

I am the solution.

ZEISS ACADEMY METROLOGY TRAINING GUIDE







Three reasons why ...

you should book a training.

Be the solution.

Receive insights into quality assurance and master the latest trends and standards. Explore step-by-step solutions that help you to solve your daily measurement challenges. Choose your desired trainings from a wide range of basic metrology software and technology topics and be ready for the future of metrology.

Be the solver.

Choose one of four customized learning paths with recommended trainings based on your current level of knowledge and your application. Receive a certificate after completing each training course that is acknowledged worldwide and proves your expertise. Take your career to the next level.

Become an expert.

Our trainers are daily users and metrology experts who are ready to answer all your questions during classroom or live online trainings. Leaving the classroom does not end your training experience. You can look up measurement topics in our (e)books, apps or eLearning courses ensuring a continuous flow of knowledge.

Three reasons why ...

your company should support your training.

Drive productivity.

In-depth process optimization expertise and shared knowledge will make your processes more stable and will make your QM lab perform faster. Ensure that your team can yield precise measurement results conforming to the latest standards and avoid user errors.

Gain competitive advantage.

Our experts provide customized training courses for leading edge companies with ambitious metrology demands – sharing the most advanced technological insights in the industry. Your systems, equipment and software is always changing and should grow with your company. Continous training from the ZEISS Academy will keep your metrology lab up-to-date.

Establish global standards.

The ZEISS Academy holds 62 training locations in 25 countries with 165 certified trainers ready to coach you. Ensure shared, standardized knowledge for all your company sites. If this is not close enough: Take advantage of on-site support directly at your location.



»In an effort to help our customers be more competitive, we have invested in a continuous learning platform so that employees can receive the very best that ZEISS has to offer, long after the initial installation.«

Al Chiasson

Vice President Aftermarket & Metrology Services
ZEISS Industrial Quality Solutions

As a metrologist or quality lab leader, you are responsible for ensuring the highest precision without impacting productivity. Sometimes, the unexpected occurs, and you need to use all of your metrology skills and expertise: quickly and effectively.

The ZEISS Academy Metrology will support you to master every measuring challenge. Experience over 35 years of quality training expertise and receive the most current knowledge. Become an indispensable resource at your company. **Become the solution**.

Establish global standards.

»Receive profound knowledge about the latest metrology trends and industrial developments which will make you even more successful.«



Katrin Schenk Product Manager Academy ZEISS Industrial Quality Solutions

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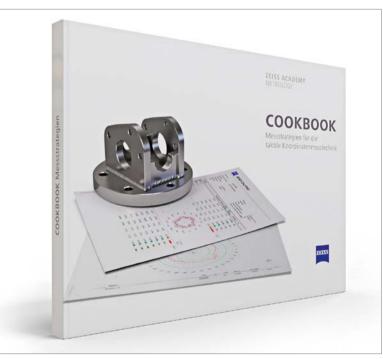
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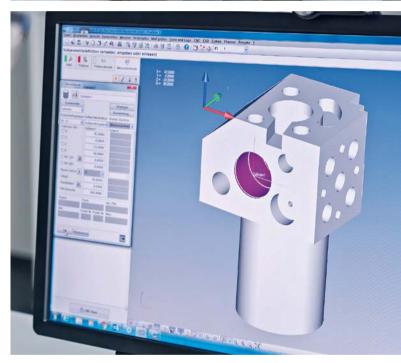
ZEISS Academy Metrology is your constant companion, always by your side. 62 training locations in 25 countries worldwide with more than 165 certified trainers ready to support you. If this is not close enough: Take advantage of on-site support directly at your location.

dtrainers













Combined Didactics. Unlimited Potential.







CLASSROOM TRAININGS

Multi-day sessions for in-depth knowledge

Comprehensive instructor-led training gets you up-to-speed. Visit us in our headquarters or in one of the ZEISS Quality Excellence Centers in your area and further develop your skills and career.

ON SITE TRAINING

Customized training at your location

Do you want us to come to your location to train your employees? Receive training and solutions customized for your business. Get in touch with us to discuss your opportunities.

E-LEARNINGS

Connect to competence

Experience limitless digital oppportunities. Choose from various basic, software, accessories and sensor eLearnings and take your skills to the next level.



LIVE ONLINE TRAININGS Personal Assist

With live online trainings you can refresh your knowledge after a group training. Learn some additional functions and ask the trainer questions live. After the training, you can put what you have learned into practice right at your workplace.

