

# 2026 Ovation™ Training Courses

Emerson offers a full range of training options for every aspect of our portfolio. Our blended training approach of traditional classrooms, virtual classes, and on-site courses help users get the most from their Ovation™ automation technology. Ovation course information, including the schedule, is available in the training section of the Ovation Users' Group website.

## Ovation Course Map

CORE OPERATOR		CORE TECH / ENGINEER		CORE REFRESHER	
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OV20	Understanding Live Ovation Control	OV210	Building Ovation Graphics	OV116	Ovation 4.0
		OV220	Building Ovation View HMI Displays		
		OV300	Ovation Troubleshooting		
		OV400	Ovation Base Certification		

  

SECURITY		CONFIGURATION & DATA INTEGRATION		PROTOCOLS & DEVICE COMMUNICATION	
OV360	Ovation Security Administration	OV230	Ovation System Configuration	OV216	Ovation Hardware Overview
OV365	Power and Water Cybersecurity Suite (Trellix)	OV12	Ovation Alarm Management Techniques	OV270	HART & AMS with Ovation
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RENEWABLES		ADVANCED		PROCESS	
OVG001	Ovation Green SCADA Operator	OV302	Advanced Database / Troubleshooting	OV277	Machinery Health Monitoring (MHM)
OVG002	Ovation Green SCADA Administrator	OV305	Advanced Ovation Diagnostics	OV315	Performance Advisor
		OV310	Advanced Ovation Graphics	OV370	Ovation Turbine Control System
		OV330	Advanced Control Techniques	OV371	DCS and Turbine Mechanical
				OV375	Steam Turbine Mechanic Hydraulics
				OV377	Ovation Excitation Systems
				OV380	Ovation Boiler Control

  

BUS TECHNOLOGY	
OV340	Ovation Applications with Fieldbus
OV345	Ovation Applications with DeviceNet
OV350	Ovation Applications with Profibus
OV265	Ovation Expert Transition

**CORE OPERATOR**

Course Code	Title	Description	Duration	2026 Price	Prerequisites
<b>OV10</b>	<b>Ovation Operator</b>	Offered in virtual classroom, this course will enable new operators to learn the Ovation applications folder including network architecture, graphics, point information, trending, alarm summary, point review, system viewer and signal diagrams.	2 Days	\$2,174	No Prerequisite
<b>OV11</b>	<b>Troubleshooting Using Ovation Applications</b>	OV11 provides an understanding on how to use Ovation applications to troubleshoot. The focus will be using the applications of the alarm package, point information and control logic; trending, point review and system viewer. These necessary software tools are available without the use of Ovation Studio. Students will explore a device's alarm through point information and/or control schemes as well as understand a controller's fault diagnostics using system status and system viewer. This course is taught with the support of Ovation workstations and controllers.	5 Days	\$5,264	No Prerequisite
<b>OV20</b>	<b>Understanding Live Ovation Control</b>	This course is a high-level overview providing a basic comprehension on how to interpret and understand control using the signal diagram Ovation application. Topics of the course involve the signal diagram application, discrete and analog logic, exploring algorithms, tracking, and macros. OV20 is intended for staff that needs to interact with control but not design it.	2 Days	\$2,174	No Prerequisite

CORE TECHNICIAN / ENGINEER					
OV100	<b>Starting with Data Acquisition</b>	This five-day course reviews the major components in the Ovation system (controllers, network switches, operator station and engineer station). The student is taught on how to use Ovation tools to configure I/O modules and to modify and create digital and analog point records.	5 Days	\$5,264	No Prerequisite
OV200	<b>Building &amp; Maintaining Ovation Control</b>	Provides proficiency in reading Ovation functional control and tuning controls schemes to improve performance as well as building/implementing new control schemes. The course also discusses how to create effective control using algorithms.	5 Days	\$5,264	OV100
OV210	<b>Building Ovation Graphics</b>	Covers building Ovation system graphic diagrams and using the Ovation Graphics Builder. Course topics include layout and implementation of static and dynamic objects, linking to control and creating perspective-type diagrams.	5 Days	\$5,264	OV100, OV200
OV220	<b>Building Ovation View HMI Graphics</b>	This course will provide new users with an understanding how to build Displays in the new Ovation View HMI package. Inline with its predecessor, OV210—Ovation Graphics, this course’s topics include navigating the Builder application, creating dynamic objects, and linking Displays to controls.	4 Days	\$4,348	OV100, OV200
OV300	<b>Ovation Troubleshooting</b>	OV300 provides the skills and methods to troubleshoot and repair faults in the data acquisition and control functions of the Ovation system. Requires students to isolate faults anywhere in the signal path, from the field terminations to the I/O modules, through the controller, across the network and into the graphic display. Students will evaluate single and multiple-problem scenarios.	5 Days	\$5,264	OV100, OV200, OV210-or-OV215
OV400	<b>Ovation Base Certification</b>	Offered as a stand-alone web-based exam or implemented with a pre-testing review at the Training Center, the OV400 measures the student’s proficiency in areas related to database building, control implementation, graphics, and troubleshooting on a system-wide basis. Earning Ovation certification acknowledges the competency of the individual on Ovation product lines and enhances their abilities in addressing, assessing, and repairing problematic situations within the Ovation system. In both offerings, a multi-point examination is administered, and participants are required to achieve a grade score of 80% or greater to successfully gain certification.	5 Days	\$5,264	OV100, OV200, OV210, OV300-or-OV215 and OV216

