



## Allen-Bradley PLC-5 Advanced Programming & Troubleshooting Module: 204

To fully understand and troubleshoot a PLC based control system, you must have a thorough understanding of all aspects of the controller. The Advanced course completes the instruction set of the PLC-5 controller by delving into the bit manipulation, process control, and program control instructions. Placing the functionality of these instructions at your command will allow you to create functional, efficient programs. *This course is conducted using Rockwell RSLogix-5, 6200, or Advanced Interface (AI) software, depending on student preference.*

### Objectives

- Briefly discuss the major functional components of the Allen-Bradley PLC-5 programmable control system.
- Review of the instructions presented in the Maintenance & Troubleshooting and Intermediate courses.
- Explore and test the functionality of the bit modify and move instructions as they apply to your system.
- Work with the block transfer functions to communicate with non-discrete I/O modules or devices.
- Review of the instructions presented in the Maintenance & Troubleshooting and Intermediate courses.
- Explore and test the functionality of the bit modify and move instructions as they apply to your system.
- Work with the block transfer functions to communicate with non-discrete I/O modules or devices.
- Discuss the program and process control functions and learn how to implement them into your control system.
- Apply these instructions to create and test your own programs in extensive hands-on lab sessions designed to simulate a logical approach to problem solving.
- Look at the applications that require the ASCII and message instructions.
- Revisit the fault, processor input interrupt (PII), and selectable timed interrupt (STI) subroutines.
- Create methods to test programs, develop traps, and to follow the flow of information through a series of mixed instructions.
- Develop advanced troubleshooting skills; learn to create logical circuits that will trap data for real-time analysis and circuit diagnostics.
- Explore the application of sequential flow chart (SFC) programming.