

ABB UNIVERSITY SWITZERLAND

Learning Center MV Drives

Course Portfolio



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Working on ABB MV Drives requires suitable personnel who are trained for the respective MV Drives product and the service to be carried out.

The MV Drives Learning Center offers suitable customer training courses with a high focus on practical exercises, so that the operator can run the system professionally and the maintenance staff to carry out their tasks in a safe and efficient way.

Editorial

Introduction

The mission of our Learning Center is to provide competence to our customers and employees. We want to enable them to operate their assets in a safe, economical and efficient way. Our vision is to assist our customers in optimizing the performance, safety and reliability of their assets.

Our Learning Center offers a wide range of professional training courses adapted to meet your needs and to establish a long-term partnership.

Your business is exclusive — your training and education should be exclusive as well!

Training courses Scheduled classes (public)

In our Learning Center in Turgi, Switzerland, we use high-quality training equipment such as real time simulators and training units. The trainees will gain hands-on experience using specialized tools and techniques by doing practical exercises.

Project-specific and tailor-made courses (on request)

The training can be held in our Learning Center in Switzerland or on-site at the customer's facilities. The program and content can be adapted according to your needs and requirements. All information related to your project will be used to run a custom-tailored training.

Thanks to our international trainer pool, some courses may be also available in other languages. Please contact us for more details.

Web-based alternatives We also offer online alternatives for most of our

courses. The small class size of 5 - 10 participants and various online tools allow a highly interactive training.

Instructors

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All our trainers are product experts and very experienced. In addition to their commissioning and engineering knowledge, they are certified as trainers according to relevant ABB and Swiss Federal standards.

Equipment and infrastructure

Fully operational training drives and/or simulators are used in all our training courses. The trainee will get the skills to operate, maintain and troubleshoot your installed system by training on a unit which is similar to your drive.

Training quality

Our highly qualified team is continuously aiming to meet your needs. All our professional full-time trainers hold the SVEB Certificate (Certificate of the Swiss Federation for Adult Learning SVEB/FSEA) or higher.

Our quality management system guarantees that our Learning Center is continuously improving the training content and teaching processes in order to maintain and increase the quality of our courses.

Training conditions

Please note, that in order to guarantee enough time for all necessary arrangements we need the purchase order in time as stated in our training conditions.

Our Learning Center shall not reserve any resources such as trainers, equipment, training material and facilities without having received the officially signed purchase order.

Course portfolio MV Drives

The course schedule is regularly updated on the Motion Upskill platform. Please click on the link found in the "Motion Upskill registration" column to obtain up-to-date information regarding the planned courses.

Preparatory courses/E-learnings (available for O&M courses/required as preparation for S&C courses)

Course Name	Duration	Upskill Motion registration
G790e - MV Drives Introduction 1 E-learning	0.5 days	G790e registration
G791e - MV Drives Introduction 2 E-learning	0.5 days	G791e registration
G711e - ACS1000 Product Overview E-Learning	1 day	G711e registration
G781e - ACS2000 Product Overview E-Learning	1 day	G781e registration
G741e - ACS5000 Product Overview E-Learning	1 day	G741e registration
G761e - ACS6000/6080 Product Overview E-Learning	1 day	G761e registration
G830e - MEGADRIVE LCI Product Overview E-Learning	1 day	G830e registration
G861e – PCS6000 Wind Product Overview E-Learning	0.5 days	G861e registration

Operation and Maintenance training, classroom and/or virtual classes

> Standard Courses

Course Name	Duration	Course description	Motion Upskill registration
G700 - ACS1000 Operation & Maintenance	3 days	<u>G700</u>	G700 registration
G770 - ACS2000 Operation & Maintenance	3 days	<u>G770</u>	G770 registration
G730 - ACS5000 Operation & Maintenance	4 days	<u>G730</u>	G730 registration
G731 - ACS5000 Air cooled Operation & Maintenance	3 days	<u>G731</u>	On request
G732 - ACS5000 Water cooled Operation & Maintenance	4 days	<u>G732</u>	On request
G750 - ACS6000 Operation & Maintenance	4 days	<u>G750</u>	G750 registration
G751 - ACS6000 with AAC Operation & Maintenance	5 days	<u>G751</u>	G751 registration
G950 - ACS6080 Operation & Maintenance	4 days	<u>G950</u>	G950 registration
G951 - ACS6080 with AAC Operation & Maintenance	5 days	<u>G951</u>	G951 registration
G820 - MEGADRIVE LCI Operation & Maintenance	4 days	<u>G820</u>	G820 registration
G875 - ACS6000c Cyclo Operation & Maintenance	4 days	<u>G875</u>	G875 registration
G980 – ACS8080 Operation & Maintenance	3 days	<u>G980</u>	G980 registration
G860 - PCS6000 Operation & Maintenance	4 days	<u>G860</u>	G860 registration
H863 - ACS6000c Marine Cyclo Operation & Maintenance	4 days	<u>H863</u>	On request
H864 - ACS6000 Marine Operation & Maintenance	4 days	<u>H864</u>	On request
H865 - ACS6080 Marine Operation & Maintenance	4 days	<u>H865</u>	On request
H871 - ACS6000 / ACS6080 Marine Operation & Maintenance	5 days	<u>H871</u>	On request

Project Courses

We conduct most Operation & Maintenance trainings as project courses. These exclusive customer trainings have an equal duration and mostly similar content as our standard courses. The attendance to project courses is limited exclusively to participants invited by the purchaser.

In the project course, not applicable drive options are left out, leaving time to explain the project-specific setup and features. Where appropriate, system-specific documents and drawings are used. Course presentations and documentation are in English, but the spoken instructions may also be in other languages (e.g., German or French).

