rexroth
A Bosch Company

Trainings

Bosch Rexroth Academy

www.boschrexroth.com

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Our knowledge for your application

Both our customers and our company must be able to successfully adapt to the current and future changes of the world. Challenges often come from the fields of climate change, energy supply, demographic change and digital transformation. People are and will remain an essential factor in ensuring the long-term competitiveness of companies. Ideally qualified experts are increasingly difficult to find. New occupations are emerging and older ones are changing in the requirements placed on them. This development, e.g., the increasing share of IT or the new and disruptive technologies, can therefore only be mastered with a successful qualification of the employees. In addition, people have more possibilities, the occupational fields are becoming more individual and require new skills. This can only be covered by equally flexible, modern and comprehensive qualification measures.

Our Academy builds on Bosch Rexroth's decades of experience as a technology leader and realization partner. We are already working today on solving the problems of tomorrow in our global network of factories or for our international customers.
Our training portfolio starts with essential basic knowledge for existing and new fields of learning and offers continuously optimized learning paths. We respond flexibly to your needs and requirements - whether face-to-face, online or in hybrid learning formats such as blended learning. A special highlight are our expert trainings, in which we demonstrably ensure the competence and implementation capabilities of our course participants for the operational application. This in one of our modern training locations or on site at your place. In our training brochure you will find a compact summary of our competencies and the associated learning paths and trainings as well as the latest highlights.

Bosch Rexroth Academy

Innovations and trends from the industry for the educational market

Welcome to the Bosch Rexroth Academy
With more than 225 years of experience as a global industrial enterprise and leading expert in drive and control technology, we have sound product, technology, and process know-how. We are happy to share this knowledge with you and assist you as your training partner for demanding technical education on the exciting path of digital change.

WE MOVE. YOU WIN.

Trainings
Experience high-quality training with digital learning methods and content for your personal basic and advanced training. Choose your technology and learn from the basics right up to expert knowledge.

www.boschrexroth.com/academy-trainings

Systems
Technology at your fingertips:
Get hands-on experience at our workstations equipped with standard industrial components and gain technology know-how as well as with solution competence!

www.boschrexroth.com/academy-systems

Media
An ideal combination of analog and digital: Immerse yourself in the extensive media offer and use our media for the modern and digital transfer of knowledge.

www.boschrexroth.com/academy-media

Trainings

Always one step ahead with the training courses from the Bosch Rexroth Academy – Our knowledge offer for you

As a global partner, Bosch Rexroth supports customers in mastering mechanical and plant engineering challenges around the world with its cutting-edge technology and unique industry knowledge. Thus, Bosch Rexroth Academy has established itself as a competent partner for basic and advanced training for numerous companies and institutions. With their various training methods, our trainers guarantee a knowledge transfer which is always oriented at the learning target and in accordance with the state of the art. The Bosch Rexroth Academy is certified according to DIN EN ISO 9001:2008 and thus supports the claim of delivering utmost quality in knowledge transfer.

Ideal learning paths for your job role
The presentation of our knowledge offer is focused on the essentials in the new training brochure: On your ideal learning path! Put together your individual learning program that will allow you to acquire the desired skills and abilities for your job role and to optimally equip yourself for your professional future.

Competent and qualified trainers
Our trainers have long-term experience in numerous units of our company and go through an additional certified trainer education in their specialist fields and soft skills. Benefit from our industrial experts who will lead you to learning success with the training method of your choice!

Face-to-face training
Face-to-face and practical training with personal contact. Direct communication and, above all, "handling" the components reinforce the theoretical content.

Online training
Online knowledge transfer (live or as a recording) by our trainers in the virtual classroom (global).

eLearning
Independent learning on a computer is an integral part of knowledge transfer. Learning contents, e.g., on technology basic knowledge are made available in the form of presentations, clearly divided into online learning modules.

Blended learning
The interaction of eTraining, eLearning and face-to-face training.

Training finder online

Training availability and registration

Use the Bosch Rexroth Academy training finder to explore our versatile range of training offers. Here you will find detailed descriptions of each technology, your desired training type, dates, training locations and the possibility of direct registration.

YOU CAN FIND OUR TRAINING PROGRAM WITH AVAILABILITY INFORMATION HERE:
https://academy.boschrexroth.com/en_de/

RT13-007

Basics for Digital Transformation (eLearning)

The ongoing digital transformation is fundamentally changing the framework conditions and the entire industry landscape. Companies face massive challenges in the targeted design and implementation of the digital transformation from individual, practical, and economic aspects. This eLearning course and the learning nuggets convey essential basic knowledge for the digital transformation, for example on digital technologies, Industry 4.0, artificial intelligence and real application cases from practice.

CONTENTS

- Introduction to Industry 4.0, opportunities and strategies of the countries
- What is behind the digital transformation?
- Automation pyramid and networking (MES, ERP, IT, OT)
- Cyber-physical systems and digital twins
- Data, information and knowledge
- Cloud, big data, data storage and tools
- Business intelligence, analytics, IoT and AIoT
- Factory of the future, technologies and megatrends
- Artificial intelligence, machine learning and use cases
- HMI, collaboration and cobots
- Status quo of digital transformation in the industry landscape
- Numerous i4.0 use cases from practice

LEARNING TARGET

- Good understanding of the digital transformation, its technologies, possibilities, and challenges
- Basic understanding of digitization, networking, automation, and related tools
- Background knowledge on future topics such as artificial intelligence, machine learning, and digital twins
- Understanding of i4.0 implementation through intensive practical examples and their potentials as well as K.O. criteria

PREREQUISITE

none

Do you have any questions?

Register now!

RT13-011

Certified Expert Machine Connectivity (TÜV)

This intensive practical training is aimed at implementers in the companies such as maintenance personnel, planners, and production IT managers who want to network the machinery in their company in order to achieve more transparency in production and thereby reduce standstill time and increase plant availability. The necessary hardware and software competence is taught at and with industrial systems with a view to prepare the participants for the economic production networking in practice.

CONTENTS

- Inventory of existing machinery
- Theory of different operating systems, interfaces, and protocols (e.g., OPC UA, MPI)
- Wiring a machine with OPC UA, and MPI
- Installation of MQTT via Solace
- Installing sensors
- Configuration of the IP addresses of the machine
- Setup of machine networking in various ways; Node RED, device bridge, and universal
- Connector to database
- Data cleansing and saving/storage of machine data
- Final examination and certification TÜV certificate

LEARNING TARGET

- Analysis of brownfield and machinery to identify suitable systems for networking
- Industrial competence for connecting and networking machines and production plants
- Selection and use of appropriate data to increase transparency and productivity

PREREQUISITE

Technical training (academic degree or vocational training) as well as basic knowledge in network technology and data processing desirable

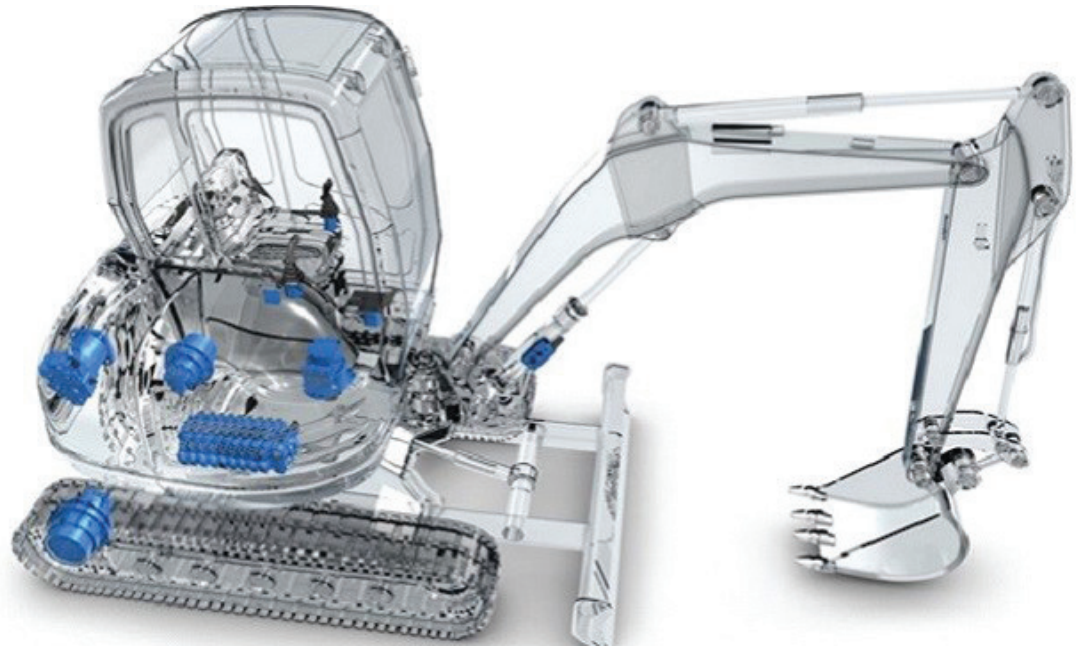
Do you have any questions?

Register now!

RT06-046

Mobile Hydraulics – Controls and Components in open-loop Circuits

The training course provides information on controls and components in open-loop circuits. It focuses on the design, function, and properties of relevant components and systems. Learn everything about load pressure-independent flow distribution and the differences between throttle and load-sensing control systems. You will carry out adjustments and tests on the training test bench and receive information on function and troubleshooting.



CONTENTS

- Function and design of axial piston units in open-loop circuits (A11VO, A10VO, A6VM) incl. adjustment types for load sensing, LUDV, and positive control
- Energy balances and features of throttle and load-sensing control systems in conjunction with the relevant pump control
- Setup, function, and options for using Rexroth control blocks and subsystems: SM...; MO...; M8...; M9...; SP08...; M4...; SB...; RS...; M6...; M7...; stabilization module RSM2...; Safety valves MHDB...; Pre-control unit TH...;

LEARNING TARGET

- Obtaining knowledge about control systems for axial piston units and how they interact with the valve components
- Obtaining knowledge about the various control types, their features, and variants
- Learning to recognize malfunctions and localizing the affected components

PREREQUISITE

Basic knowledge of hydraulics, RT06-012 or comparable knowledge

Do you have any questions?

Register now!

RT06-014

Electronics in Mobile Applications

This training course is intended to provide experienced and new employees with insights into the electronification of hydraulic applications and systems. You will become familiar with the components used. Participants will be taught how to use project planning tools and application software.

CONTENTS

- Overview of the BODAS environment (BODAS toolkit)
- Project planning tools
- Overview of application software
- Exercises on the topics presented

LEARNING TARGET

- Getting to know the basics of the electronification of hydraulic systems

PREREQUISITE

Technical understanding

Do you have any questions?

Register now!

RT02-102

ctrlX CORE – Commissioning and Project Planning

In this training course, we will provide you with useful background information regarding the commissioning and project planning of ctrlX AUTOMATION. Your learning target will be the commissioning of a machine with several axes, controlled via ctrlX WORKS, REST IP and ctrlX PLC (PLC program).

