

Education Services

Course Catalog





Learn Faster. Validate Skills. Accelerate Engineering.

With a wide variety of learning resources delivered by technical experts, NI is committed to ensuring your success with our products and services, no matter the industry or application area. Start your learning journey today by exploring NI's training and certification offerings.

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Whether you are new to NI products or have been using them for years, access to the right learning resources when you need them is critical to your success. NI provides a comprehensive education service to advance your current application and support you at every stage of your career.

This program is the most effective way to increase productivity, reduce development time, and improve your ability to engineer robust, maintainable applications with NI products. It's also individually tailored to fit your schedule, work on your terms, and deliver core competency for beginners and experts alike.



over 40 years providing education services



92% customer satisfaction



94% of our customers recommend our courses

 ${\tt SOURCE: GLOBAL\ COURSE\ SURVEY, FROM\ JANUARY\ TO\ SEPTEMBER\ 2021.}$



Follow your path. Find your success.

Increased productivity with NI tools starts with a clearly defined plan outlining your goals and application areas. You can then work with NI to identify the best strategies for acquiring and validating skills to take your productivity to the next level.

Learning paths are designed to help you navigate the learning resources available in your application area. Throughout each learning path, you can leverage assessments to identify the learning content you need to successfully develop applications.

Customize a learning path to your needs by choosing optional courses and topics, preferred learning format, and frequency of engagement with the materials.

"I estimate that the training courses have saved me more than 150 hours in self-paced learning time to get to an equivalent skill level."

> Thomas Sumrak PAR Technologies, LLC

DEVELOP LABVIEW APPLICATIONS

Go from developing basic applications in the LabVIEW graphical programming environment to architecting large applications in single- or multi-developer settings

DATA LOGGING, CONTROL, AND MONITORING

Learn how to rapidly design, prototype, and deploy embedded control and monitoring systems using LabVIEW and NI customizable off-the-shelf hardware.

DEVELOP AUTOMATED PRODUCTION TEST SYSTEMS

Learn how to develop and manage test applications in the TestStand environment, distribute them to test stations, build test code for your hardware and devices under test, and log test results to a database.

DEVELOP HARDWARE-IN-THE-LOOP TEST SYSTEMS

Develop a real-time test system and create a run-time editable user interface with VeriStand or the HIL and Real-Time Test Software Suite.

MEASURE PHYSICAL SYSTEMS AND ACQUIRE DATA

Acquire the skills to configure your DAQ hardware, perform accurate single-point and continuous measurements, and synchronize your data acquisition.

SEMICONDUCTOR TEST SYSTEM CURRICULUM

Learn how to develop and debug configuration-based test programs, create custom measurements, and optimize advanced test programs for mixed-signal and RF devices using the NI Semiconductor Test System (STS).

MANAGE DATA WITH DIADEM

Learn how to view and graphically investigate data, automate report generation, and extend the capabilities of DIAdem.

ACQUIRE IMAGES WITH MACHINE VISION

Learn to select and set up machine vision hardware and develop an application in LabVIEW that acquires, processes, analyzes, and inspects images.

ECU TEST SYSTEM CURRICULUM

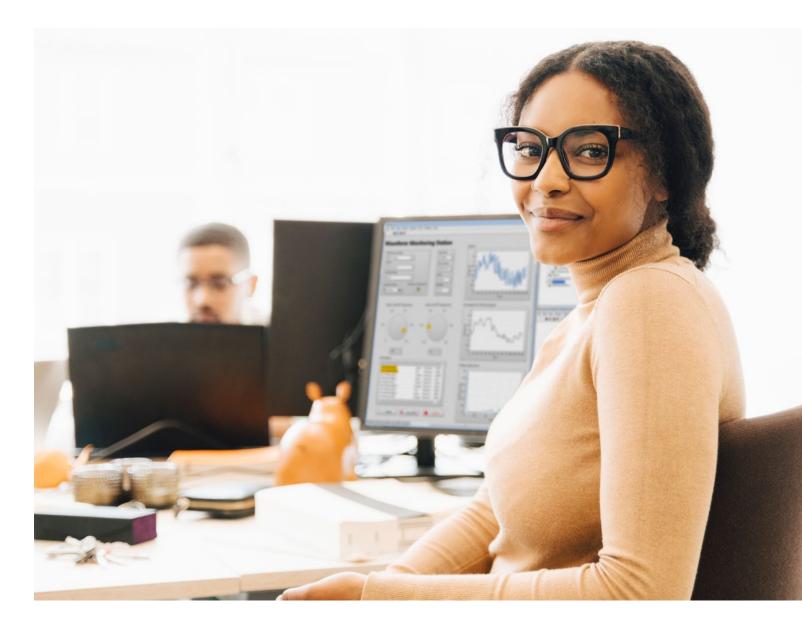
This learning path is for operators or technicians responsible for operating and maintaining an EOU Test System, and engineers developing applications for the ECU Test System.



Common Learning Paths

Find the training courses, certification exams, and proficiency events to meet your application needs using the following customized learning paths. These paths were developed around the recommended skill levels and additional areas of interest someone with this application might have.