QUALITY SOLUTIONS APPS

Basic knowledge on demand

Receive basic knowledge on demand about roughness, computed tomography, GD&T and gear metrology or have access to the most common measurement strategies in our Cookbook app. Download our apps in the iOS Store or Google Play Store.

EXTENDED LITERATURE

Knowledge at your fingertips

Explore our specialist metrology literature. In our popular ZEISS Cookbooks you'll receive recipes for the most common measurement strategies, enabling you to design your measuring run. You can choose between a printed copy or an eBook.



An enabling staff. Addicted to metrology training.

Meeting our ZEISS trainers makes a difference: They are trainers – passionated in enabling people. Making complex material understandable. Representing both: engaged metrology AND didactic experts.

ZEISS Academy Voices.



"We help you to understand the potential of the technology and apply this to your daily job.

You'll see how easy your work can become."

"Our courses are more than just a training session. They are art. Our trainers enjoy their work and give their best every day."





"I enjoy most interacting with our customers, getting to see the "light bulb" moment when a concept clicks, the learning process and evolution of what "training" means at ZEISS."



A perfect start.

First steps into metrology.

Are you new to metrology? Then let's celebrate a perfect introduction into fascination of precision. With these basic courses you'll enter metrology and its amazing opportunities for productivity and quality assurance.

Metrology Basics

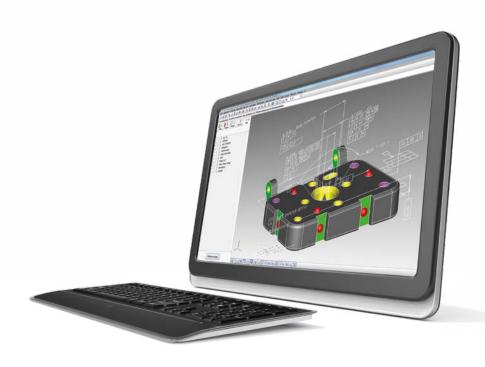
Software Based Trainings

Technology Based Trainings

An amazing start into a world of precision: In these courses you will gain basic knowledge to easily understand and apply measurement tasks. Gain knowledge in measurement techniques, physics, mathematics, standards and design. We offer 3 levels of AUKOM trainings and AUKOM GD&T.

Your first step into unleashing the full potential of your software. These trainings focus on the usage of ZEISS software & software options – effectively! A perfect introduction according to software based machine and sensor configuration (tactile, scanning, optical, laser, CT).

Technology – at a glance: Learn the most relevant facts about metrology devices and techniques. These trainings are specifically designed for the efficient use of devices and sensors. The trainings provide theoretical content, along with practical exercises.