CORE REFRESHER					
<b>OV115</b>	<b>Ovation Evergreen</b>	This Ovation refresher course reviews major components in the Ovation system, I/O module configuration, and overview of functional control. With a special focus on Ovation 4.0 innovations, this course ensures students gain hands-on experience with the newest advancements in Ovation. This class is offered as a week-long course, ideal for those with Ovation experience looking for a refresher or formal training.	5 Days	\$5,264	No Prerequisite
<b>OV015</b>	<b>Ovation 4.0</b>	This 1-day class is offered as a seminar on new Ovation features.	1 Day	\$1,087	No Prerequisite
<b>OV215</b>	<b>Ovation System Fundamentals</b>	This 10-day course was developed to help students whose primary responsibility includes making changes to Ovation by learning to primarily modify the existing database, control, graphics, and troubleshooting. Course topics are drawn from four different Ovation one-week courses: OV100 (database), OV200 (control), OV210 (graphics) and OV300 (troubleshooting). The topics covered include Ovation application functions, Developer Studio architecture, point modification, modifying control sheets, modifying graphics, troubleshooting the controller and backing-up HMI(s). This course is not intended to replace the four one-week courses directed toward personnel who have the need for the detailed knowledge provided in the one-week courses.	10 Days	\$10,530	No Prerequisite

SECURITY					
<b>OV230</b>	<b>Ovation System Configuration</b>	This course is intended for those who maintain the integrity of the Ovation DCS. Students who attend this class will learn all the configuration parameters of the Ovation Developer Studio tree (ex. quality configuration, alarm configuration, point review configuration, right click menu configuration), as well as all right click functions (ex. control functions, search, engineer, backup/restore). Backups will be discussed in detail, and the student will perform a database restore.	5 Days	\$\$5,264	OV100
<b>OV360</b>	<b>Ovation Security Administration</b>	Guides students in the proper planning and installation of security. Students will discuss and understand Ovation security concerns and apply appropriate safeguards. This course covers the installation and configuration of Ovation security using Ovation Security Manager. Students will also configure Ovation-compatible Windows server domain controllers and cover modification of Windows group policies and security auditing settings.	5 Days	\$5,264	No Prerequisite
<b>OV365</b>	<b>Power and Water Cybersecurity Suite (Trellix)</b>	The Power and Water Cybersecurity Suite (PWCS) consists of a suite of security modules to assist Ovation customers in reducing the cost of complying with the NERC CIP standards and providing enhanced control system protection. The security modules' functions include Patch Management, Application Control, Device Control, Antivirus, Rogue System Detection and Vulnerability Assessment through the central Cybersecurity Dashboard. Additional modules include Security Incident & Event Management, System Backup & Recovery, Configuration Management and Network Intrusion Detection. This course will discuss the configuration, implementation and administration of all these PWCS modules.	5 Days	\$5,264	No Prerequisite
<b>OV430</b>	<b>Ovation Security Certification</b>	This certification course measures the student's proficiency in applying security packages as well as managing, enhancing, and update the cybersecurity of the Ovation Control System. Achieving the Security Certification acknowledges the competency of the individual who has demonstrated an understanding and ability in maintaining services such as Patch Management, and Malware Prevention. A multipoint exam is administered, and participants are required to achieve a score of 80% or greater to successfully gain verification.	5 Days	\$5,264	Ovation (Base) Certification Achievement, Administrator Certification Achievement, OV360, OV365

