

EtherCAT Technology Group
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2026 EtherCAT International Technology Week (ITW) AMER | online

February 16—20, 2026

Jan 2026

Dear Sir or Madam,

We cordially invite all developers of EtherCAT MainDevices, SubDevices, Configurators, Codes, and Tools to join the **EtherCAT International Technology Week (ITW) world series 2026**. Now in its fifth year, the ITW World Series has become a staple in the annual ETG event calendar.



International
Technology Week

Throughout the ITW, ETG experts will lead a series of **technical webinars**, offering in-depth development insights and practical guidance on EtherCAT-related topics. These sessions are designed to address common challenges encountered during the implementation, certification, and release of EtherCAT devices. Each webinar will be followed by a dedicated **Q&A session**, providing ample opportunity for you to ask questions and engage with the presenters.

The webinars focus on the implementation and use of the EtherCAT technology. The content is interesting for EtherCAT newbies, as well as for the well-experienced developer. Take advantage of both, new session topics as well as sessions topics which have been addressed last year. Even if you attended those already, since they may address updated features and other aspects this year, they may offer new insights, nevertheless.

Join the **ITW World Series this year** — specifically the **ITW AMER** — which takes place **February 16 to 20, 2026** for ETG members located in North, Central and South America. Explore the details of each session and view the complete session calendar at the following pages.

Please register via the following link for one or multiple webinars, if not all of them:

www.ethercat.org/itw-AMER

Participation is free of charge and limited to ETG members.

Feel free to forward the invitation to your colleagues!

If you have any questions, please get in touch with us.

Best regards,
Your ETG Team

Webinars

BASIC MONDAY

Monday, Feb 16, 2026

11:00 am —12:00 pm (CST)

How to begin an EtherCAT development – some key points

As straight-forward the functional principle of EtherCAT is, the many implementation options, communication devices (ASICs, SoCs, and more), documentation, and developer events are available. This webinar shows key decisions and development steps, and in which order those may be tackled: It includes basic EtherCAT theory training, parameter selection to choose an EtherCAT SubDevice Controller, possible EtherCAT SubDevice software stacks, organizing the parameter and process data, in-house testing, available test tools, official testing at an EtherCAT Test Center, and more developer events.



Florian Essler

Monday, Feb 16, 2026

12:30 pm —01:30 pm (CST)

CTT – basic features and how to use it for EtherCAT SubDevice development

This webinar aims to present the basics around the EtherCAT Conformance Test Tool (CTT) and how to use it for EtherCAT SubDevice development. In this presentation we will cover the many helpful functionalities and plugins of the tool, EtherCAT protocol testing as well as long-term testing of different EtherCAT SubDevice configurations, error detection mechanisms, and analysis of the test results.



Gregor Erzen

PROFILE TUESDAY

Tuesday, Feb 17, 2026

11:00 am —12:00 pm (CST)

Structuring CoE object dictionary using profiles: MDP, DS402, Semi Device Profile

The CoE object dictionary lists all parameters and variables of a SubDevice, and is the interface to the sensor or actuator functionality. Depending on which type of device is developed, different CoE OD structurings, so called device profiles, are beneficial. Those range from a basic framework (MDP) defining a handful of categories, to a very detailed parameter definitions for drives (DS402), valves (Semi Device Profile), gateways, and others. Profiles are a very helpful concept for both, developers and device users, and this is why they have become very popular on both sides. This is to an extend where basically any EtherCAT device makes use of device profile benefits. And this webinar explains the concepts and advantages. Device profile are well combined with the ESI concepts of Modules and Slots—which are explained in the following webinar.



Florian Essler

Tuesday, Feb 17, 2026

12:30 pm —01:30 pm (CST)

Using Modules/Slots in ESI and online CoE object dictionary

The ESI elements Modules and Slots allow to generate a flexible EtherCAT SubDevice description, e.g., for modular servo drives and gateways. This webinar shows how to make correct use of the ESI elements and which online CoE objects are used for Modules/Slots functionality.



Florian Hammel

Webinars

PRACTICAL WEDNESDAY

Wednesday, Feb 18, 2026

11:00 am —12:00 pm (CST)

From Spec to SubDevice: Building an EtherCAT SubDevice - Part 1

This webinar combo describes the process of an EtherCAT development hands-on. In this first part the parameter and cyclic data are described for a prototype SubDevice. Those are structured into the CoE object dictionary using device profile guidelines. From the OD description the base to generate the SubDevice stack, ESI file, and SII are done. The process of selecting respective hardware and other basic considerations are discussed, too.

Best to watch before: How to begin an EtherCAT development, Structuring CoE object dictionary using profiles

Wednesday, Feb 18, 2026

12:30 pm —01:30 pm (CST)

From Spec to SubDevice: Building an EtherCAT SubDevice - Part 2

This webinar combo describes the process of an EtherCAT development hands-on. In this second part software stack settings and a prototype application are demonstrated. As a paramount development-supporting measure, the use of the Conformance Test Tool (CTT) throughout the development process is demonstrated.