Use the descriptions to the right of the learning path to help you determine how far along the path to progress. Keep in mind many of our courses are available in both instructor-led and on-demand formats. For your consideration, optional courses, exams, events, and assessments have been included at the bottom of each path and can be used anytime to help you customize your learning to your needs.

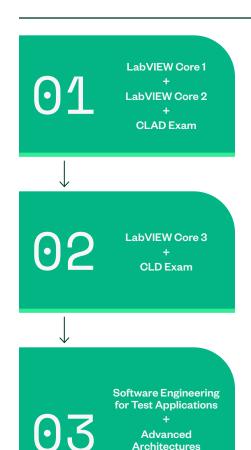




Develop LabVIEW Applications

Reduce development time and costs through faster learning and increased productivity with LabVIEW. This learning path is for engineers developing applications using LabVIEW. It presents the courses, exams, and events to help you go from developing basic applications in the LabVIEW graphical programming environment to architecting large applications in single- or multiple-developer settings. Discover recommended techniques to successfully develop applications that can scale as your projects evolve.

GETTING STARTED



CLA Exam

Explore the LabVIEW environment, dataflow programming, and common LabVIEW development techniques in a hands-on format.

Design, implement, and distribute stand-alone applications using LabVIEW and apply single- and multiple-loop design patterns for application functionality.

Certified LabVIEW Associate Developers demonstrate a working knowledge of the LabVIEW environment, a basic understanding of coding and documentation best practices, and the ability to understand and interpret existing code.

Learn structured best practices to design, implement, document, and test LabVIEW applications.

The second LabVIEW certification exam validates the ability to design and develop functional programs while minimizing development time and ensuring maintainability through proper documentation and style.

Learn common practices for managing large, team oriented, application development projects.

Discuss how to design and implement scalable, extensible software architectures for large LabVIEW applications.

The third and highest level of LabVIEW certification demonstrates mastery in architecting and project managing LabVIEW applications.

Technician or basic developers using LabVIEW to develop, support, or troubleshoot a small to medium application can learn to apply basic design patterns and troubleshoot or debug LabVIEW code.

Software engineers who need to design and develop a medium to large application with more than one process will learn to evaluate file formats, create executables, handle errors during execution, and design to user requirements.

Software architects designing the application architecture or acting as technical lead or project manager for a large application can learn to leverage the appropriate tools and techniques to manage development; design, develop, and document a clean API; and analyze the architecture of a LabVIEW application for improvement.

ADDITIONAL OPTIONS

LabVIEW Connectivity
LabVIEW Performance
Object-Oriented Design and
Programming in LabVIEW
Actor-Oriented Design in LabVIEW

LABVIEW NXG OPTIONS

LabVIEW NXG Core 1
LabVIEW NXG Core 2
Transitioning to LabVIEW NXG

BADGE ASSESSMENTS

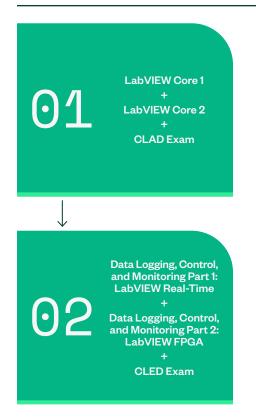
LabVIEW Programming
LabVIEW NXG Programming
LabVIEW Application Development
LabVIEW NXG Application Development



Data Logging, Control, and Monitoring

This learning path is for users developing embedded control and monitoring systems. It presents courses, exams, and events that teach you how to design, prototype, and deploy reliable and deterministic embedded systems using LabVIEW. Consider this path if you are using the Embedded Control and Monitoring Software Suite, the LabVIEW Real-Time Module, or the LabVIEW FPGA module with CompactRIO, Single-Board RIO, PXI, or R Series multifunction reconfigurable I/O devices.

GETTING STARTED



Explore the LabVIEW environment, dataflow programming, and common LabVIEW development techniques in a hands-on format.

Design, implement, and distribute stand-alone applications using LabVIEW and apply single- and multiple-loop design patterns for application functionality.

Certified LabVIEW Associate Developers demonstrate a working knowledge of the LabVIEW environment, a basic understanding of coding and documentation best practices, and the ability to understand and interpret existing code.

For those designing, prototyping, and deploying embedded control and monitoring applications, LabVIEW Core courses introduce the LabVIEW environment, communication mechanisms, and development techniques.

Learn how to efficiently design, prototype, and deploy a reliable embedded control and monitoring application.

Extend the functionality of your CompactRIO system by using LabVIEW FPGA.

Certification demonstrates proficiency and expertise in analyzing requirements for and designing, developing, debugging, and deploying reliable mission-critical embedded control and monitoring applications.

¹CLED EXAM REQUIRES A VALID CLD OR CLA CERTIFICATION TO ATTEMPT.

Translate system requirements into a scalable software architecture, choose appropriate methods for interprocess and network-based communication, design for reliability, and efficiently deploy and replicate your embedded system.