CONTENTS

- CtrlX AUTOMATION system overview
- CtrlX CORE commissioning
- Working with the ctrlX Data Layer
- Getting to know ctrlX WORKS and engineering tools and implementing the configuration of components
- Parameterizing ctrlX for use with a ctrlX CORE
- Getting to know and configuring EtherCAT and creating diagnoses
- Creating and commissioning ctrlX MOTION axes and kinematics
- Configuring the ctrlX PLC and activating axes
- Authorizing and managing access to the ctrlX CORE

LEARNING TARGET

- Getting to know the system design of the ctrlX AUTOMATION series
- Configuration of the ctrlX DRIVE PLUS with ctrlX CORE
- How to get access to data and execute commands via the ctrlX Data Layer
- Providing data via OPC/UA and evaluating fault diagnostics

PREREQUISITE

Basic knowledge of control technology

Do you have any questions?

Register now!

RT02-106

Programming with ctrlX PLC Engineering (Online Training)

The training gives an overview of the use, application, and operation of the ctrlX PLC Engineering Software. It will discuss the interaction between the engineering software and the ctrlX CORE controls. You will learn about PLC configuration and creation of PLC programs within ctrlX PLC Engineering.

CONTENTS

- Control settings
- Peripheral settings
- Configuration of a PLC Engineering controller
- Programming languages LD, FBD, SFC and SGT
- Data types
- Libraries (repository, manager)
- Troubleshooting

LEARNING TARGET

- ctrlX PLC Engineering software setup
- Being able to create an I/O configuration
- Creating, loading, and testing PLC programs in ctrlX PLC Engineering
- Knowing how to back up and restore project data in ctrlX PLC Engineering

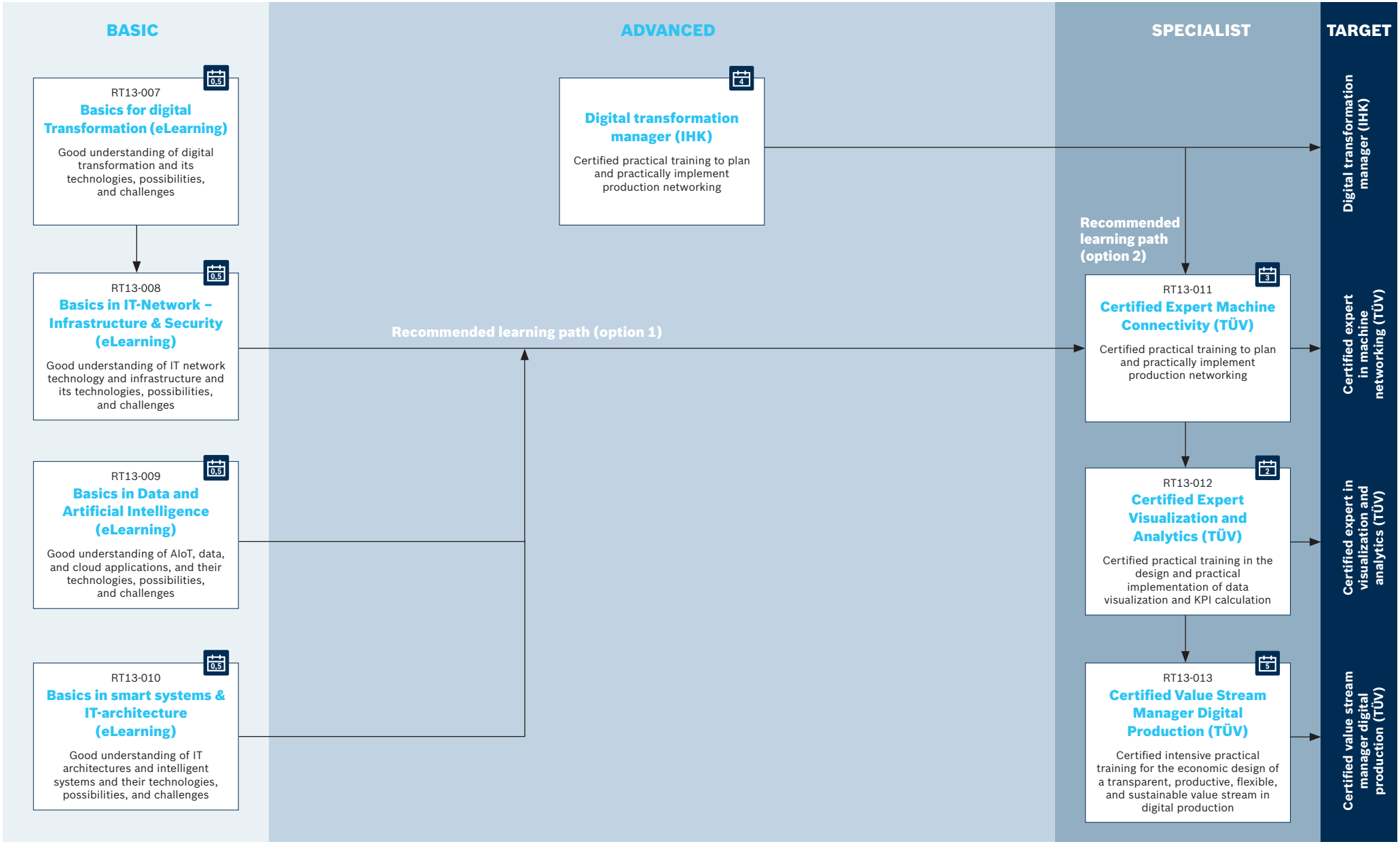
PREREQUISITE

Basic knowledge of PLC technology

Do you have any questions?

Register now!

Learning Path Digital Transformation



Learning Path Assembly Technology

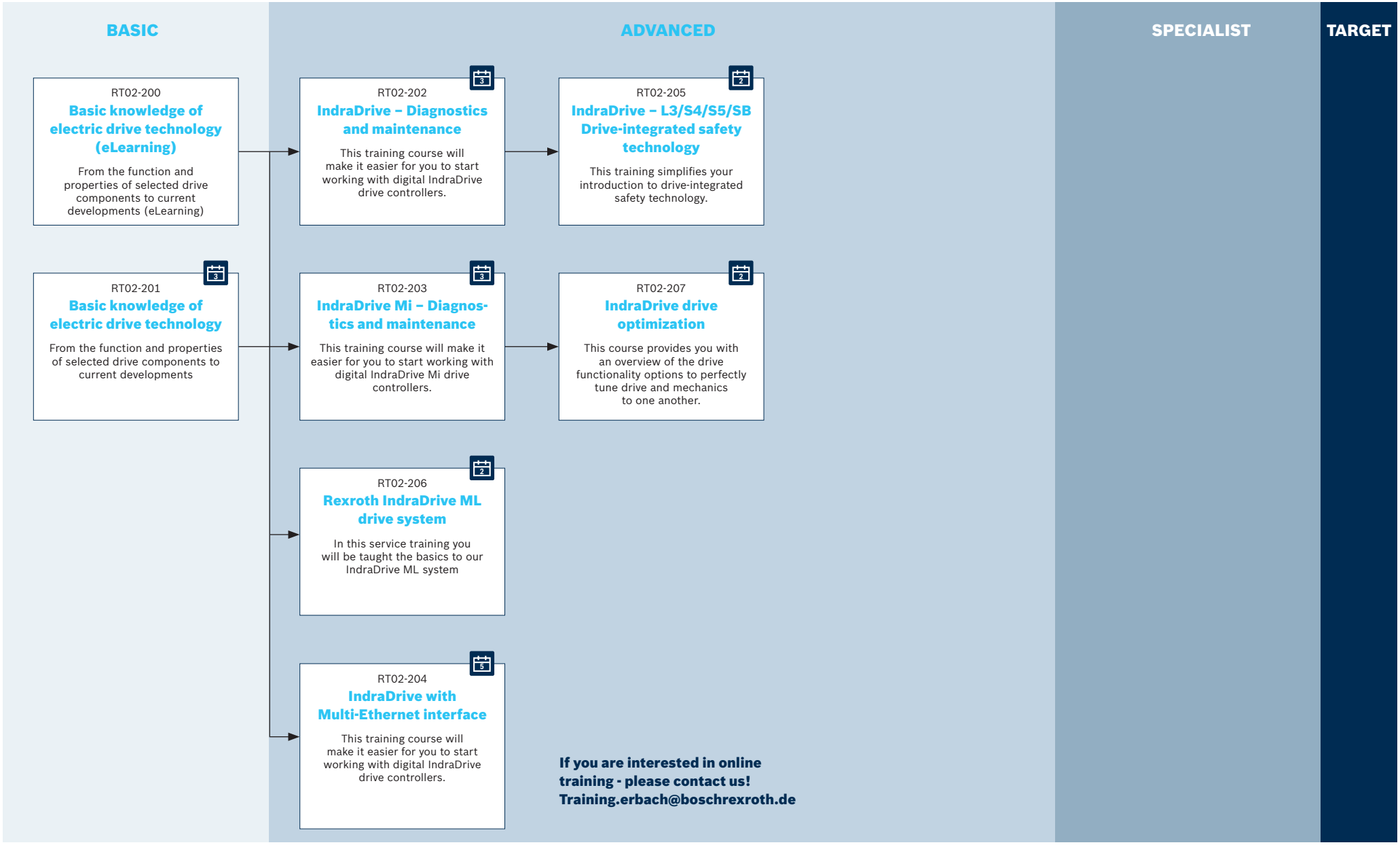
BASIC	ADVANCED	SPECIALIST	TARGET

RT01-001
TS 2 plus
We have compiled a TS 2 plus training course with the contents from all modular units.