Florian Essler

SYNC THURSDAY

Thursday, Feb 19, 2026

11:00 am —12:00 pm (CST)

EtherCAT Synchronization Modes - basic concepts

EtherCAT synchronization modes define how to synchronize the process data update and the applications of MainDevice and SubDevices. EtherCAT specifies three synchronization modes called Free Run, SM-synchronous, and DC-synchronous and also defines possible variations.

This webinar introduces the different synchronization modes with graphical animations as well as concrete examples. For each mode the underlying mechanisms, the hardware and software



Florian Hammel



Alessandro Figini

Thursday, Feb 19, 2026

12:30 pm —01:30 pm (CST)

EtherCAT Synchronization Modes - SSC Implementation

This webinar demonstrates how EtherCAT synchronization modes may be implemented in an EtherCAT SubDevice software stack, using the example of the SSC (SubDevice Stack Code). This includes the interrupt handling, the process data handling, and the monitoring of the synchronization including error handling.

Best to watch before: From Spec to SubDevice: Building an EtherCAT SubDevice - Part 2



Rainer Hoffmann

Webinars

SUPER FRIDAY

Friday, Feb 20, 2026
11:00 am —12:00 pm (CST)

SSC tool: How-to

1. Step-by-step from the Idea to the running application (based on the Beckhoff EL9800 hardware)
2. Working with the SSC command line tool
3. Create own SSC Tool configurations
 - For development service provider, ESC or development board vendor, to distribute own/ custom code settings



Rainer Hoffmann

Best to watch before: From Spec to SubDevice: Building an EtherCAT SubDevice - Part 2

Friday, Feb 20, 2026
12:30 pm —01:30 pm (CST)

In-House Testing with ETC Precision — hands on for manual testing

The tests performed by an EtherCAT Test Center (ETC) are specified in detail in ETG. 7000.2 Test Record. The test instructions include the use of the CTT and also tests performed manually. Both are important whether you're achieving conformance via in-house testing or if you're planning to get official certification. This webinar shows you how to perform some of the manual tests in the same way as they are performed by the ETC test engineers - to enable you to meet high quality standards and pass the official test on the first run.



Daniel Keil

COMPLETE SESSION CALENDAR

Please find an overview of all webinar sessions available for the 2026 EtherCAT ITW AMER below:

CST	PST	MONDAY Feb 16, 2026	TUESDAY Feb 17, 2026	WEDNESDAY Feb 18, 2026	THURSDAY Feb 19, 2026	FRIDAY Feb 20, 2026
10:30 am	08:30 am	Kick-off				
11:00 am	09:00 am	How to begin an EtherCAT development — some key points	Structuring CoE object dictionary using profiles: MDP, DS402, Semi Device Profile	From Spec to SubDevice: Building an EtherCAT SubDevice - part 1	EtherCAT Synchronization Modes - basic concepts	SSC tool: How-to
12:00 pm	10:00 am	Q&A	Q&A	Q&A	Q&A	Q&A
12:30 pm	10:30 am	CTT — basic features and how to use it for EtherCAT SubDevice development	Using Modules/Slots in ESI and online CoE object dictionary	From Spec to SubDevice: Building an EtherCAT SubDevice - part 2	EtherCAT Synchronization Modes - SSC Implementation	In-House Testing with ETC Precision — hands on for manual testing
01:30 pm	11:30 am	Q&A	Q&A	Q&A	Q&A	Q&A
02:00 pm	12:00 pm					Wrap-up

Registration & More

Registration deadline: **February 13, 2026**

ONLINE REGISTRATION

Register early for the full event via the link

www.ethercat.org/itw-AMER

and attend as many webinars and Q&A sessions as you want.

The registration deadline is **Friday, February 13, 2026**.

Feel free to forward the invitation to your interested colleagues!

Prerequisite for attending is a valid ETG membership.

ONLINE REGISTRATION CONFIRMATION AND REMINDER

Each registration has to be approved by ETG HQ, thus the login information may be provided with a small delay after your registration. Once you receive the login information, please be aware that this is **personal** and must **not** be shared inside nor outside your organization.

You will be notified one day before and one hour before each webinar day via email from GoToWebinar.

ONLINE PLATFORM

[GoToWebinar™](#) will be used as webinar software.



SPEAKER INTRODUCTION

Besides the content, one highlight of the EtherCAT International Technology Week is the speakers who prepare and conduct the details of the individual presentations and are available to answer participants' questions in the Q&A sessions.

Participants can look forward to the know-how and knowledge transfer of some of the world's most experienced EtherCAT experts. You will find the EtherCAT experts and much more at the **EtherCAT International Technology Week (ITW) World Series** landing page:

www.ethercat.org/itw