ADDITIONAL OPTIONS
LabVIEW Core 3
CLD Exam
LabVIEW Machine Vision

"I'm more confident in my abilities knowing I'm part of a select group with proven skills. Now that I'm certified, I'm more respected at work, I'm more respected by customers, and I'm more respected by attendees of my local user group. I maintain my certification for continued invitations to the CLA Summit, customer reassurance, my public profile, and to be the best I can at what I do."

Richard Thomas

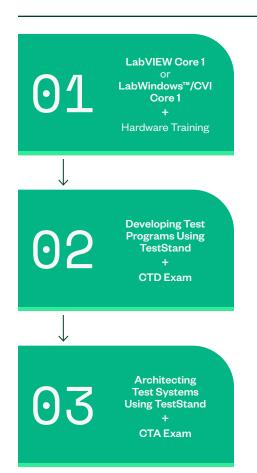
Thoric Solutions Ltd, CLA, CTD, and CLED



Develop Automated Production Test Systems

This learning path is for engineers building manufacturing test or production test applications with the Automated Test Software Suite or TestStand. It presents the courses, exams, and events that teach you to develop practical test applications in the TestStand environment and distribute them to test stations, build test code for your hardware and devices under test, and log test results to a database.

GETTING STARTED



Explore the LabVIEW environment, dataflow programming, and common LabVIEW development techniques in a hands-on format.

Develop application solutions using the built-in features of the LabWindows/CVI ANSI C integrated development environment.

Hardware training: Learn to install, configure, and program your NI hardware with a wide variety of available training courses. View on-demand PXI training at learn.ni.com/catalog.

Test developers building code modules for individual components of a DUT or defining hardware connections for the test station should familiarize themselves with the programming environment and hardware functions through the relevant training courses.

Use TestStand to develop, analyze, debug, and deploy practical test applications that match your test needs.

Certified TestStand Developers demonstrate the ability to develop, debug, and deploy functional applications in TestStand software while minimizing development time and ensuring maintainability.

Technicians and test system designers using TestStand as their test executive develop, execute, and debug an automated test system as well as manage, package, and deploy test software.

Design and architect test system frameworks, learn advanced features, and customize the built-in functionality of TestStand.

Certified TestStand Architects display expertise in architecting test systems based on TestStand from high-level specifications.

Test software architects define and create the software framework for the test organization, develop or select data and user management systems, and develop oustomized and robust user interfaces.

ADDITIONAL OPTIONS

LabVIEW Core 2

CLAD Exam

LabVIEW Instrument Control

Data Acquisition Using NI-DAQmx and LabVIEW

LabWindows/CVI Core 2

Modular Instrument Courses

BADGE ASSESSMENTS

TestStand Navigation and Diagnostics

TestStand Sequence Development

Test Principles

Test Instrumentation

"NI's TestStand I is a great course. I highly recommend it."

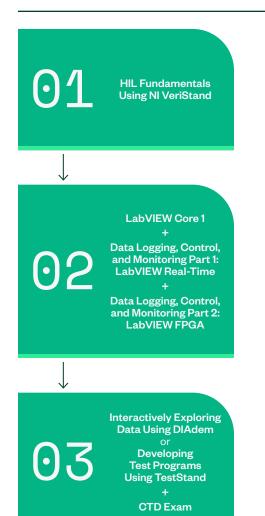
Donald Smith Alfautomazione



Develop Hardware-in-the-Loop Test Systems

This learning path is for engineers developing real-time test and hardware-in-the-loop applications with VeriStand or the HIL and Real-Time Test Software Suite. It presents the courses, exams, and events that teach you how to develop a real-time test system and create a run-time editable user interface using VeriStand.

GETTING STARTED



Use the out-of-the-box features of VeriStand to develop real-time test applications such as hardware-in-the-loop test systems.

real-time test systems such as HIL simulators and dynamometers or are tasked with executing and modifying existing VeriStand test systems, you can learn the fundamentals for test development and operation.

Whether you are creating

Explore the LabVIEW environment, dataflow programming, and common LabVIEW development techniques in a hands-on format.

Learn how to efficiently design, prototype, and deploy a reliable embedded control and monitoring application.

Learn to add more functionality to VeriStand using the power of LabVIEW. Whether you need to create custom real-time logic, develop hardware algorithms on an FPGA, or redesign your user interface, LabVIEW training courses will provide you with useful skills to add functionality to your real-time test system.

Learn to use the most important analysis, reporting, and data management features of the DIAdem environment.

Use TestStand to develop, analyze, debug, and deploy practical test applications that match your test needs.

Certified TestStand Developers demonstrate the ability to develop, debug, and deploy functional applications in TestStand software while minimizing development time and ensuring maintainability.

Improve the efficiency of your real-time test application by incorporating advanced automation, post-processing, and report generation. Learn to create automation scripts, custom test reports, and data analysis algorithms using TestStand and DIAdem.