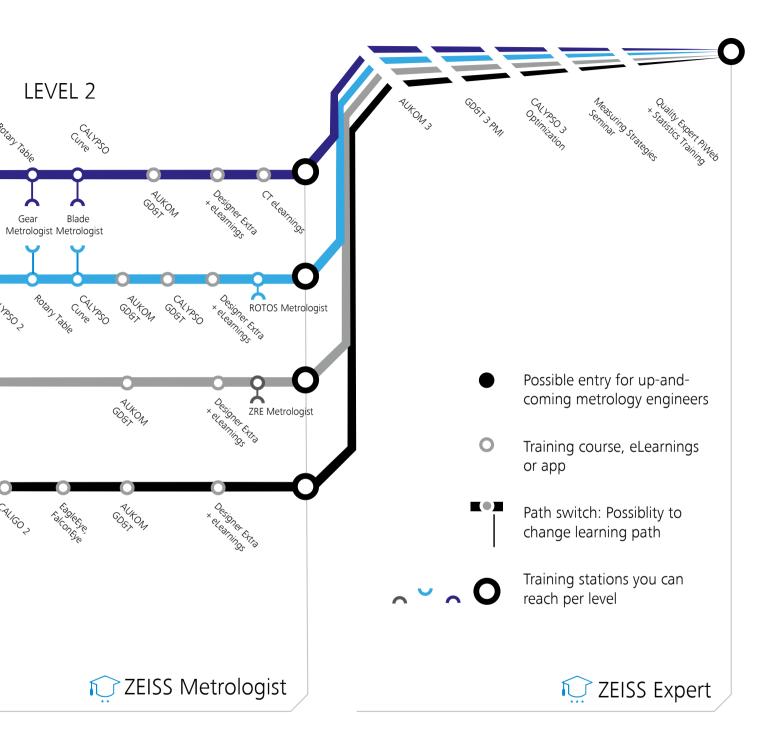


All Application Paths Lead to Unmatched Expertise

No matter which knowledge level you are starting from: With our application-oriented structure and program, you will be able to define your personal learning target and the proper learning path. IFVFI 1 **BASE** NETROTON OS × Objectosta X-Ray Inspection ORERATOR 14 RANNE **Geometry** Inspection 3D Digitalization OPERATOR **Freeform** Measurement **ZEISS** Operator

If you already have metrology background and expertise and need to know more about handling ZEISS equipment and software, the Operator Trainings will be the perfect fit. These trainings will guide you through main functionalities and get you started with using our hardware and software.

LEVEL 3



No matter which path you take in our Academy, we will guide you to become a ZEISS-certified Metrology Specialist. With the right trainings, learning formats and practical experience you will deepen your knowledge to master also complex metrology tasks.

Some tasks within metrology go far beyond performing measurements. Whenever you have the need to develop or maintain quality and inspection processes, whenever you are part of a design review whenever you define QCC limits, whenever you're responsible for a measuring room, our ZEISS Expert program will improve your skill set.

X-Ray Inspection

CT scanning of plastic, assembled or electronic parts require some extensive basics and lots of practical exercises. These specific needs are addressed in our X-Ray learning Path to support you becoming an X-Ray Metrologist.



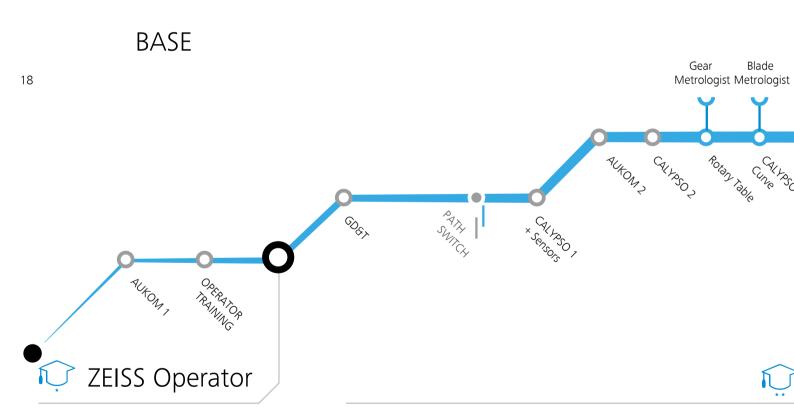
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Geometry Inspection

From Powertrain to Aerospace, from inline inspection to high precision lab measurements, from size to form, orientation and location. Learn how to program, measure and analyze prismatic parts and gain the necessary metrology knowledge.

LEVEL 2

LEVEL 1



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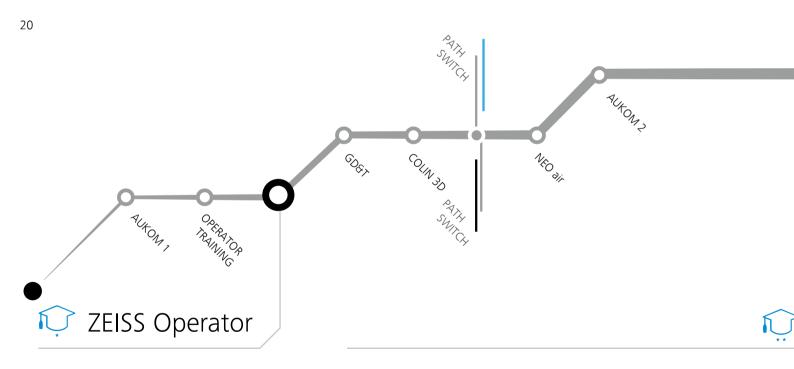
3D Digitalization

Optical scanning, point clouds, reverse engineering, tool correction - just to name a few of the things you will learn and apply when focusing your learning path on 3D Digitalization.