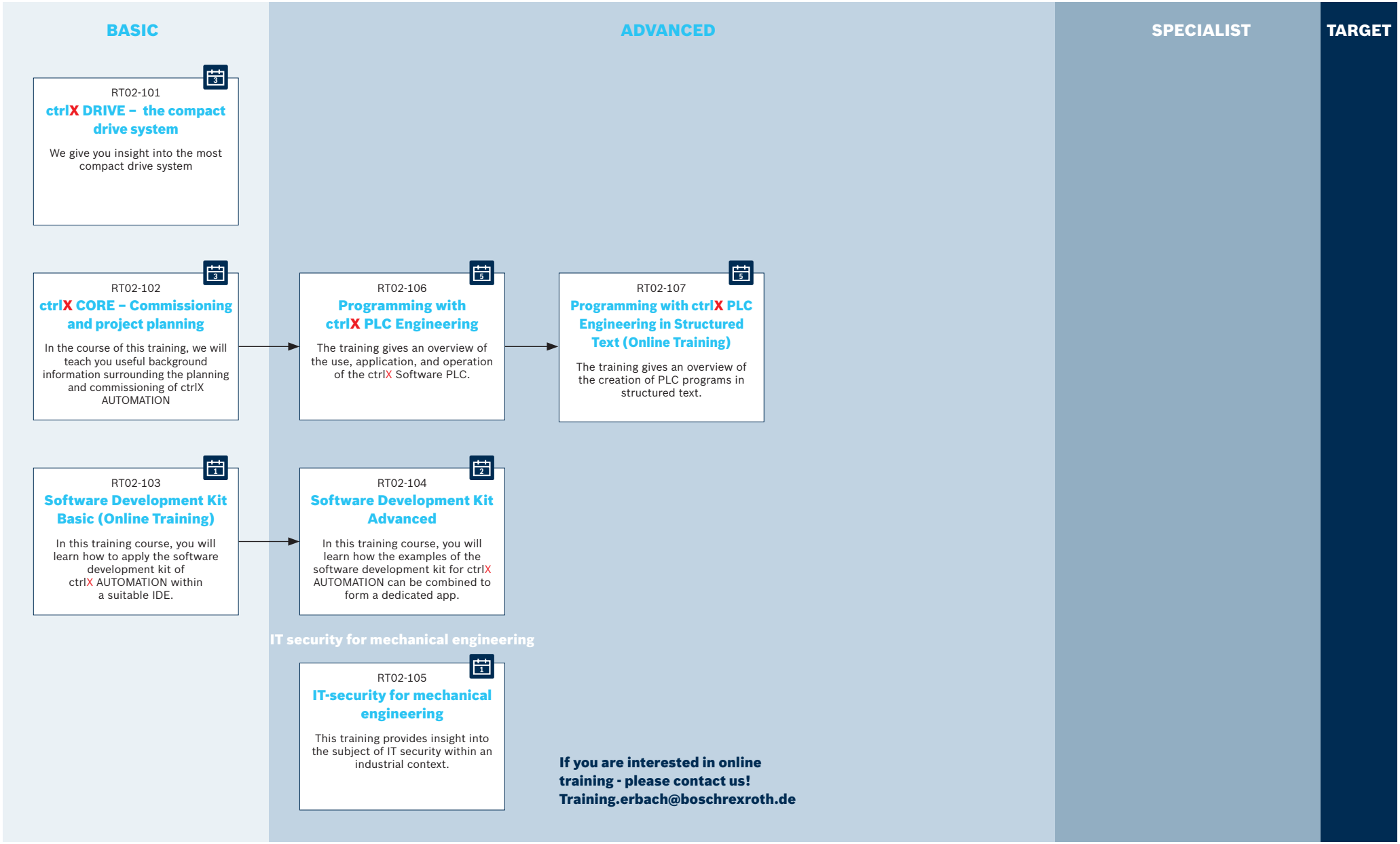
RT01-002
VarioFlow plus
We have compiled a VarioFlow plus training course with the contents from all modular units.

RT01-003
TS 5
We have compiled a TS 5 training course with the contents from all modular units.

Learning Path IndraDrive Drive Technology



Learning Path ctrlX AUTOMATION



Learning Path PLC – IndraWorks/IndraLogic

Learning Path MPC/FTS

BASIC

2-4

RT14-032

MPC/YM – Engineering

In this practical training you will learn to work with the MPC/YM platform

3-5

RT14-033

FTS – Engineering

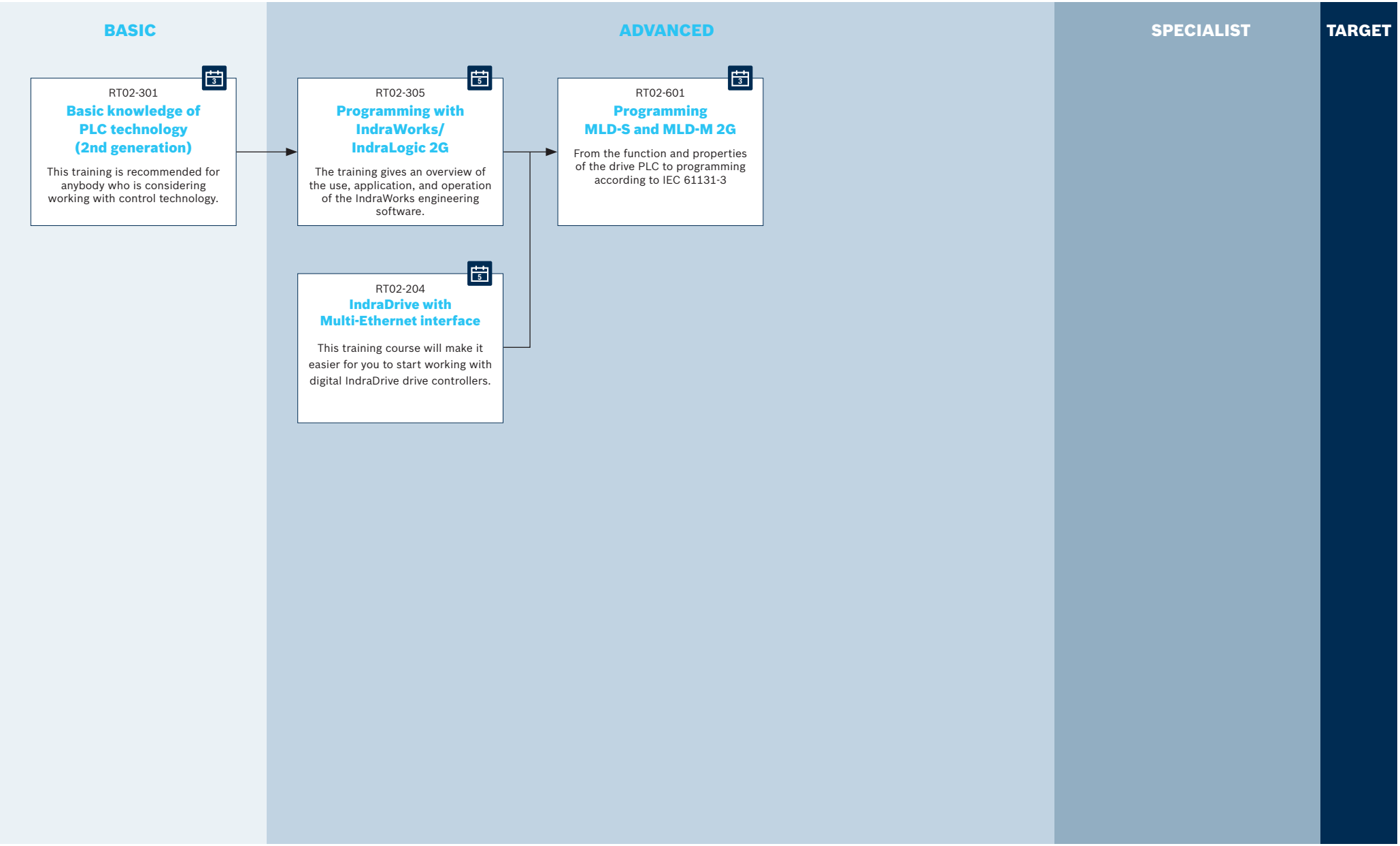
In this practical training you will get to know the Flexible Transport System (FTS)