ADDITIONAL OPTIONS

LabVIEW Core 2

CLAD Exam

LabVIEW Core 3

CLD Exam

Data Acquisition Using NI-DAQmx and LabVIEW

LabVIEW for CompactRIO Developer's Guide

BADGE ASSESSMENTS

LabVIEW Programming

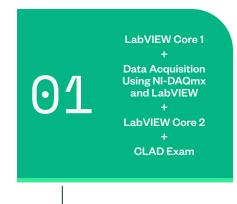
DIAdem Data Exploration



Measure Physical Systems and Acquire Data

This learning path is for engineers using NI DAQ devices and LabVIEW to develop customized and automated measurements to meet application requirements. It presents the courses, exams, and events that teach you how to configure your hardware, perform accurate single-point and continuous measurements, and synchronize your data acquisition.

GETTING STARTED



Explore the LabVIEW environment, dataflow programming, and common LabVIEW development techniques in a hands-on format.

Explore the fundamentals of data acquisition using sensors, NI data acquisition hardware, and LabVIEW.

Design, implement, and distribute stand-alone applications using LabVIEW and apply single- and multi-loop design patterns for application functionality.

Certified LabVIEW Associate Developers demonstrate a working knowledge of the LabVIEW environment, a basic understanding of coding and documentation best practices, and the ability to understand and interpret existing code.

After an introduction to the LabVIEW environment, communication mechanisms, and development techniques, developers learn to connect signals; acquire, display, and log measurements; generate waveforms; and select resolution and sample rates.



Learn structured best practices to design, implement, document, and test LabVIEW applications.

The second certification exam validates the ability to design and develop functional programs while minimizing development time and ensuring maintainability through proper documentation and style

For those who need to integrate data acquisition as a component in a large application or add advanced functionality such as synchronization or handling large quantities of data, advanced LabVIEW training is recommended.

ADDITIONAL OPTIONS

Data Acquisition Using LabVIEW NXG LabWindows/CVI Core 1 LabWindows/CVI Core 2 Interactively Exploring Data Using DIAdem LabVIEW Instrument Control BADGE ASSESSMENTS

Taking Physical Measurements

LabVIEW Programming

LabVIEW NXG Programming

"The depth of material covered and the concepts highlighted are beyond comparison to other courses I've had."

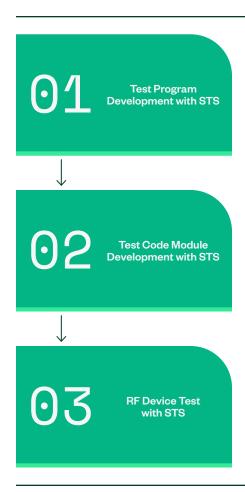
> Bruce Williams Intertek



Semiconductor Test System Curriculum

Semiconductor production test engineers are often challenged to test more complex parts in a fraction of the time and budget. The STS Test Engineer Curriculum is a learning path consisting of three courses designed to quickly teach semiconductor production test engineers how to develop and debug configuration-based test programs, create custom measurements, and optimize advanced test programs for mixed-signal and RF devices using the NI Semiconductor Test System (STS).

GETTING STARTED



Learn how to use Semiconductor Test System (STS) resources interactively to create, modify, execute, and debug test programs with pre-existing code modules to collect test data and test time reports. Available for both LabVIEW and .NET/C#.

Learn how to use Semiconductor Test System (STS) resources to develop and debug measurement code modules for the STS test program, create custom test steps, and perform test program optimization and deployment. Available for both LabVIEW and .NET/C#.

Learn how to use STS RF resources interactively to create, modify, execute, and debug test programs based on RF configurations. Available for .NET/C# only.

Semiconductor test engineers using or evaluating the NI Semiconductor Test System (STS) to perform semiconductor production test or high-volume automated device validation

Semiconductor test developers using or evaluating the NI Semiconductor Test System (STS) to develop and perform semiconductor production test or high-volume automated device validation.

Test engineers that are responsible for testing RF parts. This course should be taken after Test Program Development with STS and Test Code Module Customization with STS.

ADDITIONAL OPTIONS

LabVIEW Core 2

Developing Test Programs Using TestStand

Manage Data with DIAdem

This learning path is for engineers using DIAdem to quickly locate, inspect, analyze, and report on measurement data. It presents the courses, exams, and events that teach you how to import, view, and graphically investigate data; automate report generation; and extend the capabilities of DIAdem.

GETTING STARTED



Learn to use the most important analysis, reporting, and data management features of the DIAdem environment.

Extend the capabilities of DIAdem software using the advanced VBScript and SUDialog capabilities of DIAdem.

New DIAdem users can explore the most important analysis, reporting, and data management features of the DIAdem environment. Those interested in acquiring measurement data using the DIAdem environment should consider the DIAdem Data Acquisition and Control (DAO) course.

For DIAdem users interested in extending the capabilities of DIAdem software, discover the advanced VBSoript and SUDialog capabilities of DIAdem. Those interested in optimizing the speed of a script and minimizing maintenance should consider the DIAdem Customizing and Data Management course.

