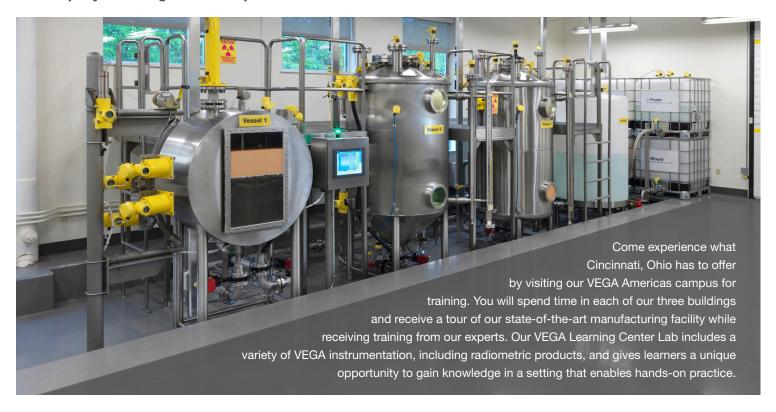
# Course Catalog

### Introduction

VEGA Americas understands that training is an essential part of developing a productive workforce that has the skills and knowledge needed for the field. VEGA's Learning and Development Center offers a variety of training solutions that combine hands-on experience and in-depth instruction to meet your company's training and development needs.



Dates of trainings held at Cincinnati's campus can be viewed on our website at https://www.vega.com/en-us/services/training.

Can't make it to VEGA's campus in Cincinnati? VEGA Americas has two additional offices that offer training in Houston, TX and Newport Beach, CA. We also provide various training courses virtually and at your site. Attendees walk away with the same quality of training and understanding of VEGA instrumentation. If you can't come to us, we bring the classroom to you.

If your needs differ from the courses listed, VEGA Americas offers customized training to best meet your needs. If you are interested in discussing customized training options further, or you would like to schedule a training to be held at your facility or at the Houston or California office, please contact our Training Coordinator via phone or email.

Renee Madden +1 513 272 7386 r.madden@vega.com



# Radiation Safety Officer (RSO) Training

This 40-hour training class is designed for those who intend to become Radiation Safety Officers and any who desire the highest level of training the industry has to offer. Based on NUREG 1556, this course meets all of the requirements of the NRC and Agreement States for RSO training. Upon successful completion of the course, attendees receive a certificate to use for application to the appropriate licensing agency.

### Who should attend?:

Any person who plans to become a Radiation Safety Officer

### Objectives:

At the end of this course, attendees are knowledgeable of all radiation safety aspects as defined in NUREG 1556, Volume 4, Appendix D

### Methodology:

Theory: Instructor-led modules with a variety of content including videos, live demonstrations, and application of information discussed through class activities

**Practical:** Supervised hands-on experience of routine maintenance procedures, practical application of real-life emergency procedures

### **In-Person Option**

A written examination is given at the end of the class as well as a Certificate of Completion for each attendee.

Location	Cost
VEGA Americas'	\$2,400
Cincinnati Office	per person

### Prerequisites:

Ability to use a scientific calculator

Max. participants: 20

### Topics:

- Basic Radiation Theory
- Measurement and Monitoring Techniques
- Biological Effects of Radiation
- Radiation Safety and Protection
- Licensing Rules and Regulations
- Tests Performed on Devices
- Emergency Procedures
- Source Decommissioning
- Security
- Department of Transportation Regulations

### **Virtual Option**

An online examination is given at the end of the class as well as a Certificate of Completion for each attendee.

Location	Cost
Zoom session allows for this training to be attended from most locations	\$1,600 per person

- Access to a radiation survey meter
- Ability to use a scientific calculator
- Basic computer skills
- Access to a computer with a webcam and internet access for the duration of the training
- Ability to download Zoom

# Radiation Safety Officer (RSO) Review Training

This 16-hour training class is designed for those who have previously taken a 40-hour Radiation Safety Officer course. Based on NUREG 1556, this course meets all of the requirements of the NRC and Agreement States for RSO training. A review class is recommended every two to three years.

### Who should attend?:

Any person who has previously completed a Radiation Safety Officer course and wants to stay current on radiation protection standards.