ADVANCED

SPECIALIST

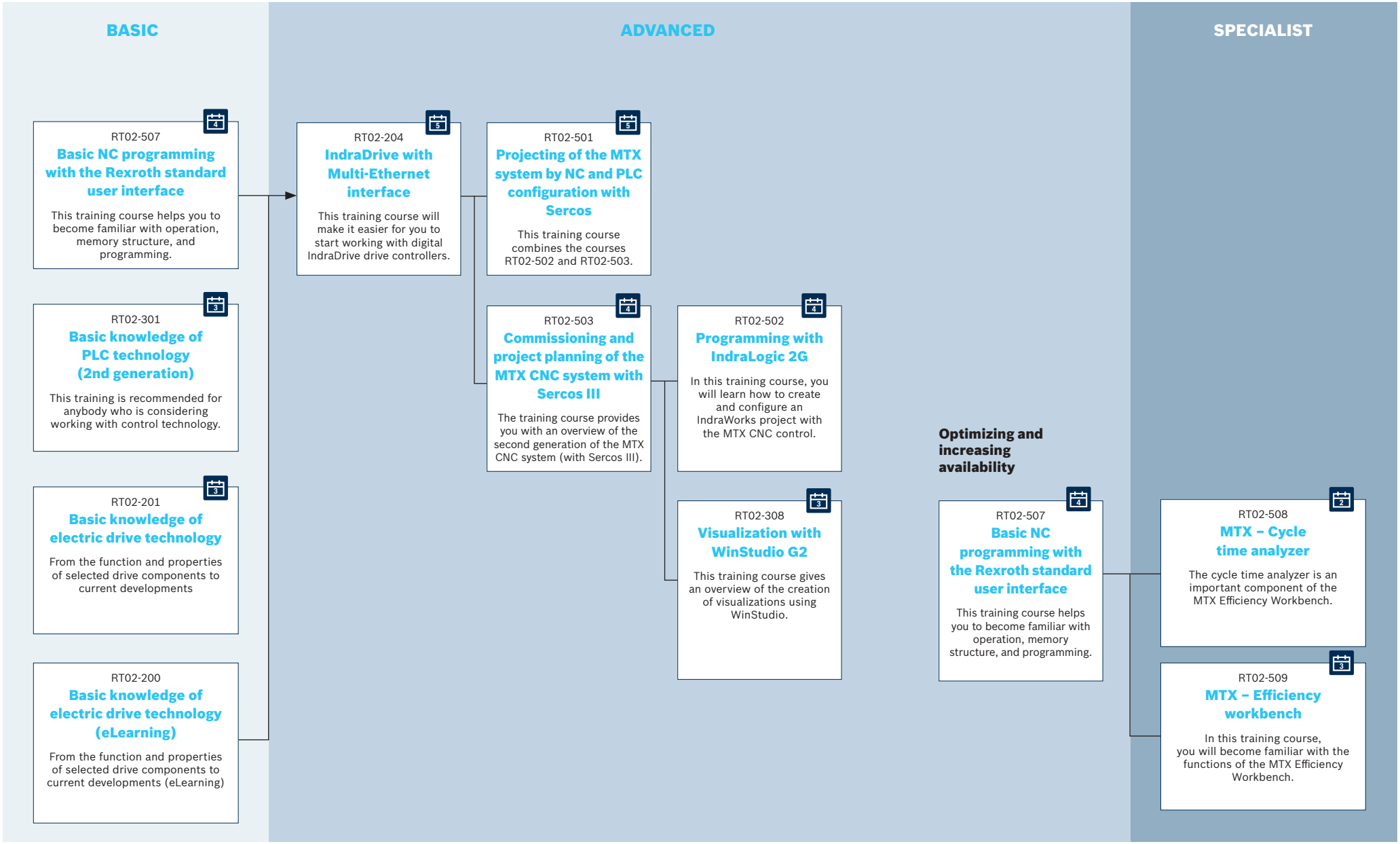
TARGET

Learning Path MotionLogic MLD

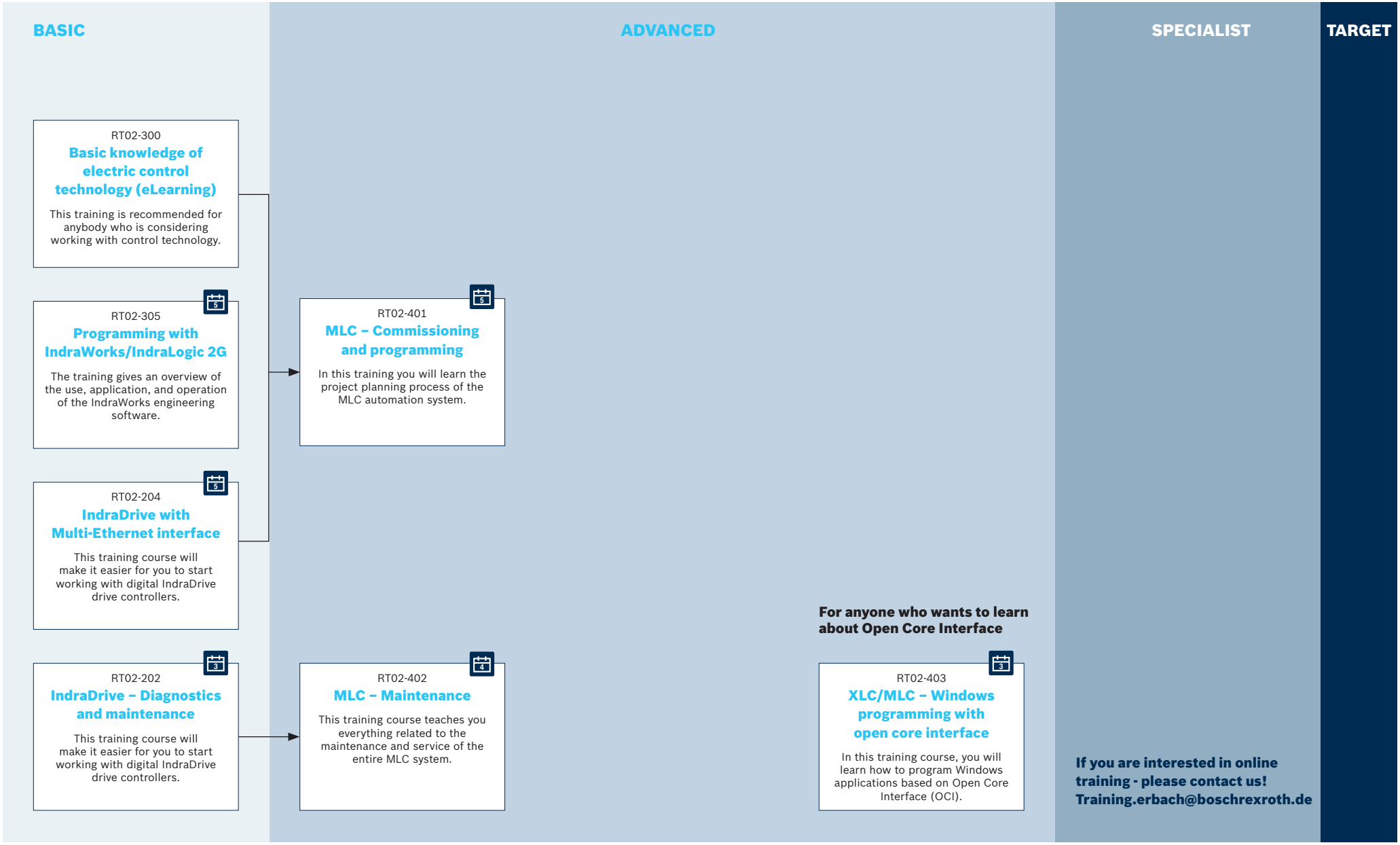


Learning Path CNC System MTX

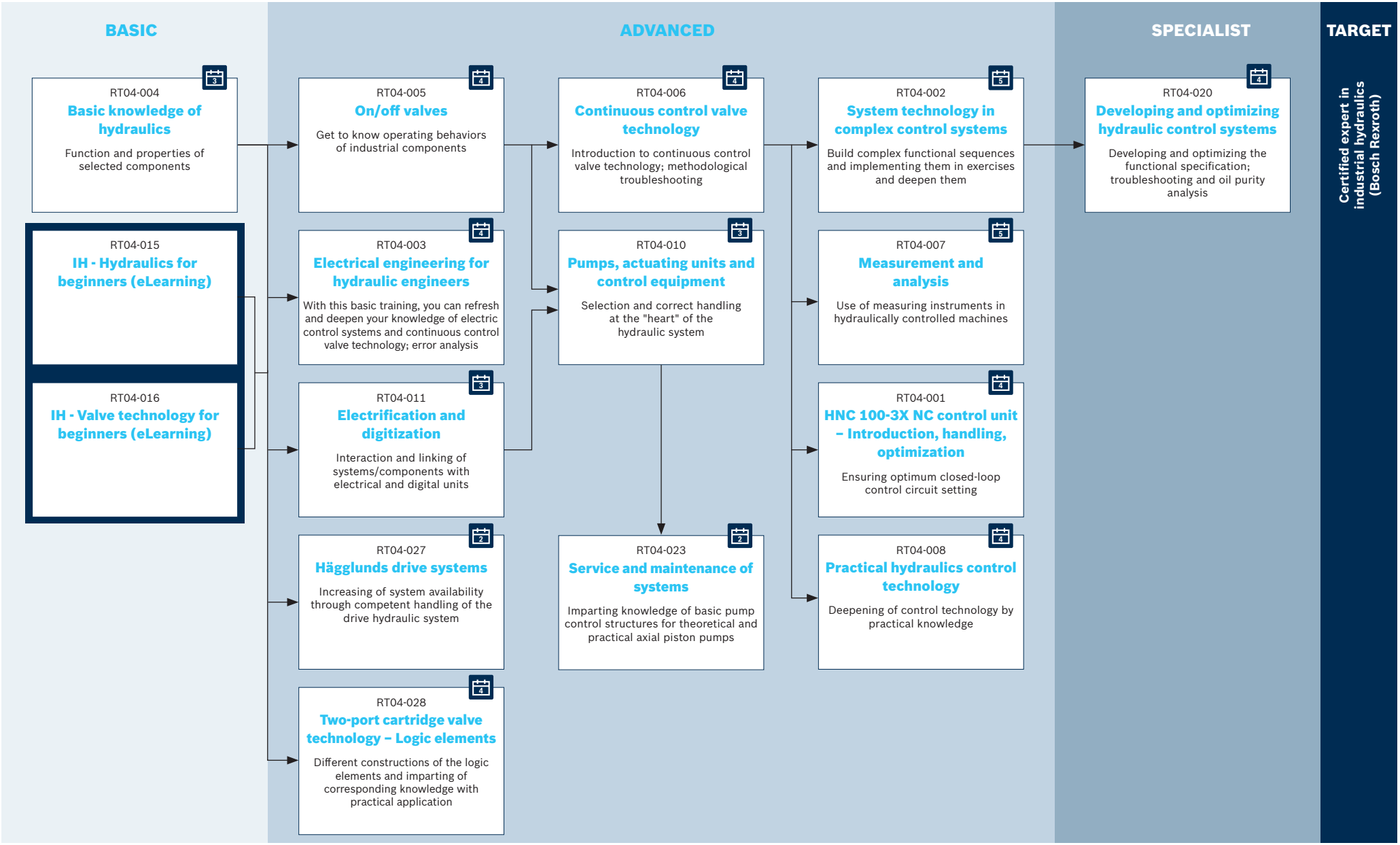
Learning Path CNC System MTX



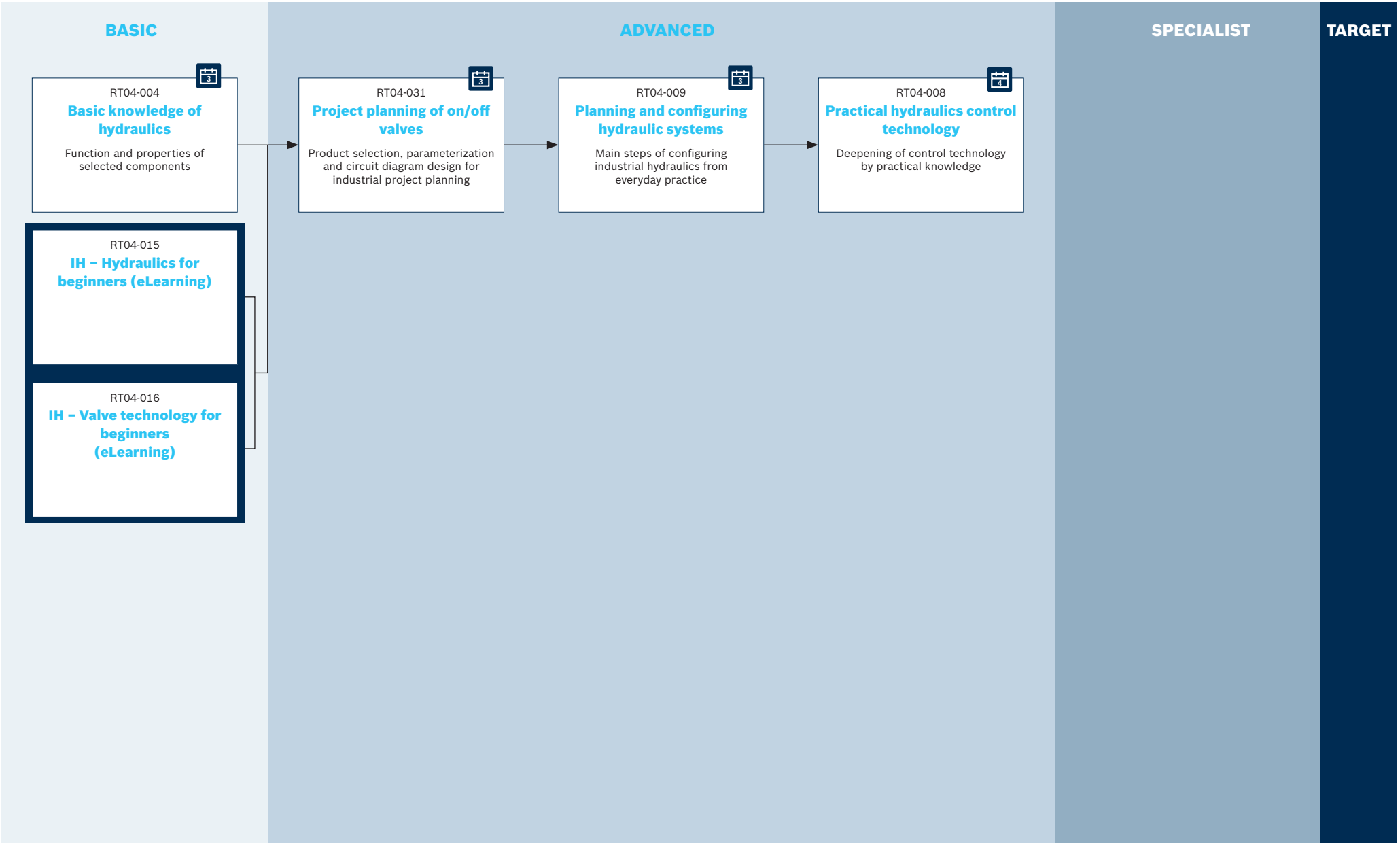
Learning Path XLC/MLC



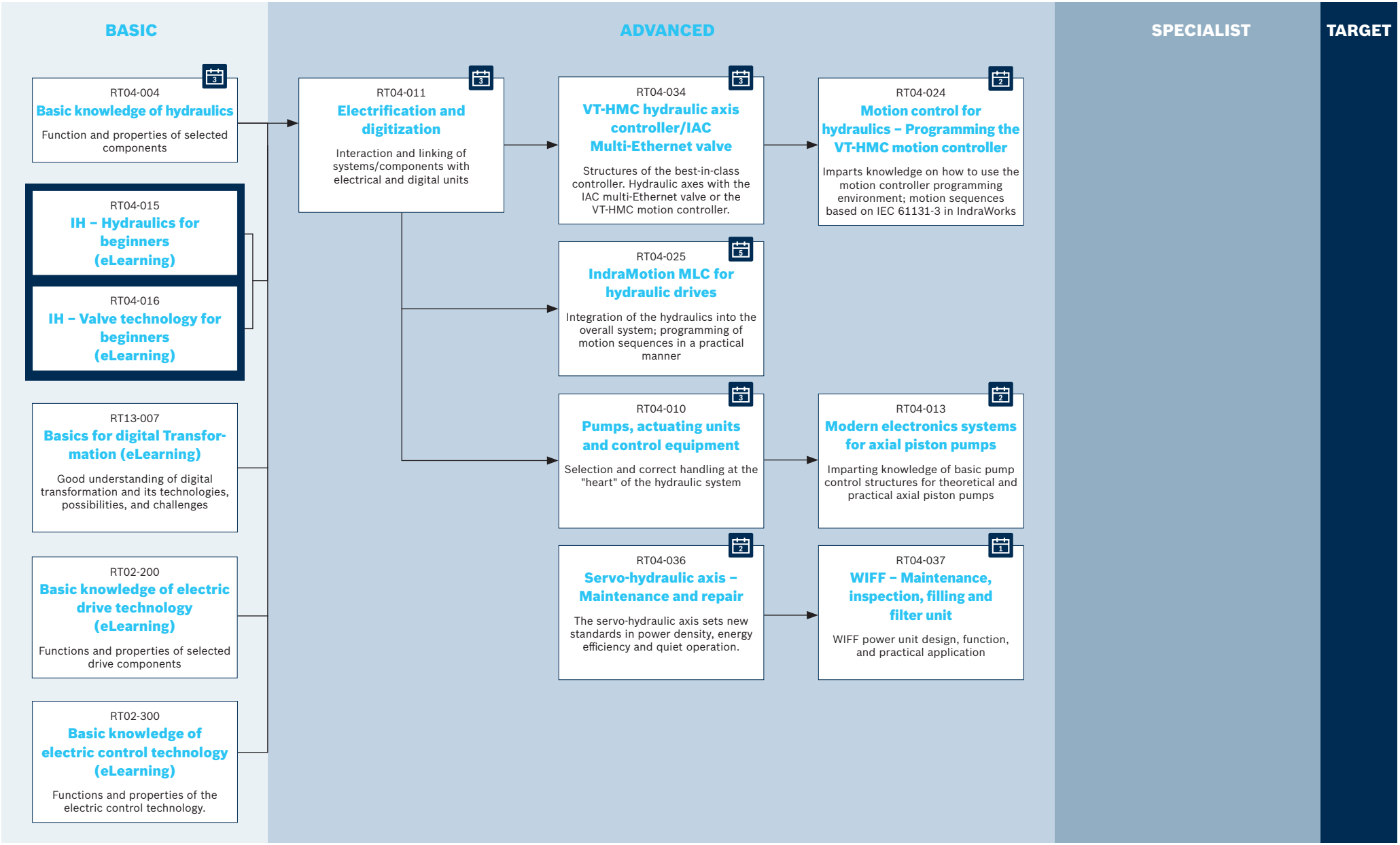
Practical Error Analysis



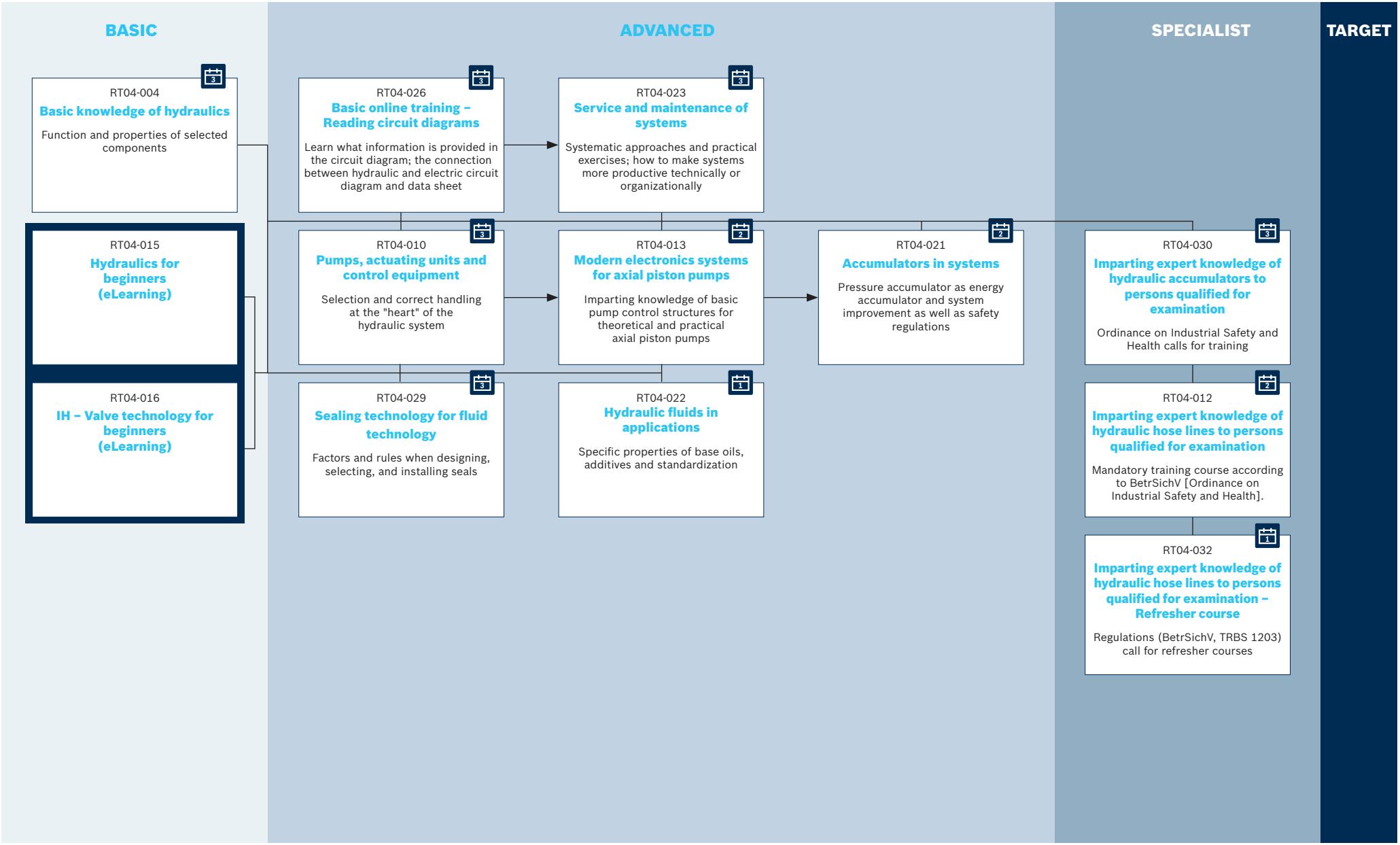