LEVEL 2

LEVEL 1

BASE

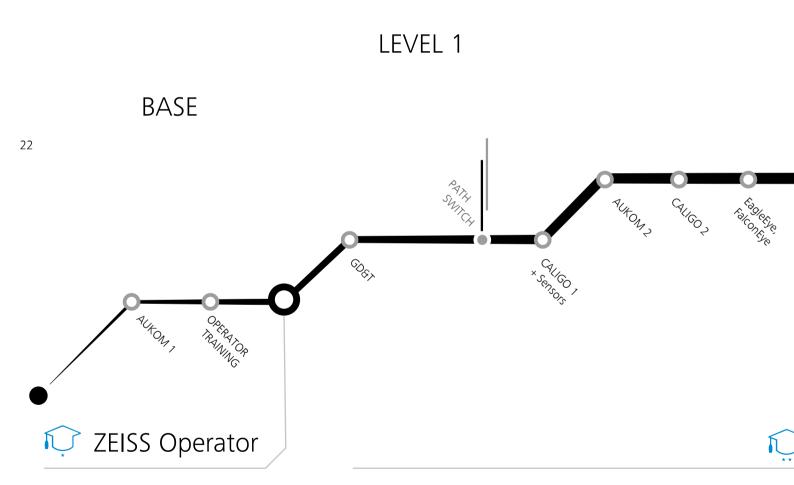


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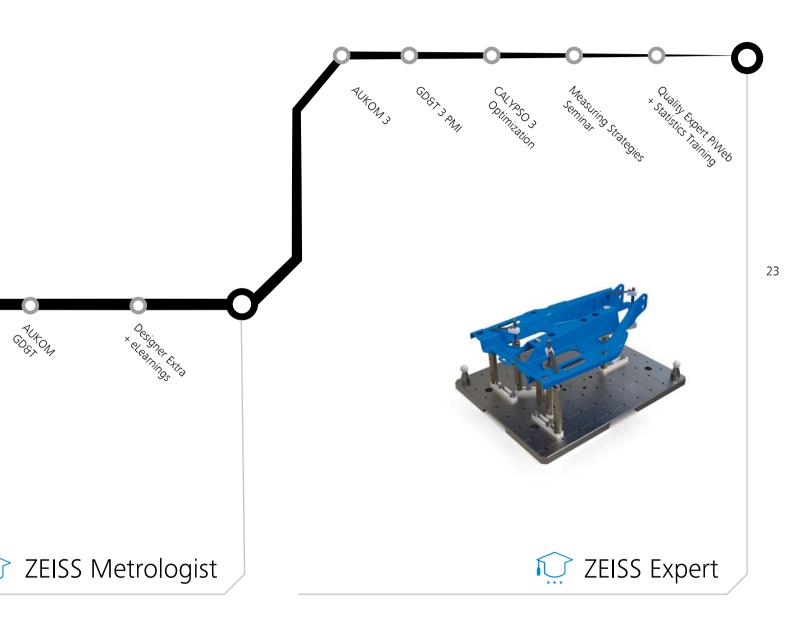
Freeform Measurement

Measurement of sheet metal parts and freeform surfaces is completely different to other measurement technologies. This is why we also offer a specific learning path. It's for you to focus on dedicated content and practical examples.

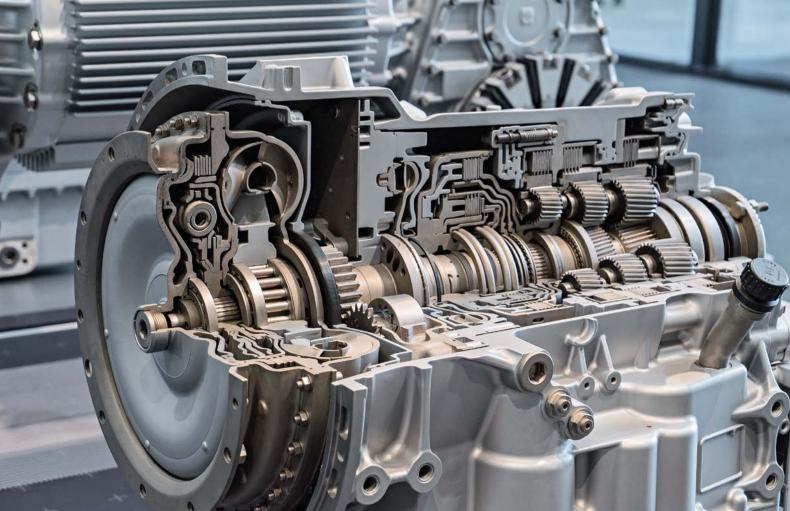
LEVEL 2



LEVEL 3







Customer Success Story. ZF Friedrichshafen.

