

IDAC 101

OEM: RedTeam • Code: IDAC 101

COURSE DESCRIPTION

New to the 2026 catalog, Intrusion Detection and Access Control IDAC 101 is a foundational course that establishes the essential knowledge shared by both Physical Access Control Systems (PACS) and Physical Intrusion Detection Systems (PIDS). Rather than covering each domain separately, this course focuses exclusively on the core concepts that underpin both platforms—low-voltage electrical fundamentals, system architecture patterns, wiring and termination methods, sensor technologies, and the input/output logic that drives all electronic physical security. With a full day of instruction including hands-on exercises, students build a rock-solid foundation that makes advanced coursework far more effective. The measured pace and practical labs are designed to help knowledge stick well after students leave. Students will get a comprehensive overview of common components and will get hands-on experience with many of them.

AUDIENCE PROFILE

- This section doesn't contain any content.

PREREQUISITES

- None — this is the entry point for RTA's PACS and PIDS curriculum. No prior experience with physical security systems is required.

COURSE OBJECTIVES

By the end of this course, participants will be able to:

- Low-Voltage Electrical Fundamentals
- System Architecture: The Shared DNA of PACS and PIDS
- Sensor Technologies Common to Both Platforms
- Wiring, Terminations, and Field Installation
- Current-Sensing Loops and Supervision
- Identifying PACS and PIDS in the Field
- Business Drivers and Design Constraints

COURSE OUTLINE

Module 1: Low-Voltage Electrical Fundamentals

- Key Electricity Concepts for Physical Security Applications
- Voltage, Current, and Resistance in Low-Voltage Installations
- Power Supplies, Circuits, and Common Wiring Configurations

Module 2: System Architecture: The Shared DNA of PACS and PIDS

- Both Platforms as Embedded Systems: Central Controller Boards Connected to Remote Low-Voltage Devices
- Input Devices, Output Devices, and Programmed Logic
- How Modern PACS Often Functions as a Superset of PIDS Capabilities

Module 3: Sensor Technologies Common to Both Platforms

- Passive Infrared (PIR) Motion Sensors
- Magnetic Reed Switches and Door/Window Contacts
- High-Security Sensors and Specialty Devices
- Hands-On Experience with Common Sensor Components

Module 4: Wiring, Terminations, and Field Installation

- Common Termination Types Encountered in the Field
- How Systems Are Designed, Wired, and Installed
- What Red Teamers Need to Recognize During Reconnaissance

Module 5: Current-Sensing Loops and Supervision

- How Input Devices Use Current-Sensing Loops
- End-of-Line Resistors (EOLR): What They Are, How They're Used, How to Identify Them, and Their Limitations
- Supervised vs. Unsupervised Circuits

Module 6: Identifying PACS and PIDS in the Field

- Visual Hallmarks and Characteristics of Installed Systems
- Recognizing System Presence During Physical Assessments

Module 7: Business Drivers and Design Constraints

- Why Physical Security Controls Are Designed the Way They Are
- Cost, Compliance, and Operational Factors That Shape Implementations