Project Planning



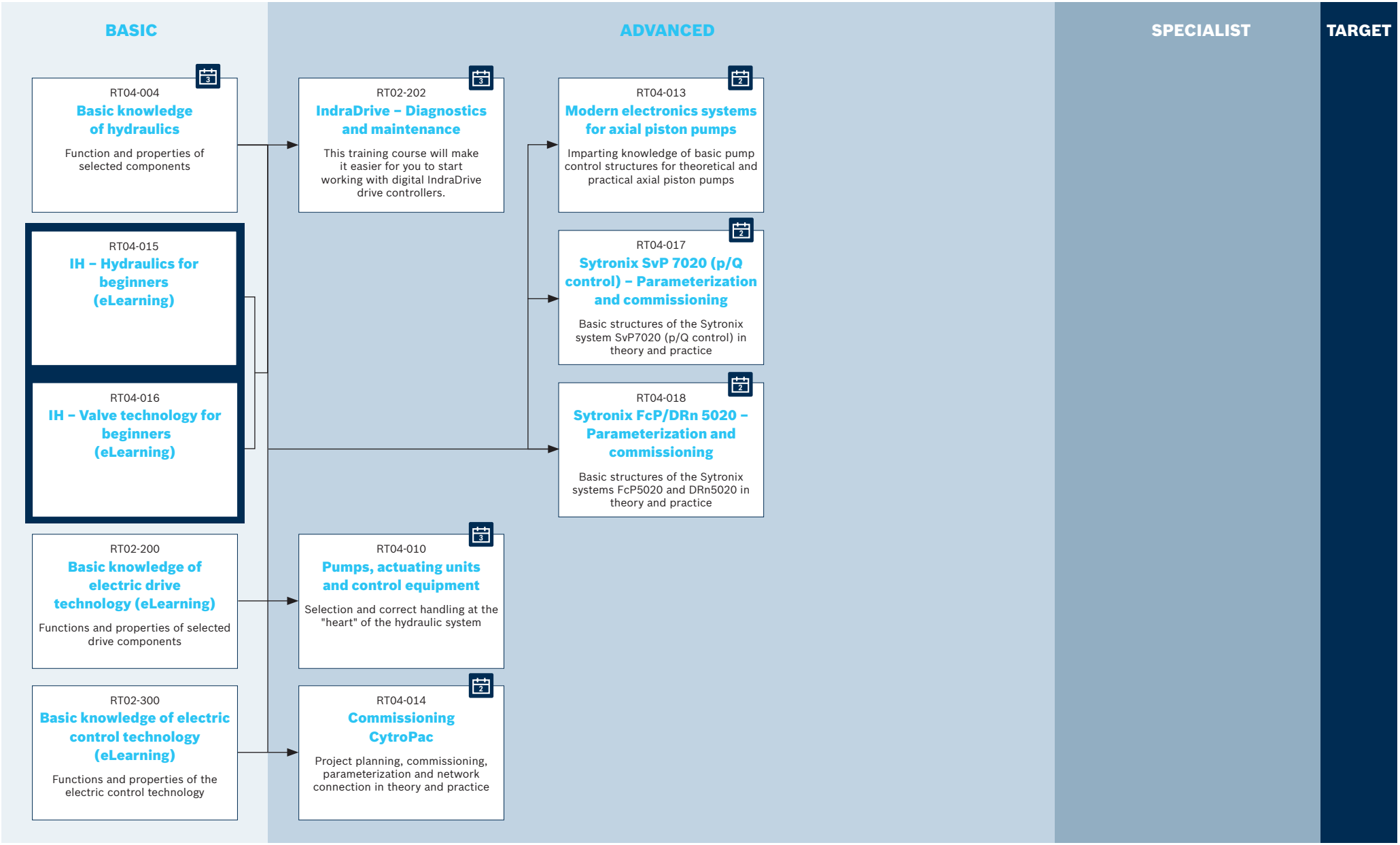
Learning Path Connected Hydraulics



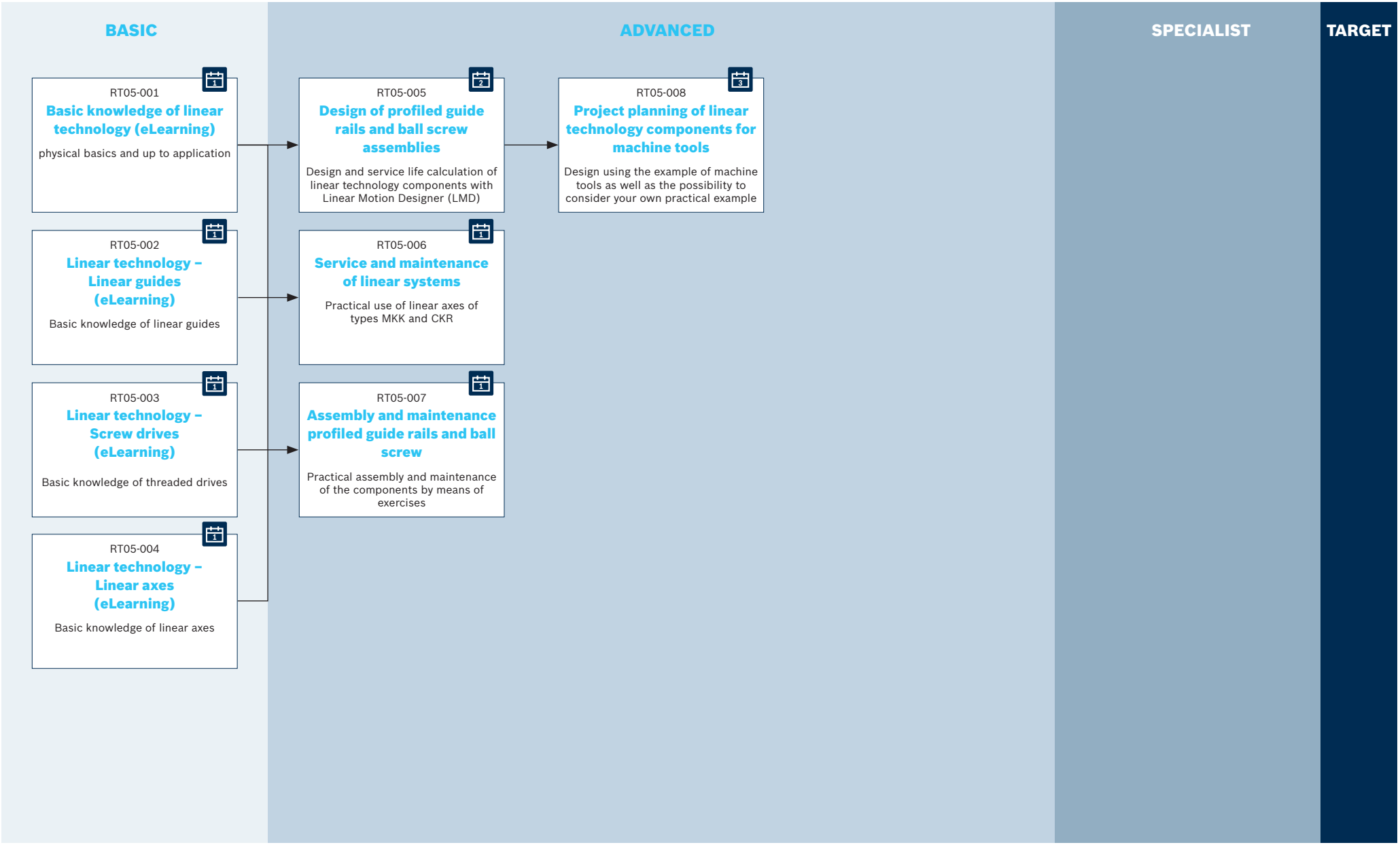
Learning Path Special Topics



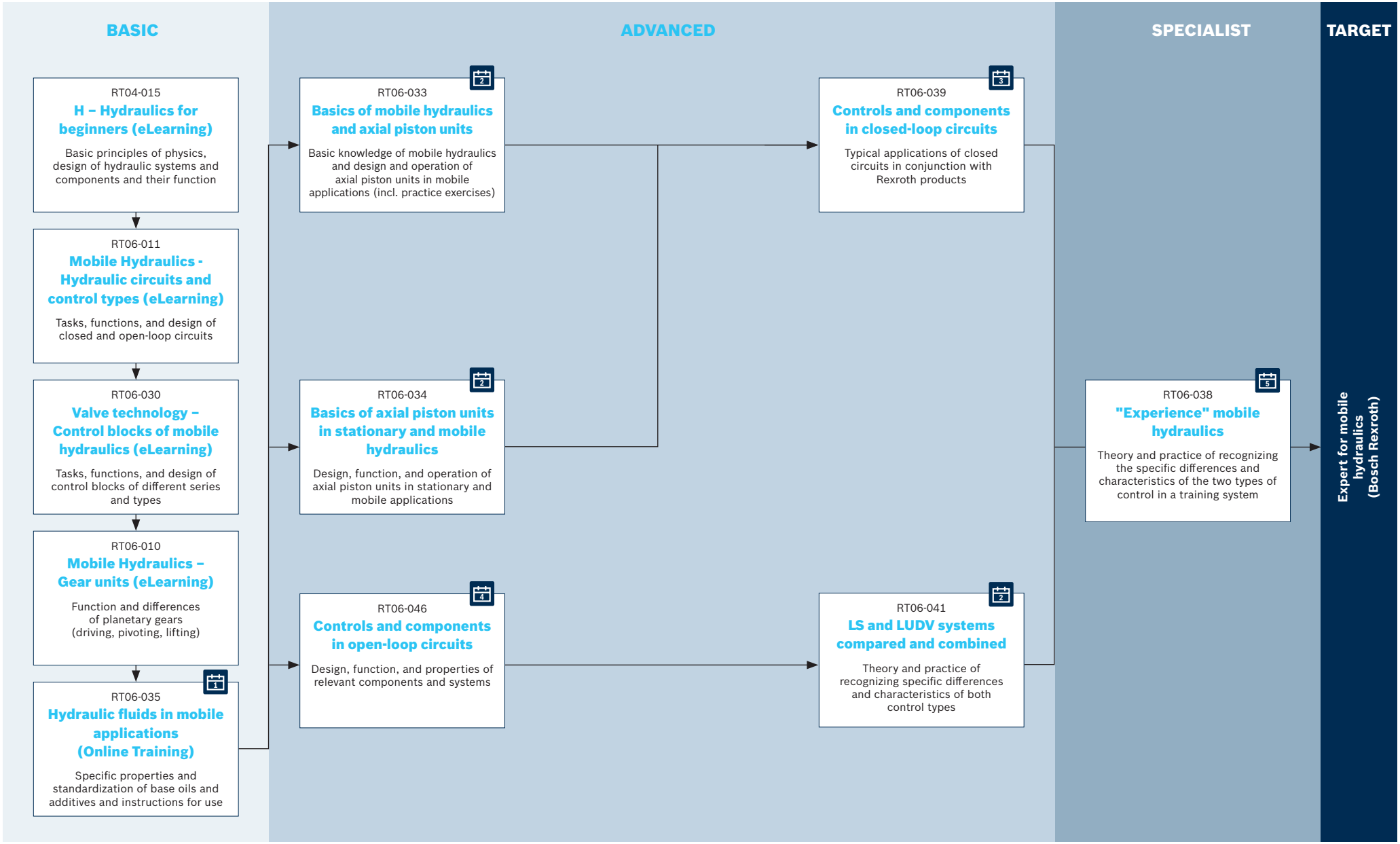
Learning Path Sytronix



Learning Path Linear Motion Technology



Learning Path Mobile Hydraulics



Learning Path Mobile Hydraulics

BASIC

ADVANCED

INDIVIDUALLY BOOKABLE PRODUCT TRAINING COURSES

RT06-043
Function and design of the M4 control block
Detailed knowledge of the M4 product family – Design and functionality, characteristic curves, and limits of use as well as the flexibility of the M4 kit

RT06-044
Function and design of the M7 control block
Detailed knowledge of the product M7 – Design and function, characteristic curves, and limits of use as well as flexibility of the M7 control block