Their metrologists have to create new measurement programs every day and the trainings from ZEISS help them to the master the challenge.

Driven by a Thirst for Knowledge

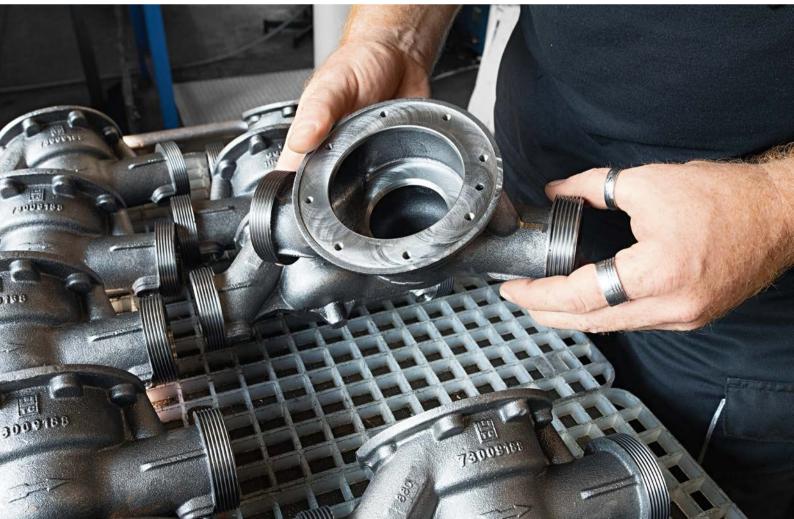
A total of 32 employees, 13 of them metrologists, are responsible for quality control. Mehmet Akol is one of them. Akol joined ZF Friedrichshafen ten years ago and initially worked in gearbox production. Every day he was faced with measurement results from quality inspection. If these conflicted with the results produced by his processing center, Akol wasn't satisfied with simple explanations: "I always wanted to know where the measurement results came from and why they turned out the way they did. I constantly asked about this and that's why I drew so much attention to my quality inspections." This prompted Akol to switch to metrology three years later; he's not easily satisfied with his measurement results here, either: "Everyone can share a result, but you have to know how it came to be and how you should evaluate it. Only then can it be valuable for the worker." He always questioned processes and results and wanted to find out the background to them. His curiosity led him to attend his first AUKOM seminar at ZEISS in 2014, which he followed up with AUKOM Stages 2 and 3 and AUKOM GD&T. He also attended further seminars on CALYPSO, GEAR PRO and on offline programming. He even received training in a special subject, the Fourier analysis.

About **ZF**



ZF is a global leader in driveline and chassis technology as well as active and passive safety technology. The company has a global workforce of 149,000 with approximately 230 locations in some 40 countries. In 2018, ZF achieved sales of 36.9 billion € and as such, is one of the largest automotive suppliers worldwide.





Customer Success Story. FiberTech.

Metrologists need both exceptional hardware and the right expertise to deliver precise measuring results.

Daniel Döhn from Fiber-Tech is new to the industry and took advantage of the available ZEISS training to quickly become a quality assurance specialist.

From Industry Newcomer to Specialist

He was always interested in technology and computers, and three years ago quickly developed a passion for precision. Daniel Döhn works as a metrologist at Fiber-Tech CNC Management GmbH. Just three years ago, his health forced him to give up his old job and he began working in Quality Assurance at the company, which is based in East Germany. He had no formal qualifications in this or a related field. But thanks to his drive, the support of his supervisor and the available ZEISS training, Döhn quickly became a metrology specialist. He attended five seminars, three of them AUKOM courses and two on software – Basic and Advanced CALYPSO – between December 2017 and June 2018 at the ZEISS headquarters in Oberkochen. This equipped him with the skills he needed to perform his measuring duties.

About Fiber-Tech

The company was founded in 1990 by Dr. Matthias Pfalz and Juliane Pfalz. Initially, it primarily produced fins and paddles for surfboards using carbon and epoxy resin, but soon its portfolio was expanded to include advertising pillars, roller coaster seats, facade elements and much more. In 2010, Fiber-Tech manufactured balustrade elements in the shape of a tuning fork for the Elbphilharmonie concert hall in Hamburg. CNC metal processing is another area that has seen extreme growth in recent years.

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