### Objectives:

At the end of this course, attendees are knowledgeable of all radiation safety aspects as defined in NUREG 1556, Volume 4, Appendix D

### Methodology:

Theory: Instructor-led modules with a variety of content including videos, live demonstrations, and application of information discussed through class activities

Practical: Supervised hands-on experience of routine maintenance procedures, practical application of real-life emergency procedures

### Max. participants: 20

### Topics:

- Basic Radiation Theory
- Measurement and Monitoring Techniques
- Biological Effects of Radiation
- Radiation Safety and Protection
- Licensing Rules and Regulations
- Tests Performed on Devices
- Emergency Procedures
- Source Decommissioning
- Security
- Department of Transportation Regulations

### **In-Person Option**

A written examination is given at the end of the class as well as a Certificate of Completion for each attendee.

Location	Cost
VEGA Americas'	\$800
Cincinnati Office	per person

### Prerequisites:

- Ability to use a scientific calculator
- Previously completed a full Radiation Safety Officer training

### **Virtual Option**

An online examination is given at the end of the class as well as a Certificate of Completion for each attendee.

Location	Cost
Zoom session allows for this training to be attended from most locations	\$500 per person

- · Access to a radiation survey meter
- Ability to use a scientific calculator
- Basic computer skills
- Access to a computer with a webcam and internet access for the duration of the training
- Ability to download Zoom

# Radiation Safety for Gauge Users Training

This 8-hour training class is designed to give operation and maintenance personnel the knowledge they need to work safely with and around radiometric gauges. Based on NUREG 1556, this course meets all of the requirements of the NRC and Agreement States for Authorized Users training.

### Who should attend?:

Any person working with and around radiometric gauges.

### Objectives:

At the end of this course, attendees are knowledgeable of all radiation safety aspects as defined in NUREG 1556, Volume 4, Appendix D

### **In-Person Option**

A written examination is given at the end of the class as well as a Certificate of Completion for each attendee.

Location	Cost
Customer's site	\$1,900 for up to 10 people from your company.  Cost of instructor's travel expenses will be added if training is held at customer's site.

### Methodology:

Theory: Instructor-led modules with a variety of content including videos, detailed review of radiation license, and application of information discussed through class activities

**Practical:** Supervised hands-on experience of routine maintenance procedures

### Prerequisites:

Basic knowledge of instrumentation

### Max. participants: 10

### Topics:

- Basic Radiation Theory
- Health Risks
- The Use of Radiation Detection Instruments
- Standard Procedures
- Emergency Guidelines

### **Virtual Option**

An online examination is given at the end of the class as well as a Certificate of Completion for each attendee.

Location	Cost
Zoom session allows for this training to be attended from most locations	\$1,200 for up to 10 people from your company.

### Methodology:

Theory: Instructor-led modules with a variety of content including videos, lecture, and application of information through class activities and discussion

**Practical:** Supervised hands-on experience of routine maintenance procedures

- Basic knowledge of instrumentation
- Access to a computer with a webcam and internet access for the duration of the training
- Ability to download Zoom

# DTM (PACTware) Training, Lab-based

This 16-hour training class is held in our state-of-the-art instrumentation lab and instructs on the use of PACTware and VEGA Device Type Managers (DTMs) to setup, troubleshoot, and calibrate VEGA instruments. This course is primarily hands-on and provides advanced exercises that simulate real-world examples.

### Who should attend?:

Any person working with VEGA instrumentation that would like to learn more about the setup and maintenance of VEGA instruments using VEGA DTMs within PACTware.

### Objectives:

At the end of this course, attendees are able to configure a 4 ... 20 mA VEGA radar sensor, setup 0% and 100% points, configure a PLICSCOM display, setup the failure mode, optimize the sensor for specific applications, and suppress false signals.

### Methodology:

Theory: Instructor-led modules with a variety of content including lecture, live demonstrations, and application of information discussed through class activities and discussions

**Practical:** Supervised hands-on experience with setup, configuration, and calibration of VEGA sensors in our state-of-the-art training lab.

### Max. participants: 12

### Topics:

- Installation
- Wiring Options and Limitations
- Setup
- Configuration
- Troubleshooting
- Service Options
- Data Collection Options
- Failure Mode
- False Signal Suppression

Location	Cost
VEGA Americas' Cincinnati office	\$1,000 per person
Prerequisites:	

- Basic knowledge of instrumentation
- Basic computer skills

# DTM (PACTware) Training

This 8-hour training class introduces PACTware and VEGA's Device Type Managers (DTMs).