CONFIGURATION & DATA INTEGRATION					
OV230	<b>Ovation System Configuration</b>	This course is intended for those who maintain the integrity of the Ovation DCS. Students who attend this class will learn all the configuration parameters of the Ovation Developer Studio tree (ex. quality configuration, alarm configuration, point review configuration, right click menu configuration), as well as all right click functions (ex. control functions, search, engineer, backup/restore). Backups will be discussed in detail, and the student will perform a database restore.	5 Days	\$5,264	OV100
OV12	<b>Ovation Alarm Management Techniques</b>	This course covers the cycle of alarm management, including the alarm philosophy, the design and implementation of alarms, the maintenance and suppression, and the assessment of alarms on the Ovation system. OV12 also discusses the theory and purpose of alarm management and uses hands-on exercises to implement different management techniques using Developer Studio and the Ovation applications.	2 Days	\$2,174	No Prerequisite
OV245	<b>Ovation Process Historian (OPH)</b>	Provides knowledge to setup and configure the Ovation process historian to retrieve real-time and historical data. Students will create, schedule, and generate various types of reports, including periodic, event-driven, and on-demand. The course includes basic troubleshooting skills to help students analyze and resolve problem conditions.	5 Days	\$5,264	OV100
OV246	<b>Ovation Process Historian (OPH) Report Building</b>	This course will teach students to configure and retrieve historical data using Ovation process historian and Crystal Reports. Students will learn how to use the OPH Report Manager to define alarm, SOE, point and operator event reports. Students will also learn how to configure demanded reports, triggered reports, and timed reports in the OPH Report Manager. Additionally, this course teaches how to use Crystal Reports to create new report formats for use in the OPH Report Manager.	3 Days	\$3,262	OV100
OV248	<b>Enterprise Data Solution (EDS)</b>	This course is designed to give students a detailed understanding of the EDS. Upon completion of the course, students will be able to configure an EDS Server to collect points data from existing Ovation systems. An EDS client will be properly configured, and the applications that make up the EDS Terminal will be covered extensively. This course is designed for anyone using and managing the EDS.	3 Days	\$3,262	No Prerequisite

CONFIGURATION & DATA INTEGRATION (Continued)					
<b>OV320</b>	<b>Ovation Network Administration</b>	This course provides an understanding of general networking concepts, as well as Ovation-specific network configurations for Fast Ethernet systems. OV320 teaches hands-on knowledge of switch and router configuration for use in Ovation systems. This course is intended for Ovation network administrators, system administrators, and those upgrading their Ovation Certification Program.	5 Days	\$5,264	No Prerequisite
<b>OV420</b>	<b>Ovation Admin Certification</b>	Offered as a stand-alone web-based exam or implemented with a pre-testing review at the Training Center, the OV420 measures the student's proficiency in areas that address the overall Ovation system configuration while maintaining the integrity of the system software. It assesses the students understanding of networking concepts and that of switch and router configurations. Achieving admin certification acknowledges the competency of the individual in maintaining the integrity of the Ovation system concerning user access and capabilities. In both offerings, a multi-point examination is administered, and participants are required to achieve a grade score of 80% or greater to successfully gain certification.	5 Days	\$5,264	Ovation (Base) Certification Achievement and OV230, OV320, OV245

PROTOCOLS / DEVICE COMMUNICATION					
<b>OV216</b>	<b>Ovation Hardware Overview</b>	This course is designed for personnel whose primary interest and/or job assignment includes maintaining the Ovation hardware. Select topics from several courses are incorporated and expanded upon, including the replacement, and set up of an Ovation Controllers, installing new I/O thermocouple/RTD modules, and configuring points. Several power supply configurations will be discussed. Students will install a HART 4-20 mA analog input I/O module and transmitter as well as install and configure an Ovation remote node controller with fiber connections. Hands-on exercises will require building control sheets and linking digital input and relay output modules.	5 Days	\$5,264	OV100, Recommended OV200
<b>OV270</b>	<b>HART &amp; AMS with Ovation</b>	This 2-day HART & AMS course will introduce the student to configuring HART devices in Ovation and using AMS Device Manager to initially populate the AMS database with Ovation HART I/O and perform basic device access and configuration steps. A student seeking advanced skills within AMS Device Manager training should attend the AMS Device Manager – 7020 course.	2 Days	\$2,174	OV100
<b>OV280</b>	<b>Ovation SCADA System</b>	Teaches the basic components of an Ovation SCADA system. Items covered include SCADA servers, remote terminal units, scan blocks, lines, ports, configuration, protocol analyzers and more.	3 Days	\$3,262	Recommended OV100, OV210
<b>OV295</b>	<b>Serial Link Controller</b>	This course teaches the attending students how to create specialized I/O links to non-Ovation field devices using the serial link module. The course covers configuring and loading link controller modules, memory mapping and the Ovation system addressing requirements.	3 Days	\$3,262	OV100, OV200

