

## Registration\*\*

- ESD coordinator**  
4 days from 15.10.–18.10.2024\*  
€ 1820.00 (excl. 19% value-added tax)  
Including drinks, refreshment during intervals  
and 3 course lunch or buffet
- ESD representative**  
3 days from 15.10.–17.10.2024\*  
€ 1560.00 (excl. 19% value-added tax)  
Including drinks, refreshment during intervals  
and 3 course lunch or buffet
- ESD assistant**  
2 days from 15.10.–16.10.2024\*  
€ 1250.00 (excl. 19% value-added tax)  
Including drinks, refreshment during intervals  
and 3 course lunch or buffet

Surname: \_\_\_\_\_

First name: \_\_\_\_\_

Company: \_\_\_\_\_

Department: \_\_\_\_\_

Street address: \_\_\_\_\_

Postal code, city: \_\_\_\_\_

Country: \_\_\_\_\_

Phone No.: \_\_\_\_\_

Mobile: \_\_\_\_\_

E-Mail: \_\_\_\_\_

Signature: \_\_\_\_\_

### Send application to:

Info@proba-industrieberatung.de  
or by fax: 03222-9809-923

\* Courses take place with a minimum group number of six and a maximum of twelve. Course fees must be paid before the start of the course.  
\*\* PROBA QS Industrieberatung will exclusively retain your data and not pass this on to third parties. Our T&Cs apply, can be seen at:  
[www.proba-industrieberatung.de](http://www.proba-industrieberatung.de)

## The company / The trainer

Particular emphasis is placed on practical relevance in our ESD training sessions. This practical relevance is primarily down to many years of audit experience. Well over 500 ESD consulting and certification audits carried out at home and abroad are witness to this. It is also indispensable to have had the responsibility of an ESD coordinator to convey this knowledge professionally.

### Arguments that speak for themselves:

- More than 20 years of professional experience in quality assurance.
- Former ESD coordinator of Robert BOSCH GmbH in Reutlingen.
- Certified auditor.
- Diplom. Engineer (Automation Technology / Power Electronics).
- Many years of experience in ESD auditing for companies covering different industries.
- Former employee at BOSCH ESD Standards Committee AK019
- Participation in German ESD Standards Committee.
- Independent business, therefore no conflict between training and sales of ESD items.
- Comprehensive measurement exercises with a maximum of five person per measurement group, equipped with a complete set of high-quality measuring instruments.
- Of course, like your graduation or profession, your certificate is not limited in time too.



## Training as

- **Certified ESD assistant**
- **Certified ESD representative**
- **Certified ESD coordinator**

**CW 42 / 2024**

**Tuesday 15th October till  
Friday 18th October**

**Training location:  
Hotel Fortuna Reutlingen**



Carl-Zeiss-Straße 75  
72770 Reutlingen

### Organizer:

**PROBA QS Industrieberatung  
ESD Technologie**  
Lichtensteinstraße 40  
72770 Gönningen (DE)  
info@proba-industrieberatung.de  
www.proba-industrieberatung.de



Zert.-Nr.: 90315139

For other relevant dates, see:  
**[www.proba-industrieberatung.de](http://www.proba-industrieberatung.de)**

## ESD assistant

### Prerequisites:

No specialized prerequisites required.

### Training content on the first day:

- Fundamentals of electrical engineering and electrostatics, dangers of ESD, consequences of ESD, miniaturization
- Potential generation by contact, tribo-electrical range, influence effect, discharge risks (models), how do we recognise ESDS (data sheet, code letter ...)
- Where do ESD hazards occur? From incoming to outgoing goods. Where are certain protective measures required?
- ESD protective areas: Definition and boundary conditions with relevant reference standard
- Protective measures within the EPA with relevant reference standard: Personal measures such as wrist straps, garment, shoes, tables, shelves, chairs, carts, floor coverings, packaging materials in accordance with EN 61340-5-3

### Training content on the second day:

- A full day of measurement training in accordance with: EN 61340-5-1 and 2-3 with approx. 90 measurement exercises: Rpp, Rgp, Rg, Rs, potential reduction, potential measurements by means of rotary voltmeter, electrostatic voltmeter and contact voltmeter, walking tests in accordance with EN 61340-4-5

### Training duration:

2 days (1 day theory, 1 day of hands-on measurements)  
9:00 AM to 5:00 PM on both days

### Documents:

You will receive a comprehensive course portfolio printed in colour.

### Supporting documents:

- Certification following a written final examination. This will be sent to you corrected.
- Certificate of completion in printed form.

## ESD representative

The contents of the new standards 5-1 / 2-3 / 4-7 are taught

### Prerequisites:

Participation in the ESD assistant course (equivalent training can possibly be offset on presentation).

### Training content:

- Protective measures within the EPA with relevant reference standard: Tools, machinery, electrostatic potentials, ionizers, frequent danger potentials
- Future prospects: Miniaturization and the resulting increasing difficulty of the internal protection circuitry. Failure images and failure analysis
- DIN EN 61340-5-1 with EN 61340-5-2: Requirements and their implementation possibilities. Training, personnel grounding, ESD protection zones, tailoring, control program requirements
- Strategy to avoid ESD. Points of intersection and tasks of an ESD representative
- Joint preparation of quality-relevant documents: Work instructions, type approvals

### Training duration:

1 day from 9:00 AM to 5:00 PM

### Documents:

You will receive a comprehensive course portfolio printed in colour.

### Supporting documents:

- Certification following a written final examination. This will be sent to you corrected.
- Certificate of completion in printed form.

## ESD coordinator

### Prerequisites:

Participation in the ESD assistant and delegate course (equivalent training can possibly be offset on presentation).

### Training content:

- Preparation, implementation and rework of internal ESD audits
- Innovations from technology and materials
- Future prospects in terms of new ESD standards
- Approach to the preparation of training documents and the implementation of internal ESD training
- How are internal ESD training sessions carried out – obligation to prove the implementation
- What is the burden of proof – reversed, what does this have to do with ESD?
- How can the ESD protection be integrated into your QM system
- Practical work: Preparation of an ESD control program plan
- Why ISO 9001 auditors, of course, scrutinize your ESD protection
- Similarities between ISO 9001 and DIN EN 61340-5-1

### Training duration:

1 day from 9:00 AM to 2:00 PM

### Documents:

You will receive a comprehensive course portfolio printed in colour.

### Supporting documents:

- Certification following a written final examination. This will be sent to you corrected.
- Certificate of completion in printed form.