### Who should attend?:

Any person working with VEGA instrumentation that would like to learn more about the setup and maintenance of VEGA instruments using VEGA DTMs within PACTware.

### Objectives:

At the end of this course, attendees are able to configure a 4 ... 20 mA VEGA radar sensor, setup 0% and 100% points, configure a PLICSCOM display, setup the failure mode, optimize the sensor for specific applications, and suppress false signals.

### **In-Person Option**

In-depth instruction and basic hands-on exercises instruct on the use of PACTware and DTMs to setup, troubleshoot, and calibrate VEGA instruments.

Location	Max. participants	Cost
VEGA Americas' Cincinnati office or at Customer's site	10	\$1,900 for up to 10 people from your company. Cost of instructor's travel expenses will be added if training is held at customer's site.

### Methodology:

Theory: Instructor-led modules with a variety of content including lecture, live demonstrations, and application of information discussed through class activities and discussions

**Practical:** Supervised hands-on experience with setup, configuration, and calibration of VEGA radar sensors.

### Prerequisites:

- Basic knowledge of instrumentation
- Basic computer skills

### Topics:

- Installation
- Setup
- Configuration
- Service Options
- Data Collection Options
- False Signal Suppression

### **Virtual Option**

In-depth instruction and live demonstrations instruct on the use of PACTware and DTMs to setup, troubleshoot, and calibrate VEGA instruments.

Location	Max. participants	Cost
Zoom session allows for this training to be attended from most locations	12	\$299 per person

### Methodology:

Theory: Instructor-led modules with a variety of content including lecture, live demonstrations, and application of information through class discussions

- Basic knowledge of instrumentation
- Basic computer skills
- Access to a computer with a webcam and internet access for the duration of the training
- Ability to download Zoom

# Radiometric Measurements for Level & Density

This 16-hour training class introduces radiometric measurements for level and density applications. In-depth instruction and hands-on exercises instruct on the setup, calibration, and linearization of VEGA radiometric instruments.

### Who should attend?:

Any person working with the setup or maintenance of radiometric measurement devices in level and / or density applications

### Objectives:

At the end of this course, attendees are able to describe how a radiometric measurement is made for level and density applications, configure a VEGA radiometric sensor, identify common error codes.

### Methodology:

Theory: Instructor-led modules with a variety of content including lecture, live demonstrations, and application of information discussed through class activities

Practical: Hands-on experience with routine maintenance procedures and calibration of level and density radiometric sensors

### Max. participants: 12

### Topics:

- Principles of Operation
- ALARA principle
- Setup
- Calibration
- Maintenance and Diagnostic Functions

Location	Cost	
VEGA Americas' Cincinnati Office	\$1,000 per person	
Prerequisites:		
Basic knowledge of instrumentation		

- Basic computer skills

# ProTrac Level or Density

This 8-hour training class introduces radiometric measurements for level or density applications. In-depth instruction and hands-on exercises instruct on the setup, calibration, and linearization of VEGA radiometric instruments.

### Who should attend?:

Any person working with the setup or maintenance of radiometric measurement devices in level or density applications

### Objectives:

At the end of this course, attendees are able to describe how a radiometric measurement is made for level or density applications and configure a VEGA radiometric sensor.

### Methodology:

Theory: Instructor-led modules with a variety of content including lecture, live demonstrations, and application of information discussed

**Practical:** Hands-on experience with routine maintenance procedures and calibration of level or density radiometric sensors

### Max. participants: 10

### Topics:

- Principles of Operation
- ALARA principle
- Setup
- Calibration
- Maintenance and Diagnostic Functions

Location	Cost	
VEGA Americas' Cincinnati office or at Customer's site	\$1,900 for up to 10 people from your company.  Cost of instructor's travel expenses will be added if training is held at customer's site.	
Prerequisites:		
<ul><li>Basic knowledge of instrumentation</li><li>Basic computer skills</li></ul>		

VEGA Americas, Inc. 4170 Rosslyn Drive Cincinnati, OH 45209 USA

Toll Free +1 800 367 5383
Phone +1 513 272 0131
Fax +1 513 272 0133
E-mail americas@vega.com
Web www.vega.com