PROTOCOLS / DEVICE COMMUNICATION (Continued)					
<b>OV296</b>	<b>Third-Party I/O and Ethernet Link Controllers (ELC)</b>	This course will enable the student to configure, network and troubleshoot Ethernet link controllers (ELC) and third party I/O points. Topics covered include configuration of the ELC in Developer Studio, using the ELC configuration tool, simplex and redundant ELC's, networking, communication protocols, editing XML files, graphics, troubleshooting and building third-party I/O points. Students will configure the ELC to communicate to RTU's via both Ethernet and serial.	4 Days	\$4,384	OV100 OV200
<b>OV355</b>	<b>Ovation Applications with Wireless</b>	This course reviews the major components of an Ovation wireless system (wireless transmitters, gateways and the components of the SmartPack™). It also teaches how to utilize the available configuration tools to set up an Ovation wireless interface and add transmitters to an existing network.	5 Days	\$5,264	OV100

<b>BUS TECHNOLOGY</b>					
<b>OV340</b>	<b>Ovation Applications with Fieldbus</b>	This course provides students with a thorough knowledge of Fieldbus applications as applied to an Ovation system. Ovation Fieldbus module, segment design, device commissioning, Foundation Fieldbus algorithms and basic troubleshooting are covered. Students will be provided with hands on experience implementing Fieldbus architecture. This course is intended for technicians who install and maintain Ovation Fieldbus devices.	3 Days	\$3,262	OV100, OV200, Recommended OV275
<b>OV345</b>	<b>Ovation Applications with DeviceNet</b>	OV345 provides students with a detailed knowledge of DeviceNet applications as applied to an Ovation system. Ovation DeviceNet module, segment design, device commissioning, point mapping and basic trouble shooting are covered in this two-day class. Students will be provided with hands-on experience implementing DeviceNet architecture. This course is intended for technicians who install and maintain Ovation DeviceNet devices.	2 Days	\$2,174	OV100
<b>OV350</b>	<b>Ovation Applications with Profibus</b>	Intended for technicians who install and maintain Ovation Profibus devices, this course provides students with a full knowledge of Profibus applications as applied to an Ovation system. Ovation Profibus module, segment design, device commissioning, point mapping and basic troubleshooting are covered. Students will be provided with hands-on experience implementing Profibus architecture.	2 Days	\$2,174	OV100
<b>OV265</b>	<b>Ovation Expert Transition</b>	This course provides the user with proficiency in updating the Ovation interface after a change has been made to the ABB Bailey Infi90. Students will learn the basic mechanics of using the Ovation OPC client and OPC90 server (Rovisys) applications. The course includes layout and implementation of the hardware and software required for the migration. Simple methods for troubleshooting faults will also be discussed.	5 Days	\$5,264	OV100

ADVANCED					
<b>OV302</b>	<b>Advanced Database / Troubleshooting</b>	This course is designed for engineers and technicians that have used Ovation Developer Studio on a consistent basis since troubleshooting is part of their primary role. Topics covered include controller failures, networking, algorithm troubleshooting, Ovation services, NTP problems, HART, 3rd party and remote I/O issues.	5 Days	\$5,264	OV100, OV200, OV300
<b>OV305</b>	<b>Advanced Ovation Diagnostics</b>	The OV305 course is designed to provide the end-user with advanced skills and methods in Ovation troubleshooting, with emphasis on Ovation controller behavior and various troubleshooting tools available inside of the Ovation software suite. This iteration details new features involved in the Ovation 4.0 interface, specifically database basics and the new Ovation View HMI graphics builder and interface. Additionally, systemic troubleshooting on the topics of network and HMI's is also discussed.	5 Days	Contact for Pricing	OV100, OV200, OV300
<b>OV310</b>	<b>Advanced Ovation Graphics</b>	Uses application programs and advanced programming techniques, including the use of memory segments combined with pointer manipulation, to enhance advanced graphic programming skills. It also teaches how to Build several graphics utilizing pointers and memory segments. Students will learn how to assess problematic graphics and solve them with available tools.	5 Days	\$5,264	OV210
<b>OV330</b>	<b>Advanced Control Techniques</b>	OV330 continues with the implementation of Ovation control algorithms as presented in the prerequisite, OV200. This course adds discussion into algorithm tracking, PID parameters, a review of Zeigler Nichols tuning, Feed Forward and Cascaded control schemes. Time functions as well as discussions regarding the Sootblower, Ideal Gas Law and Balancer are also presented.	5 Days	\$5,264	OV100, OV200