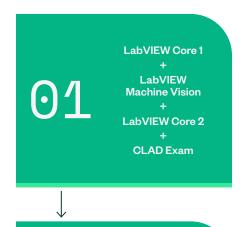
ADDITIONAL OPTIONS
LabVIEW Core 1

BADGE ASSESSMENTS
DIAdem Data Exploration

Acquire Images with Machine Vision

This learning path is for engineers developing vision applications with NI machine vision hardware and software. It presents the courses, exams, and events to help you select and set up the machine vision hardware and develop an application in LabVIEW that acquires, processes, analyzes, and inspects images for applications such as assembly verification, object tracking, and vision-guided robotics.

GETTING STARTED



Explore the LabVIEW environment, dataflow programming, and common LabVIEW development techniques in a hands-on format.

Learn the fundamentals of machine vision tasks and inspections. Select and use the hardware components of a machine vision system.

Design, implement, and distribute stand-alone applications using LabVIEW and apply single- and multi-loop design patterns for application functionality.

Certified LabVIEW Associate Developers demonstrate a working knowledge of the LabVIEW environment, a basic understanding of coding and documentation best practices, and the ability to understand and interpret existing code.

After an introduction to the LabVIEW environment, communication mechanisms, and development techniques, basic vision system developers learn hardware selection, setup, and use and the acquisition, display, and processing of images.

62 LabVIEW Core 3
+
CLD Exam

Learn structured best practices to design, implement, document, and test LabVIEW applications.

The second certification exam validates the ability to design and develop functional programs while minimizing development time and ensuring maintainability through proper documentation and style.

As your applications become more complex, advanced LabVIEW training is recommended to learn best practices for the LabVIEW graphical programming environment.

BADGE ASSESSMENTS
LabVIEW Programming
LabVIEW NXG Programming

"On-site training is an excellent solution for customers who need to train multiple people. It offers a level of flexibility in the delivery of that training that personalizes it for your unique needs."

Trey McWhorter

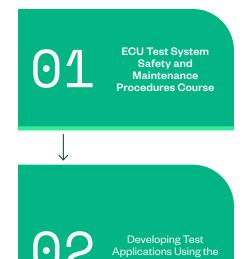
NI Account Representative to Hach Company



ECU Test System Curriculum

This learning path is for operators or technicians responsible for operating and maintaining an ECU Test System, and engineers developing applications for the ECU Test System.

GETTING STARTED



ECU Test System

Learn about safety features of the ECU Test System along with maintenance and calibration procedures.

Operators, technicians, and engineers using an ECU Test System can learn how to maintain safe, reliable operation of the system.

Leverage the NI ECU Test System software and hardware to test a DUT. Participants get hands-on experience with InstrumentStudio™ software, TestStand, the TestStand ECU Toolkit, and Switch Executive to leverage the on-board instrumentation and accomplish an array of test cases that require of signal generation, acquisition, and processing to determine if the DUT passes or fails.

The course guides participants on how to use the different instruments, application software, and drivers included in the ECU Test System by implementing a DUT test plan.

Flexible Purchase Options

NI provides flexible options for purchasing training and certification. Whether you want to make an upfront investment, or pay as you go, NI has offerings to meet a variety of budgetary needs. Most offerings can be purchased at ni.com/training/buy, and custom or private training offerings can be purchased by contacting NI at ni.com/contact-us.

SAVE MONEY WITH A TRAINING MEMBERSHIP

A Training Membership is a cost-effective way to take multiple instructor-led training courses. This program provides one year of unlimited access to instructor-led training and certification.

BUY CREDITS NOW, SCHEDULE LATER

Purchase Education Services Credits now and redeem later for any training or certification offering. Education Services Credits expire after one year.

SECURE A SEAT IN A PUBLIC COURSE

View NI's global training calendar and secure a seat in an upcoming virtual or classroom instructor-led course. You can purchase the course by completing this form.

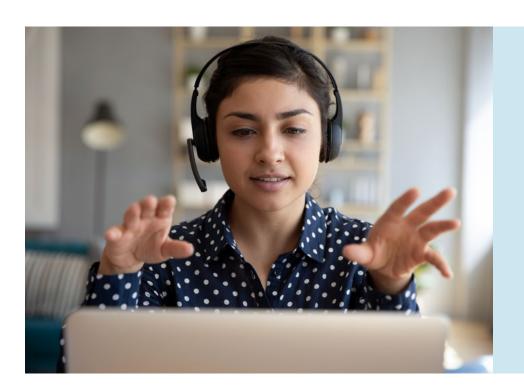
TAKE ADVANTAGE OF ON-DEMAND LEARNING

NI Software licenses include one-year access to introductory on-demand learning content so you can onboard quickly. Purchase additional on-demand courses at ni.com/training/buy.

To find out what on-demand training your license includes, view the knowledge base article, "Which Online Training Courses Can I Access Based on My NI Service Contract?"

ORGANIZE A PRIVATE TRAINING EVENT

NI offers private training events for teams up to 12 students. Private training events can leverage standard NI training courses and include custom materials tailored to your needs.