On request, the focus of the O&M (Operation & Maintenance) courses can be aligned to the current life cycle of the drive. In addition to the standard O&M training, one of the following life cycle topics can be covered in more depth:

• O&M installation & commissioning

Special focus on correct installation of the drive, requirements for the Main Circuit Breaker, power cables, earthing and shielding as well as prerequisites for commissioning.

O&M for newly installed drives

The maintenance tasks of the new drive must be integrated into the existing service procedures of the customer. The points that need to be considered will be discussed together with the participants.

O&M refresher training

After several years of operation, the service staff may need a refresher training to stay up-to-date and be able to react correctly in case of disturbances.

• O&M advanced troubleshooting

The level of experience of the maintenance staff can be maintained / improved through an advanced troubleshooting session.

O&M control upgrade

For control upgrades, additional explanations about the differences between the old and the new system will be given. The state-of-the-art control features will be explained in detail.

By condensing the standard content, the training can be conducted in the normal duration. However, we recommend booking an additional training day. This also allows for extended hands-on exercises and sufficient time for Q&A sessions.

> Tailor-made Courses

Exclusive tailored training may have customized duration and adapted content compared to standard courses. The attendance to tailor-made courses is limited exclusively to participants invited by the purchaser.

In tailor-made courses, our trainer can respond to the needs of the participants and explain the project-specific setup and features. Where appropriate, system-specific documents and drawings are used.

If suitable infrastructure for classroom lessons and hands-on exercises is available, we can also offer an Operation & Care Training at the end user's site. For the maintenance staff, however, we recommend the in-house courses in our training center, as we have suitable training units here for comprehensive hands-on exercises. Because of the limited hands-on opportunities, Operation & Care Trainings at end user's site are usually shorter than the standard courses.

On-site Operation Induction, by ABB field service engineers

When completing the commissioning of an MV Drive, the ABB Lead Engineer can carry out a half-day to one-day Operation Induction if agreed in good time.

Course Name	Duration	Course description
On-site Operation Induction	few hours	product specific → see also service manual

Classroom training

Our classroom trainings are characterized by a high percentage of hands-on activities. Fully operational training drives, simulators, and other training equipment in combination with small class sizes enable a very practical and effective training.



Theory in classroom



Hands-on training in small groups



Training on real drives



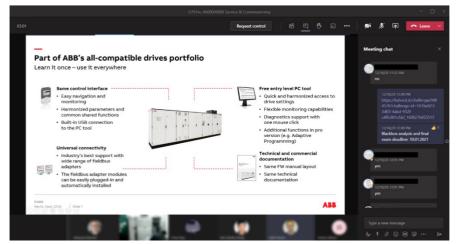
Fully operational demo units



State-of-the-art simulators for software handling

Virtual Classroom training

The small class size of 5-10 participants and various online tools allow a highly interactive training. The hands-on parts, which cannot be carried out over web by the participants themselves, are taught as good as possible using videos, demonstrations, case studies, etc.



Topics were meeting my expectations

My basic knowledge was sufficient to follow the course

The content is useful for my job

My questions have been answered

The audion

ACS2000: Please rank the topics based on usefulness and presentation quality

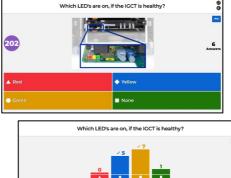
Presented very

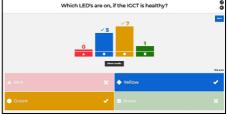
Presented very

Presented to only

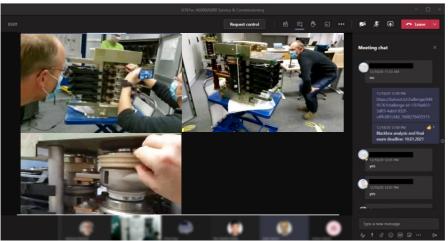
Virtual Classroom lessons with modern online tools in small groups

Interactive survey and evaluation tools



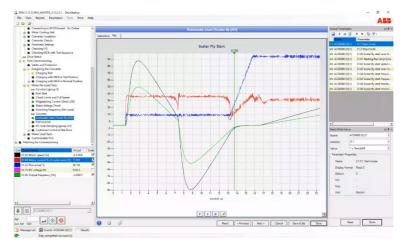


Gamification: Playful learning



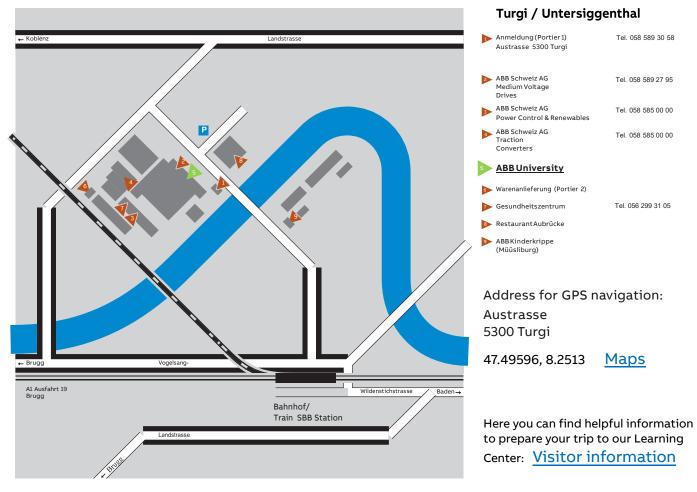
Hybrid training with on-site and remote participants. Hands-on exercise streamed with several cameras showing different perspectives.





Emulators can be accessed from remote

ABB Turgi site map



Learning center location in Turgi, Switzerland

ABB UNIVERSITY SWITZERLAND Learning Center MV Drives

Department MOSE-SU CH-5300 Turgi Switzerland

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https://new.abb.com/service/abb-university/ch/lcmvd

