

Advanced Technical Training









Advanced Training Hardware



Nida 130ST Trainer

A major advantage of the Model 130ST Trainer is that it supports core and advanced subjects. In the lab, a single 130ST Trainer can present a series circuit or an advanced sonar circuit simply by changing the circuit cards installed.

Fast Track Experiment Cards

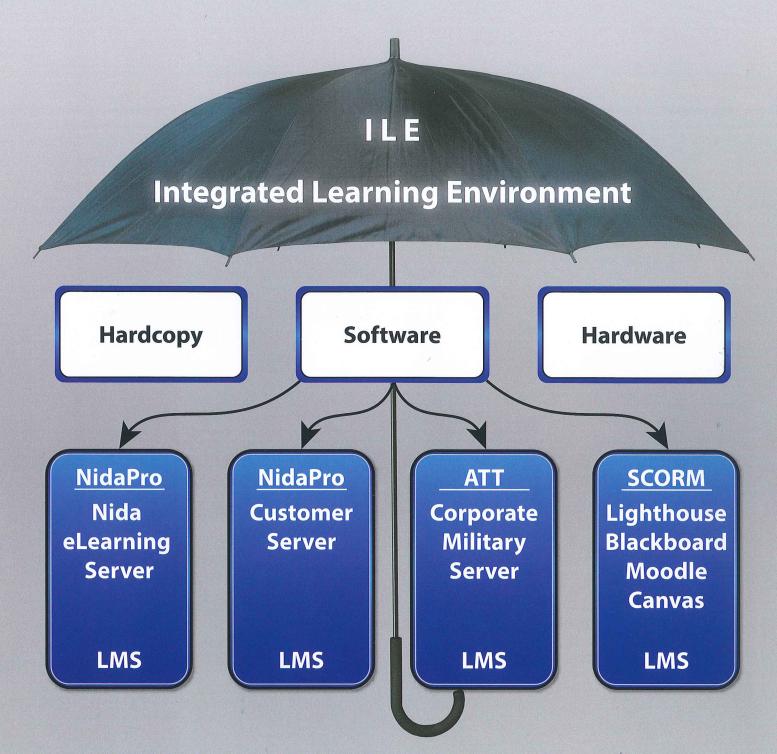
The Fast Track program is a streamlined method of delivering basic electronics training. Individual circuits are combined to make systems that students can analyze while observing the effects of input, process, and output.





Specialty Trainers

Specialty trainers are designed to support the hands-on analysis and troubleshooting of specific technical subjects. The 5050 PLC trainer and 360S Industrial Technology trainer are examples of specialty trainers.



Nida includes a free LMS as part of our curriculum package that can be installed locally and managed entirely by the user. As an option, Nida offers an online eLearning site that is also managed by the user but, requires no IT staff. And, for those who have their own LMS the curriculum is available in SCORM compliant packages.

Nida offers over 3,000 hours of computer-based learning content covering basic electronics, mathematics, communications, industrial automation, automotive electrical, aviation maintenance technology and many other technical subjects. The learning content is modular in design and provides a theory presentation, followed by a hands-on experiment and topped off with a randomly generated end of lesson quiz.

Nida's knowledge assessments and special performance testing card sets are designed as capstone events to ensure that your student can apply their new knowledge and practical skills.

Industrial Electronics

Microprocessors/Microcontrollers - Covers the operation, analysis, and troubleshooting of Intel microcontrollers/microprocessors and Motorola microprocessors.

Transducers - Presents the basic principles of motion, position, temperature, pressure, and optical sensing transducers.

Basic Motors - Provides operation, analysis, and troubleshooting of DC and AC motors and generators, and stepper motors.

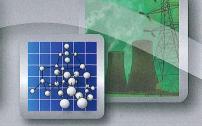
Motor Control Systems - Demonstrates the operation of position detection, motion detection, error detection & feedback, open and closed loop systems, and PID control systems with a focus on analysis and troubleshooting.

Temperature Control Systems - Presents the concepts, principles, and operation of temperature measurement, heat dissipation, basic heat sensors, temperature transducers, and digital temperature displays.

Process Automation - Provides concepts and experimentation on industrial process actuators, sensors, communications, control, and integration. Introduction lessons present SCADA, DCS, and system process troubleshooting using a factory-inspired card set. Requires the Model 360S specialty trainer.

Programmable Logic Controllers - Covers operation, programming, and troubleshooting of the Allen Bradley 1200 Series PLC. Projects include: programming for a manufacturing process, elevator, traffic signals, security system, and an amusement ride. Requires the Model 5050 specialty trainer.





Advanced Programs





Transportation Electrical/Electronics

Automotive - Teaches students how to analyze and troubleshoot automotive electrical and electronics systems using basic test equipment.

Car Audio/Trailer Wiring - Teaches configuration and installation techniques for these familiar vehicle features, providing perfect short modules for your automotive program or as recruitment/interest-generating tools.

Aircraft Maintenance Technology (AMT) - Covers aircraft electrical systems theory, troubleshooting, and repair. Modules include system troubleshooting principles, science for aircraft techs, aircraft support functions, power generation/distribution, instruments, aircraft wiring, all major aircraft systems, communications, and navigation.

Data Bus Systems - Teaches the basics of aircraft data bus systems, covering RS-232-C, RS-485, IEEE 488, ARINC 429, and ARINC 629 protocols.

Avionics - Discusses advanced electronics, RF communications, navigation, and data bus performance-based troubleshooting for avionics technicians.

Aircraft Electronics Technology (AET) -Provides the foundation for the NCATT AET certification, combining aircraft systems troubleshooting with advanced communications and navigation systems concepts.





Communications Electronics

Signal Processing - Teaches the principles of time and frequency division multiplexing; phase and frequency shift keying; and delta, phase, frequency, amplitude, and pulse code modulation.

Fiber Optics - Covers the characteristics, design, manufacturing, and troubleshooting of fiberoptic components, sources, detectors, transmitters, receivers, and communications.

Telephony - Introduces the basic theory of a communication system, the telephone system, and specific telephone equipment.

Microwave - Teaches the principles, operation, characteristics, and troubleshooting techniques of basic microwave systems, waveguides, and antennas.

RF Communications - Covers AM and FM modulation, including transceivers - AM, single sideband (SSB), and narrowband FM (NBFM). Available for the Model 130E and also the 205ECT specialty trainer.

Data Networks - Teaches broadband networks, network topology, serial data interfaces, and data network operations. Experiments include recognizing and diagnosing data rate & bandwidth relationships, frame formats & byte-oriented protocols, and frame collisions.

Basic Electronics Mathematics Chemistry **Physics** Soldering **Cables & Connectors Residential Wiring Hydraulics/Pneumatics** Synchro/Servo





Nida Corporation - Customer Services

Software Technical Support

All Nida software comes with a 5-year basic level of technical support to ensure the program continues to run smoothly.

Student Centered Learning

Nida staff are ready to assist you in developing strategies designed for long term training solutions or simply in assisting your instructors in managing a student-centered learning environment.

Nida eLearning Services

Unable to host a web-based training program yourself? Nida eLearning services allow you to manage, distribute, monitor, and collect student data via the Nida web server.

Instructor Workshops

Keeping up with the latest delivery techniques for technical training is a must when working with today's "Information Age" students. Nida's "Train the Trainer" workshop covers learning management, content management, and learning environments, providing tactics that can be implemented immediately into your training programs.

Custom Training Development

Nida is in the unique position of being able to customize technical training precisely according to specifications received from individual clients. Because all courseware (including hardware and software) is developed by Nida, we can design new learning content or make changes to existing resources as needs of our customers change.