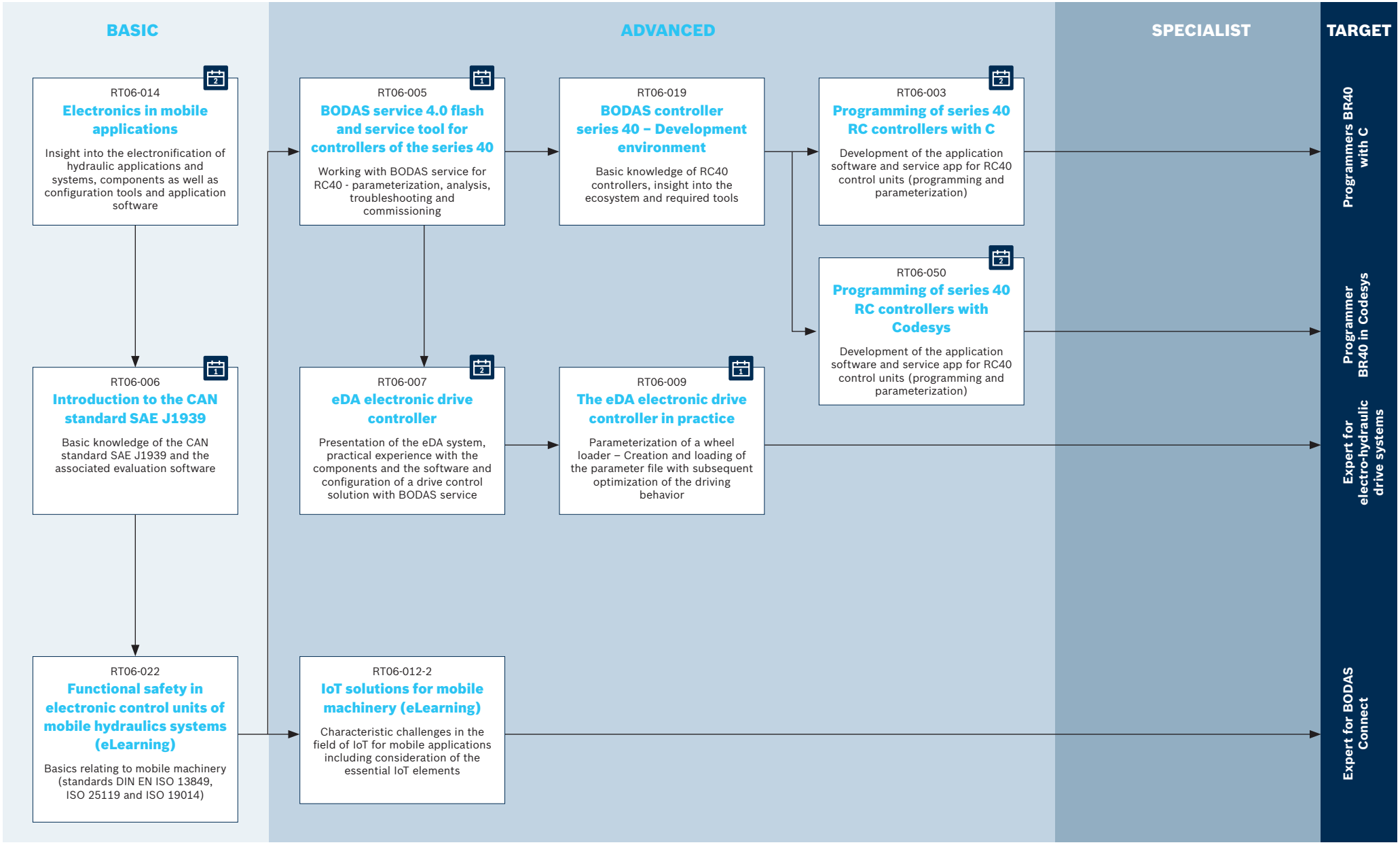
RT06-031
Function and design of A10 and A1 axial piston units
Overview of the medium-pressure units A1VO, A10VSO, A10VZO, A10VM and their typical controllers (incl. practical aspects)

RT06-032
Function and design of A4VSO and A15 axial piston units
Overview of the high-pressure units A15VSO, A4VSO, A4VSG, A4CSG, and A6VM and their typical controllers (incl. practical aspects)