Explore the New NI Learning Center

With hundreds of on-demand lessons and application-focused learning paths, the new NI Learning Center makes it quick and easy to learn new skills.

Check it out today at learn.ni.com.



Invest Upfront and Use Later

NI offers two options for customers to pay upfront for training and certification. For individuals seeking to pay upfront for unlimited instructor-led training and certification options, NI offers the Training Membership program. For individuals or team managers, a bulk quantity of Education Service Credits can be purchased and redeemed for any Education Services offering, for any user, within one year of purchase.

Education Service Credits

Designed for individuals or groups that want to purchase training for multiple employees or team members but need the flexibility to decide who participates in the training and when. You can use credits to purchase:

- Instructor-led training (virtual and classroom)
- On-demand training
- Certifications
- Private training events

Oredits are recommended for large projects, volume license agreements, and end-of-year budget spending. Visit ni.com/training for more information about Education Service Oredits.

Training Membership

- Provides unlimited access to all NI public classroom and public virtual courses, along with unlimited certification vouchers.
- Offers cost savings if you are planning to take multiple instructor-led courses within one year.
- Is a one-time purchase that does not renew.

Visit ni.com for more information about Training Membership.



Select a delivery format to accommodate your learning preferences.

NI offers courses in several languages and formats, including classroom training at facilities worldwide or on-site at your facility, online courses, and virtual training to better serve your individual needs. Whichever course format you choose, NI training courses can help you achieve immediate productivity gains and long-term success. Visit ni.com/training/options for more details about learning formats.

LEARNING FORMAT NAME	DESCRIPTION	PRICE (USD)	EDUCATION SERVICES CREDITS (ESC)	LEGACY TRAINING CREDITS (TC)
On-Demand	Online course that includes pre-recorded videos, quizzes, and hands-on labs or exercises. Available in a 12-month subscription.	\$500 USD/ subscription	5 ESC/subscription	2 TC/subscription
Public Classroom	A training course on our calendar that is open to the public for registration and delivered at a physical NI training center. Delivered in full days (8 hours).	\$1,000 USD/ day/student	10 ESC/day/student	3 TC/day/student
Public Virtual	A training course on our calendar that is open to the public for registration and delivered virtually.	20,,200		
Private Classroom	A training course that is hosted for a specific group of users at an account often at the customer's site. Delivered in full days (8 hours).	\$7,000 USD/day/ up to 12 students	70 ESC/day/ up to 12 students	20 TC/day/ up to 12 students
Private Virtual	A training course that is hosted for a specific group of users at an account but virtually. Delivered in half days (4–6 hours) versus full days (8 hours).	Software course \$7,000 USD/day/ up to 12 students	Software course 70 ESC/day/ up to 12 students	Software course 20 TC/day/ up to 12 students
		Hardware course \$4,000 USD/day/ up to 6 students ¹	Hardware course 40 ESC/day/ up to 6 students¹	Hardware course 12 TC/day/ up to 6 students ¹
Private Classroom Configured	Delivered in the private classroom format, using NI standard training content that is reconfigured to better meet the needs of the audience. Delivered in full days (8 hours).	\$8,400 USD/day/ up to 12 students	84 ESC/day/ up to 12 students	25 TC/day/ up to 12 students
Private Virtual Configured	Delivered in the private virtual format, using NI standard training content that is reconfigured to better meet the needs of the audience. Delivered in half days (4–6 hours) versus full days (8 hours).			

¹HARDWARE-BASED PRIVATE VIRTUAL COURSES HAVE A MAXIMUM OF 6 STUDENTS TO ENSURE A BETTER CUSTOMER EXPERIENCE.

Scheduled Virtual and Classroom Training

NI offers virtual and classroom training courses so that you can learn with peers who have the same professional interests. To attend one of these virtual or in-person classroom courses, view Scheduled Virtual and Classroom Training.



Become familiar with NI hardware and software by attending our training courses.

Customer Education Courses are available for new and experienced users in the form of on-location and virtual classrooms, labs, and collaborative sessions. Topics include working with LabVIEW, InsightCM™, TestStand, FPGA and data acquisition hardware, and more.

	INSTRUCTOR-LED LEARNING FORMATS				
TRAINING COURSES	PUBLIC VIRUTAL	. AND CLASSROOM	PRIVATE VIRTUAL AND CLASSROOM		
	EDUCATION SERVICES CREDITS (ESC)	LEGACY TRAINING CREDITS (TC)	EDUCATION SERVICES CREDITS (ESC)	LEGACY TRAINING CREDITS (TC)	
Actor-Oriented Design in LabVIEW	30	9	210	60	
Advanced Architectures in LabVIEW	30	9	210	60	
Architecting Test Systems Using TestStand	20	6	140	40	
Data Acquisition Using LabVIEW NXG ¹	20	6	140	40	
Data Acquisition Using NI-DAQmx and LabVIEW	20	6	140	40	
Data Logging, Control, and Monitoring 1	40	12	280	80	
Data Logging, Control, and Monitoring 2	30	9	210	60	
Developing Test Programs Using TestStand	30	9	210	60	
Interactively Exploring Data Using DIAdem	30	9	210	60	
DIAdem Advanced	20	6	140	40	
High-Performance LabVIEW FPGA	30	9	210	60	
HIL Fundamentals Using NI VeriStand	30	9	210	60	
LabVIEW Connectivity	20	6	140	40	
LabVIEW Core 1	30	9	210	60	
LabVIEW Core 2	20	6	140	40	
LabVIEW Core 3	30	9	210	60	



