Language Distribution System |
| **Learning targets** | By successfully completing this training the customer should have:<br><br>• A full understanding of designing, installing and operating DCN Conference Solutions and First Line Services<br>• A basic understanding of designing, installing and operating DCN Conference Solutions with PC Control<br>• A full understanding of designing, installing and operating DCN Conference Solutions with Camera Control<br>• A basic understanding of Open interface (LBB4187), DCB-SWSMD and DCN-SWAPI<br>• A full understanding of designing, installing and operation of INTEGRUS Language Distribution System and First Line Services |
| **Prerequisites** | • Basic knowledge of Conference Systems |
| **Target groups** | • System Integrators |
| **Training Duration** | On request |
| **Commercial Information:** | CTN number:<br>• Eindhoven: TRA-DCNNG-COM<br>Price: on request |

# Fire Overview

## FPA-5000

| | | | |
|---|---|---|---|
| Online Exam (EN DE ES PT) | 15 mins | | |
| Course: Fire Alarm Panel FPA-5000 Technical Training - Master | 2 days | | Master |
| Course: IP Networking basics (EN DE RU FR ES) | 90 min | | |
| Online Exam (EN DE ES PT) | 2 days / 15 mins | | |
| Course: Fire Alarm Panel FPA-5000 Technical Training - Expert | 2 days | | Expert |
| Course: Bosch Fire Systems Designer: Installation and Application incl. Exam (EN DE) | 30 mins | | |
| Course: Peripherals Module 1: Detectors and Manual Call Points incl. Exam (EN DE FR IT ES PT PL RU) | 40 mins | | |
| Course: Exam for FPA-5000 Module 2 (EN DE FR IT ES PT PL RU) | 10 mins | | Professional |
| Course: FPA-5000 Module 2: MPC, LSNi and Programming (EN DE FR IT ES PT PL RU) | 45 mins | | |
| Course: Exam for FPA-5000 Module 1 (EN DE FR ES IT PT PL RU) | 10 mins | | |
| Course: FPA-5000 Module 1: Components and Functionalities (EN DE FR ES IT PT PL RU) | 45 mins | | |

Classroom    Online    Certification

The learning path is also available in the Bosch Building Technologies Academy. You only need to click on the certification symbol and you will be routed directly to the correct learning path.

The languages supported for classroom trainings are subject to availability at the respective region.
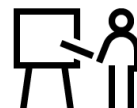
# Fire

## FPA-5000 Technical Professional Training Plan

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|---|---|
| **Short description** | This training plan includes several topics and modules that will give you an overview of<br>• the basic components of the Bosch Fire Alarm Panel FPA-5000<br>• different technologies and applications for Bosch Fire Detectors<br>• different types of manual call points<br>You will also learn how to use the Bosch Planning Tool in your daily work.<br><br>Please register to the Training Plan and open it afterwards in order to see the assigned individual Online Training offering. |
| **Content** | This training plan will include:<br>• Bosch Fire Alarm System FPA-5000<br>• Bosch Fire Peripherals<br>• Bosch Fire Planning Tool: Safety Systems Designer |
| **Learning targets** | By successfully completing this training plan the customer should be able to:<br>• Understand the modular concept of the FPA-5000<br>• Get familiar with functional concept of LSN and basic structure of RPS<br>• Understand features and differences of Bosch products and learn about their technical data<br>• Create:<br>    o projects of different sizes<br>    o bill of material<br>    o tender texts<br>    o battery and loop calculations and<br>    o schematic drawings<br>with the Safety Systems Designer |
| **Prerequisites** | • Basic Fire Knowledge |
| **Target groups** | • System Integrators |

**Fire**

## Fire Alarm Panel FPA-5000 Technical Training - Expert

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|---|---|
| **Short description** | A 2 day Classroom training and online exam which concerns the modular fire panel FPA-5000 and basic diagnostics procedures. In order to achieve the Technical Expert qualification the customer must attend all training days of the classroom trainings and pass an Online Exam after the Trainings. |
| **Content** | This training plan will include:<br>• A Recap of Modular Concept<br>• Redundancy<br>• Recap LSNi Basics<br>• LSN Advanced<br>• LSNi Test Tool<br>• "Do's and Don'ts" Installation<br>• Maintenance<br>• Programming with RPS<br>• Troubleshooting<br>• Simple Networking<br>• Hands-on sessions |
| **Learning targets** | By successfully completing this training the customer should be able to:<br>• Have a general understanding of the FPA product family<br>• Design, install and program an FPA-5000 system in stand-alone set-up |
| **Prerequisites** | • Basic Fire Knowledge<br>• Completed FPA-5000 Technical Professional Training Plan |
| **Target groups** | • Installers<br>• System Integrators |
| **Training Duration** | 2 days |
| **Commercial Information:** | Location wise CTN numbers:<br>• Grasbrunn: TRA-FPA-FE<br>• Eindhoven: TRA-FPA-CE<br>Price: €600 per training per person (Price before VAT) |

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**Fire**

## Fire Alarm Panel FPA-5000 Technical Training - Master

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|---|---|
| **Short description** | A 2 day Classroom training and online exam which concerns the networking capabilities of the Bosch FPA-5000 Fire Alarm Panel.<br>In order to achieve the Technical Master qualification the customer must attend all training days of the classroom trainings and pass an Online Exam after the Trainings.<br><br>The completion of the Online Training **IP Networking Basics** should also be completed at this time. (See page <u>12</u>) |
| **Content** | This training plan will include:<br>• Complex networks (CAN, IP, OPC)<br>• Connection to FSM<br>• Smart Safety Link (Integration to Praesideo, Paviro)<br>• RPS Programming advanced: application of rules over FPA network<br>• Hands-on sessions |
| **Learning targets** | By successfully completing this training the customer should be able to:<br>• Have a general knowledge about FPA-5000 networking and connection to FPA-OPC, Fire Evac and FSM-2500/5000<br>• Install, configure and commission an FPA-5000 network |
| **Prerequisites** | • Certificate Expert Level |
| **Target groups** | • Experienced Electrical Design Engineers |
| **Training Duration** | 2 days |
| **Commercial Information:** | Location wise CTN numbers:<br>• Grasbrunn: TRA-FPA-FM<br>• Eindhoven: TRA-FPA-CM<br>Price: €600 per training per person (Price before VAT) |

## Additional comments

Offering a broad range of training courses across various business domains it is our pleasure to welcome you soon at our Bosch Building Technologies Academy.
As stated in the beginning, you can register to attending online, virtual or class room trainings as part of Professional, Expert or Master levels at the following link:
https://academy.globalteach.com/ST/Login.aspx

This document is valid for 2020 trainings and information provided are subject to changes without further notice.

Please note that 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, see link above.

Prices for class room trainings are prices before VAT; online training courses are free of charge and students can attend those courses at the time and speed they prefer.

In case of further questions, please contact us at:

training.emea@bosch.com



**Professional:**
Online training on basic product features and system architecture

**Expert:**
Training on basic system design/configuration for lower complexity systems

**Master:**
Training on advanced system configuration/ integrated systems and in troubleshooting

*"The more you learn, the higher the qualification you earn"*

# NOTES

# NOTES

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