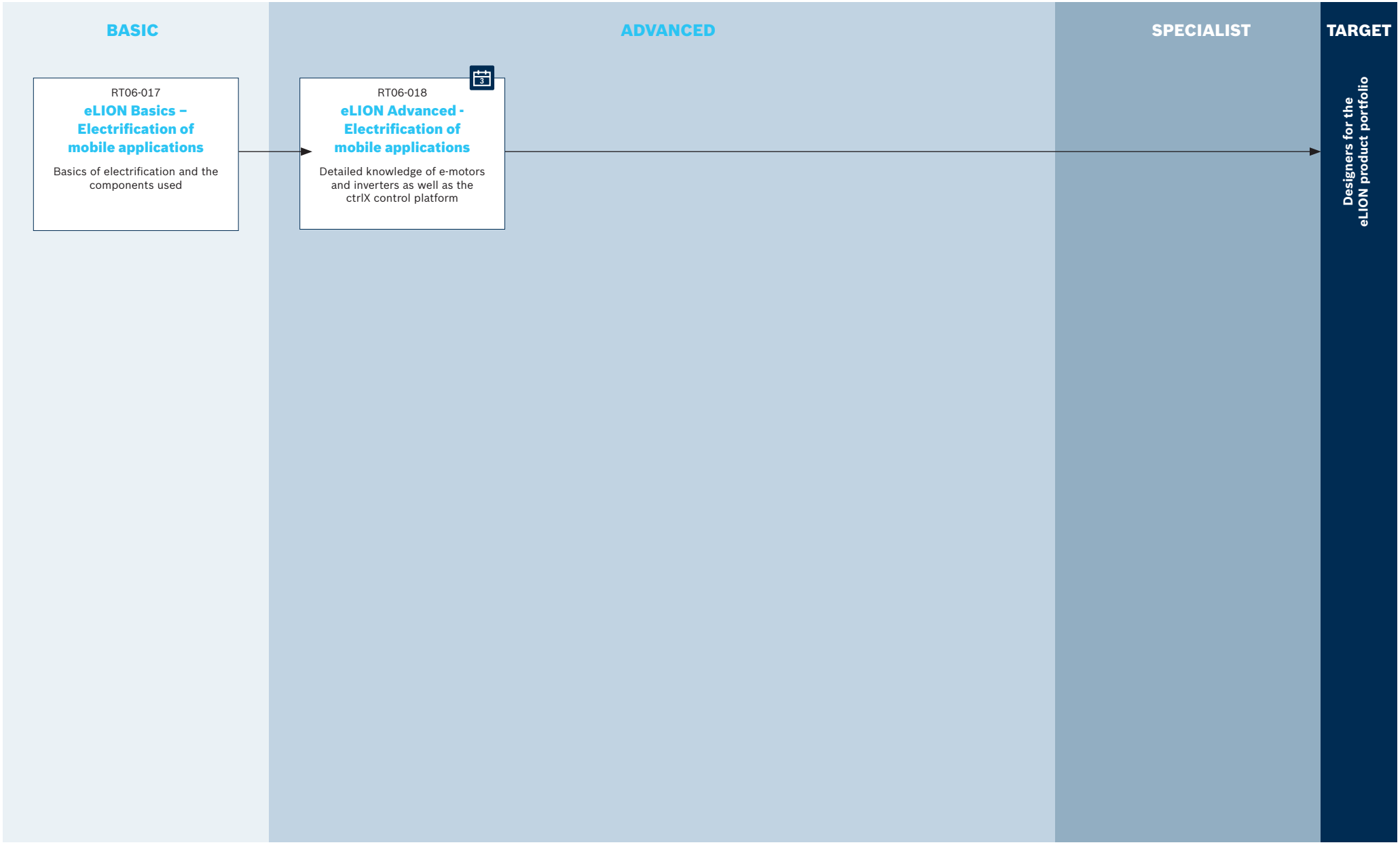
SPECIALIST

TARGET

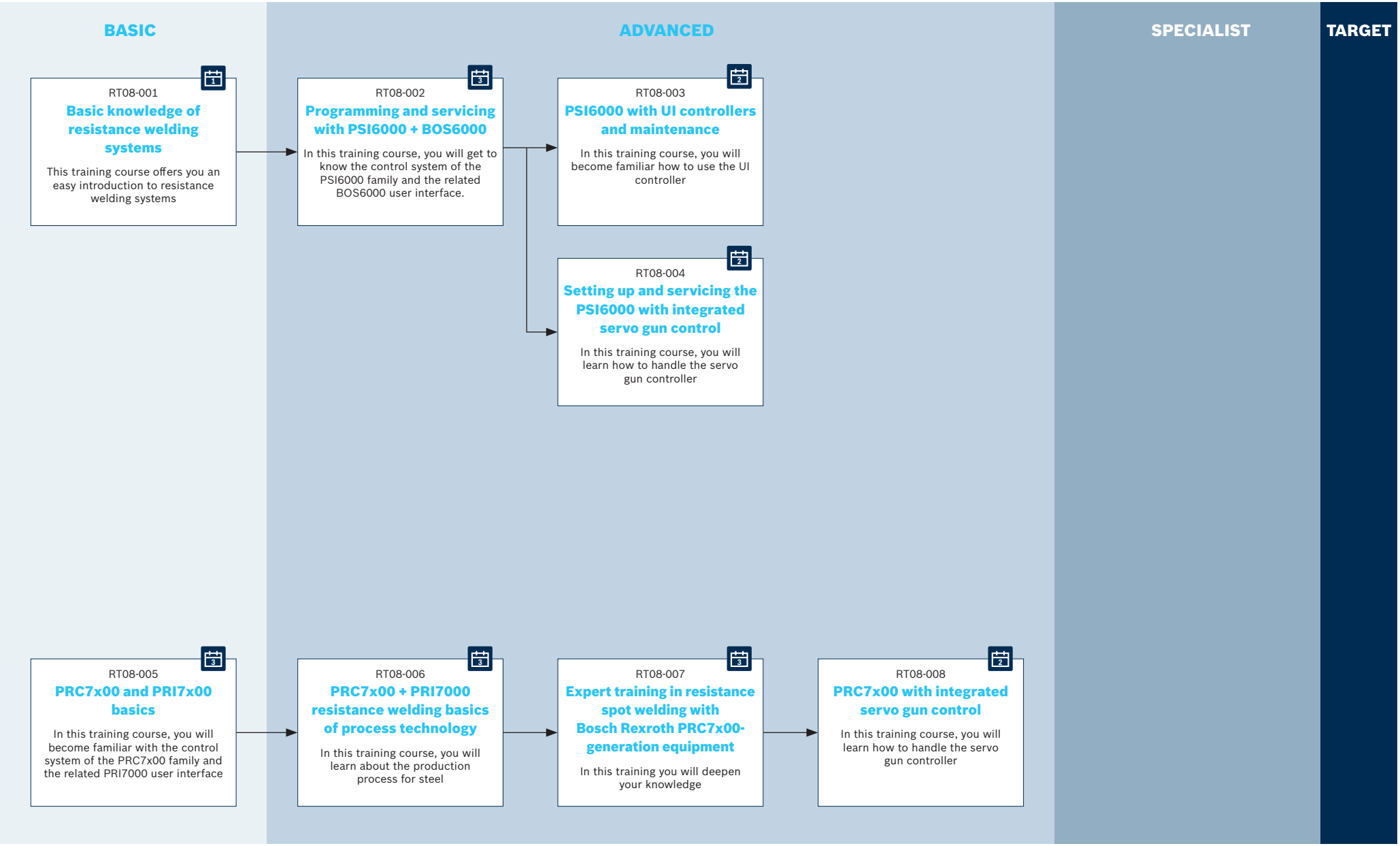
Learning Path Mobile Electronics



Learning Path Electrics

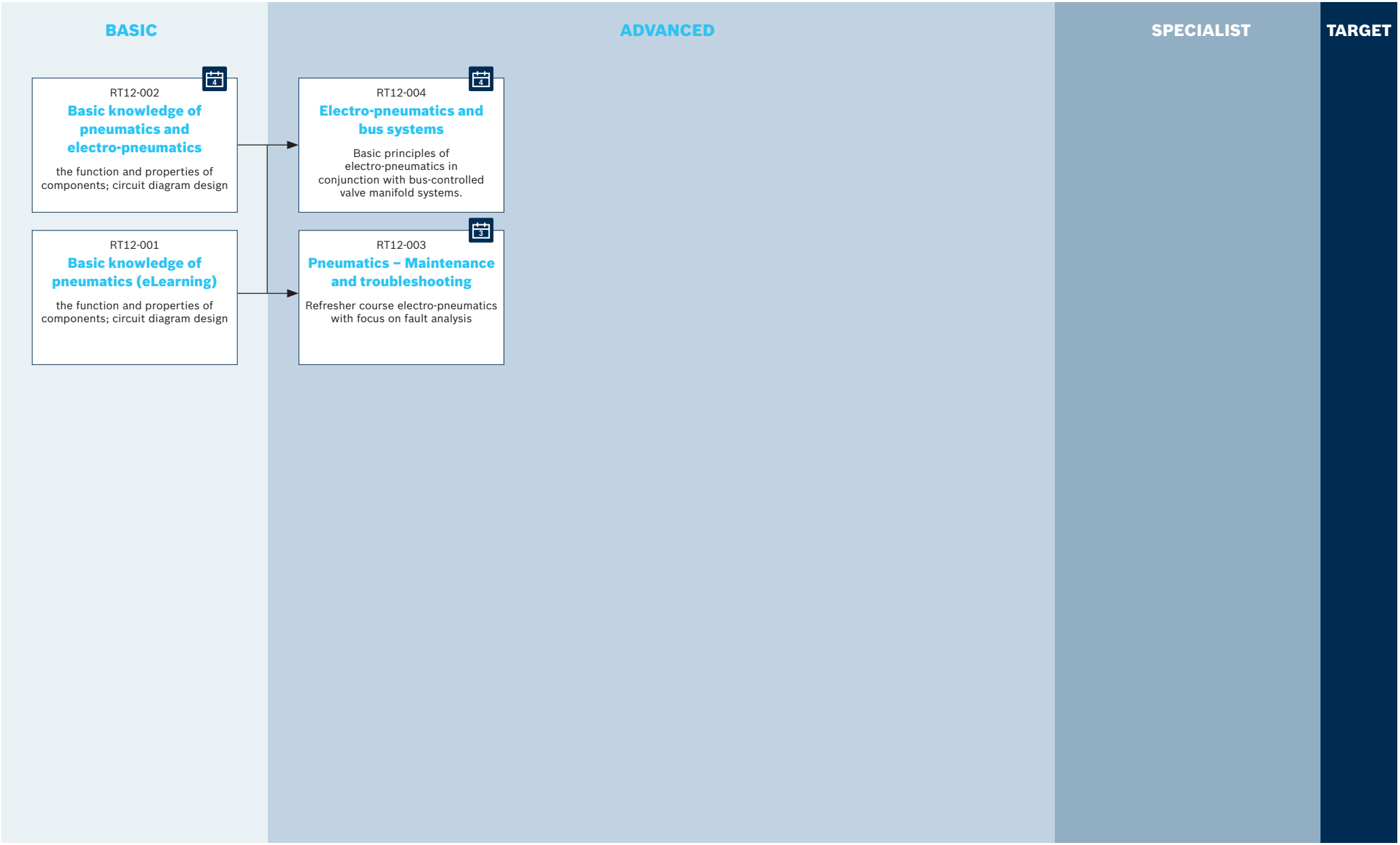


Learning Path Welding Technology

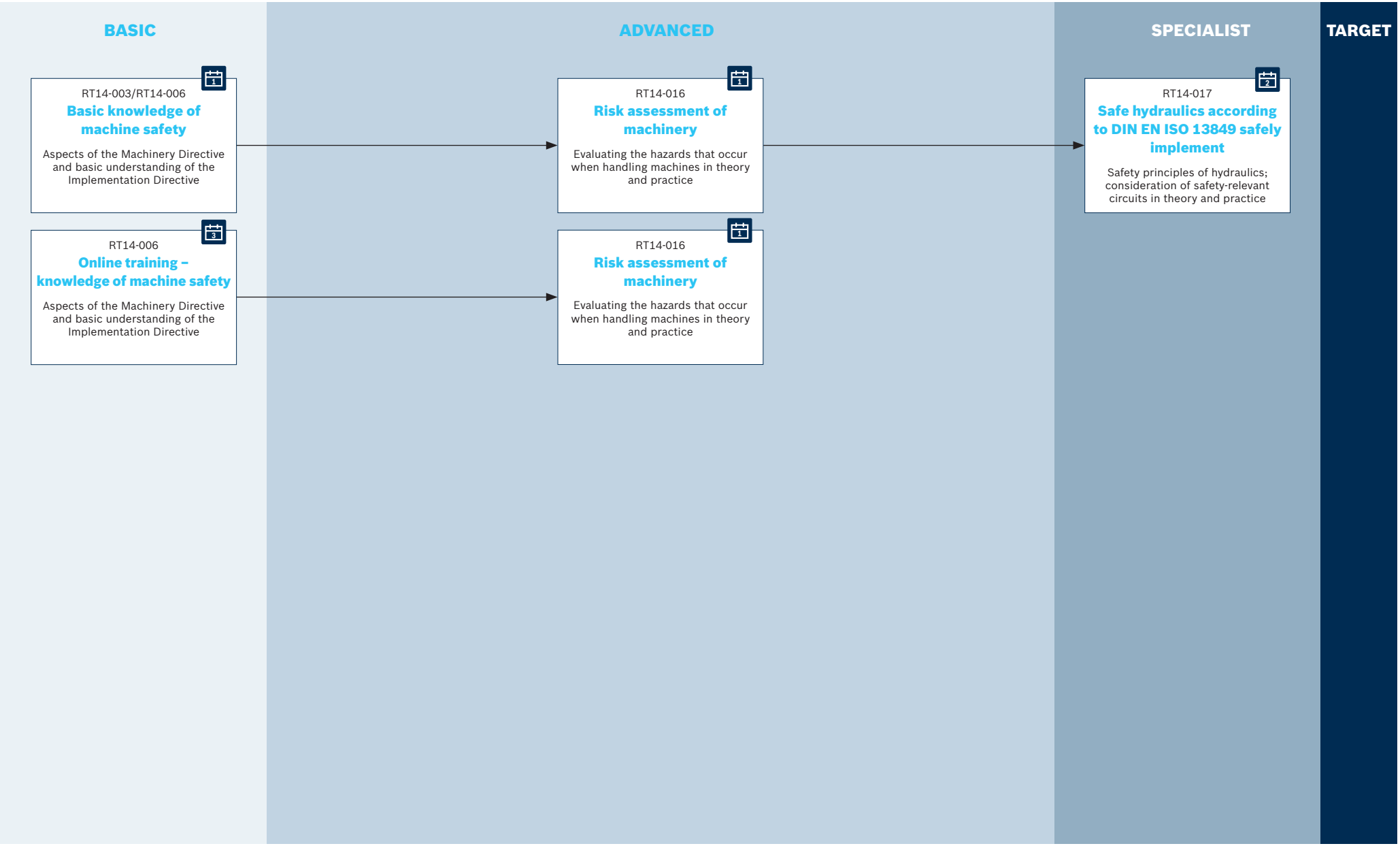


Learning Path Tightening Technology

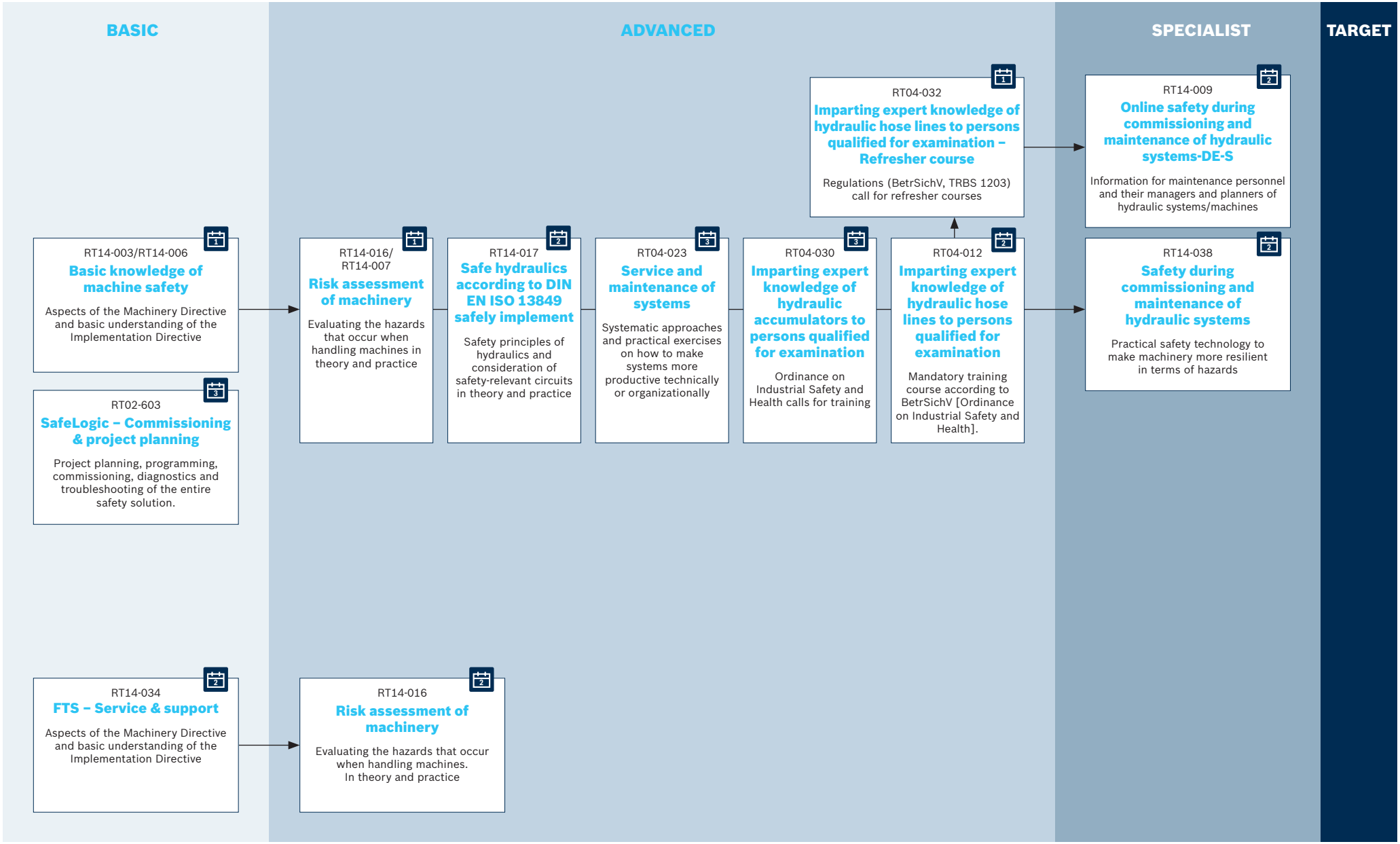
Learning Path Pneumatics



Learning Path Safety Technology



Learning Path Safety Technology



Please contact us:

Do you have any other questions about our training courses?

We would be happy to advise you.

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training@boschrexroth.de

CONTACT FORM