LabVIEW Instrument Control ¹	20	6	140	40
LabVIEW Machine Vision ¹	30	9	210	60
LabVIEW NXG Core 1	30	9	210	60
LabVIEW NXG Core 2	20	6	140	40
LabWindows/CVI Core 1	30	9	210	60
LabWindows/CVI Core 2	20	6	140	40
Managing Software Engineering in LabVIEW	20	6	140	40
Multisim Basics	20	6	140	40
Object-Oriented Design and Programming in LabVIEW	20	6	140	40
RF Device Test with STS	20	6	140	40
Test Code Module Development with STS Using LabVIEW	30	9	210	60
Test Program Development with STS Using LabVIEW	30	9	210	60
Ultiboard Basics	10	3	70	20
Using NI InsightCM™ Enterprise for Condition Monitoring	20	6	140	40

¹THESE COURSES ARE ONLY AVAILABLE IN A PUBLIC OR PRIVATE CLASSROOM FORMAT

View NI's catalog of on-demand content at learn.ni.com. Navigate to your desired learning path and log in to find out if you have access. Some on-demand training is included with software licenses, including Software SSP, VLAs, and Enterprise Agreements. See the full list here. All on-demand learning paths are available for purchase, for one year of access, at \$500 USD, 5 Education Services Credits, or 2 Legacy Training Credits.



Accelerate learning and promote your accomplishments with NI badges.

Find learning resources and gain skills related to your application. Track your knowledge growth with milestone badge assessments and professional certifications. Then share your successes with others on social media and job sites.

What Is a Badge?

A badge is a digital credential that NI issues to you in recognition of your accomplishments, such as passing an assessment, exam, or audit. These digital credentials contain verified, personalized information, including details on the exam you passed to earn your certification or your skills tested in an application area.

NI BADGES



LEARNING BADGES

Discover engineering fundamentals and NI product best practices through on-demand learning, and then test your understanding with self-assessments and share your success.



PROFESSIONAL CERTIFICATION

Demonstrate that you have the skills needed to create high-quality applications with NI software. Share your skills on social media and job sites and advance your career.



COMMUNITY ADVOCACY

Gain recognition for technical leadership, participation in, and contributions to the NI user community and NI's expansive ecosystem of tools and expert developers.

Promote Your Accomplishments

You can hyperlink a badge image file to the digital credential containing your unique, verified data. This makes badges more secure than paper-based certificates and eliminates the possibility of anyone claiming your credential. Adding a hyperlinked badge image to your email signature and sharing your badge on social media and job sites are great ways to make sure your professional network is aware of your accomplishments.

Benefits of Badges

- You receive feedback on your learning and uncover next steps in your skill progression.
- Employers, peers, and customers can instantly verify your skills.
- You can easily share your achievements on a variety of social media platforms.

Have questions? Email BadgeManager@ni.com.



Challenge yourself and test your understanding with NI learning badges.

Complement NI courses and certifications with learning badge self-assessments to track your and knowledge growth and find additional content related to your application. Test your understanding of engineering fundamentals and best practices using NI products with these free online assessments.

Use Learning Badges to:

- Prepare for NI certification exams
- Identify knowledge gaps before starting a new project
- Optimize your self-paced learning and target topics specific to your needs

How Do Learning Badges Work?

- 01 Select a badge related to your projects and review the available learning resources.
- 02 Take the free, open-book, untimed assessment.
- Earn all the badges in a badge learning path and receive the high-level badge for that path.
- 64 Follow instructions from Acclaim to share your badges with others on social media and job sites.

CHOOSE A BADGE LEARNING PATH THAT BEST FITS YOUR APPLICATION NEEDS



Automate simple tasks and take basic measurements on a one-off basis. Build a simple looping or sequencer VI from scratch (LabVIEW and LabVIEW NXG).

Take ad-hoc engineering measurements using LabVIEW and NI data acquisition hardware. Build a custom measurement solution to acquire and visualize real-world signals.

Build a foundation of test and measurement principles to help you test multiple products with a test platform.

Visit ni.com/badges to take a free learning badge assessment.



Validate your skills and advance your career with certifications.

Certification demonstrates you have the skills needed to create high-quality applications with NI software and gives customers, peers, and employers confidence in your abilities. With nearly 20,000 certified professionals worldwide, NI certifications are widely recognized in industry. NI offers certifications that are standardized globally, allowing for secure and uniform testing across teams, organizations, or countries. You can use certification to assess and validate an individual's skills for the purpose of project staffing or career advancement.