PROCESS					
OV277*	<b>Machinery Health Monitor Vibration</b>	This course will cover general concepts regarding the Ovation Machinery Health Monitor I/O module for measuring and recording plant vibration data. The student will configure the I.O module, install multiple types of vibration inputs and monitor the feedback data utilizing Emerson vibration sensors. Configuration of the Machine Works application and the Machinery Health Waveform Recorder will also be discussed.	2 days	\$2,174	OV100
OV315	<b>Performance Advisor</b>	The course describes the capabilities and limitations of a performance advisor, the hardware and software requirements to implement it, and provides hands-on exercises to install, use and backup the performance advisor and the information that is created. After the attendees have loaded the performance advisor on a workstation and have been provided the knowledge of how to create a workspace, a project and a functional block diagram hands-on exercises will include building feed-water heater performance calculations, building steam turbine performance calculations, and building condenser calculations. Data agents, and communication on a local and enterprise systems, are also described.	5 Days	\$5,264	OV100, Recommended OV200
OV370	<b>Ovation Turbine Control System</b>	OV370 explores the Ovation steam turbine control system functions, including operation, graphics, and control logic. The course includes calibration and troubleshooting exercises on speed detector and valve positioner modules.	5 Days	\$5,264	OV100, OV200, Recommended OV375
OV371	<b>DCS and Turbine Mechanical System</b>	This course enables the student to better understand the relationship between the Ovation DCS and the turbine mechanical system. Control logic and Ovation graphics will be reviewed to enhance the student's familiarity with this equipment. Classroom discussion will entail the following: normal functionality, setup, calibration, testing, maintenance, and troubleshooting. Course content is primarily by lecture with minimal hands-on equipment when attended at the Pittsburgh training facility.	5 Days	Please contact for tuition pricing	No Prerequisite

PROCESS					
<b>OV375</b>	<b>Steam Turbine Mechanic Hydraulics</b>	This course is designed to identify the major hydraulic components, pumps, accumulators and other electro-hydraulic control elements of a steam turbine. Students will demonstrate knowledge on hydraulic logic valves, as related to directional, proportional and servo valves and trace components using hydraulic diagrams and drawings. Students will also demonstrate knowledge on types of oil used, acceptable temperatures, cleanliness and how to fill the tank.	5 Days	Please contact for tuition pricing	No Prerequisite
<b>OV377</b>	<b>Ovation Excitation Systems</b>	This course focuses on Ovation Excitation. The course is intended for engineers and I&C technicians that interface and maintain an Ovation excitation system and includes a review of the history and fundamentals of excitation, types of excitation and the concepts of SCR bridges. The course discusses excitation and its elemental components, maintenance and troubleshooting, data retrieval and analysis. There are no mandatory prerequisites as this course does not require knowledge of Ovation DCS. Course content is primarily by lecture with minimal hands-on equipment.	3 Days	\$3,262	No Prerequisite
<b>OV380</b>	<b>Ovation Boiler Control</b>	This five-day course reviews standard control logic used in Ovation systems for a typical, coal-fired, drum-type boiler as well as examining typical analog and digital logic building blocks and how they combine to create a functional unit. It also explores theory concerning the air, water, steam and fuel systems, along with the modes and operation of coordinated control.	5 Days	\$5,264	OV100, OV200

RENEWABLES					
<b>OVG001</b>	<b>Ovation Green SCADA Operator</b>	This course will provide new operators with an understanding of the major functions within the Ovation Green SCADA software including overview dashboards, alarm monitoring and historical alarm review, historical production and downtime analysis data, viewing saved reports, and creating customized workspaces for individual preferences.	2 Days	\$2,174	No Prerequisite
<b>OVG002</b>	<b>Ovation Green SCADA Administrator</b>	This course will provide system administrators and engineers with the knowledge necessary to maintain their Ovation Green SCADA system. Topics covered in this course include system configurations and requirements; license management; creating sites, plants, and units; creating and modifying users, groups, permissions, and roles; scheduling tasks and services; and creating reports, trends, and alarms.	3 Days	\$3,262	No Prerequisite

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