CLAD | CERTIFIED LABVIEW ASSOCIATE DEVELOPER

The CLAD certification indicates a broad working knowledge of the LabVIEW environment, a basic understanding of coding and documentation best practices, and the ability to read and interpret existing code.

CLD | CERTIFIED LABVIEW DEVELOPER

The CLD certification indicates the ability to design and develop functional programs while minimizing development time and ensuring maintainability through proper documentation and style.

CLA | CERTIFIED LABVIEW ARCHITECT

The CLA exam tests the user's ability to build a sensible VI hierarchy and project plan for delivering an application that meets project requirements. Certified Architects can design the application architecture and manage the development of the individual components by other engineers.

CLED | CERTIFIED LABVIEW EMBEDDED SYSTEMS DEVELOPER

A CLED demonstrates expertise in designing, developing, debugging, and deploying applications based on CompactRIO, Single-Board RIO, and/or R Series hardware. A CLED efficiently uses the LabVIEW Real-Time and LabVIEW FPGA modules with NI-recommended best practices to design modular, scalable, and maintainable embedded systems to requirements.

CTD | CERTIFIED TESTSTAND DEVELOPER

The first step in the two-part TestStand certification process, the CTD measures the ability to develop, debug, and deploy functional applications in TestStand software while minimizing development time and ensuring maintainability.

CTA | CERTIFIED TESTSTAND ARCHITECT

The final step in the two-part TestStand certification process, the CTA shows a user's expertise in architecting test systems in TestStand based on high-level specifications. Certified Architects can design the application architecture and manage the development of individual components by other engineers.

CERTIFIED PROFESSIONAL INSTRUCTOR

The CPI certification distinguishes individuals who are authorized to teach NI courses. CPIs are the only non-NI instructors authorized to teach NI courses. Through teaching courses, CPIs can identify business opportunities and position themselves as experts in their field.

"You can be confident in what you are getting if that certification level is there. Those individuals have the knowledge and experience to hit the ground running."

David Hakey GE Energy





CERTIFICATION EXAM FORMATS	MULTIPLE CHOICE	PRACTICAL	PREREQUISITES	EXAM DURATION	RECERTIFICATION INTERVAL
Certified LabVIEW Associate Developer			none	1 Hour	2 Years
Certified LabVIEW Developer			none	4 Hours	3 Years
Certified LabVIEW Architect			CLD	4 Hours	4 Years
Certified LabVIEW Embedded Systems Developer			CLD or CLA	1 Hr, 5 Hr	5 Years
Certified TestStand Developer			none	4 Hours	3 Years
Certified TestStand Architect			CTD	1 Hour	4 Years
Certified Professional Instructor			CLD/CTD/ or Higher	8 Hours	Subject to review

PREPARE FOR AN EXAM

Preparing for your exam is easy with live and on-demand resources such as preparation guides, webcasts, sample exams, and solutions. See a recommended preparation plan customized to your experience and the time you have until your scheduled exam.

Visit ni.com/certification-prep to learn more.

REGISTER FOR AN EXAM

NI's multiple choice certifications are offered at Pearson VUE testing centers worldwide. For practical certifications, contact your local NI office or email certification@ni.com to register.

Visit ni.com/certificationschedule for more details.

Not Quite Ready for an Exam?

If you would like to spend more time covering exam topics, explore the NI Badge Program. Assess your skill level with NI Badge assessments and view recommended learning material as you progress through a badge path.

Visit ni.com/badges to learn more.



NI complements its industry-leading products with services from experts around the globe to help you achieve your goals. Whether your challenges are simple or complex, NI can help you maximize productivity and reduce costs with services such as Training, Technical Support, Consulting and Integration, and Hardware Services.

At NI, we are creative problem solvers, always seeking to help one another to be more effective. Please don't hesitate to contact us if you would like to adapt your learning path to your needs.

Software Services

Maximize the use of NI software by leveraging services such as technical support, online training, flexible licensing, and asset management.

Hardware Services

Minimize downtime, save on repair costs, and ensure measurement accuracy with world-class service programs for hardware.

Education Services

Develop 50 percent faster and spend 43 percent less time on code maintenance with NI training courses. Also validate your expertise with NI certifications.

Technical Support Services

Get started with NI products faster or troubleshoot tough issues by contacting NI applications engineers who are ready to help via phone and email.

Professional Services

Leverage our extensive network of NI Partners and NI engineers for assistance with prototyping, feasibility analysis, consulting,

Technical Resources

Access volumes of self-help information at ni.com, including application tips, example programs, and developer communities.

Enabling Success Every Step of the Way

Take advantage of services that meet your needs in any phase of the application life cycle, from planning and development through deployment and ongoing maintenance.

- Professional technical support
- Online and classroom-based training courses
- Software upgrades and updates
- Hardware repair and calibration
- System assembly and test
- Prototyping and feasibility analysis
- Consulting and development assistance

Disability and Accessibility

We're in this together! NI endeavors to provide training courses accessible to the widest possible audience, regardless of technology or ability.





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