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## RPG IV Programming

*(5 day Instructor-Led Course)*

This introductory RPG IV programming workshop presents RPG IV (ILE RPG/400) from start to finish. If you're new to RPG, this class is for you. It covers all the language's specifications and structures. The material in this class will arm you with the skills and knowledge you'll need to build basic RPG programs.

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**Recommended schedule:** 5 days

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### Who Should Attend

This class is appropriate for programmers who need an introduction to the RPG IV language syntax.

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### Prerequisites

No previous knowledge of RPG is required. In order to successfully complete this course, students should have completed the following course, or have equivalent knowledge/experience:

- IBM i Concepts and Programming Tools

Previous knowledge of another computer language may be helpful.

This class provides the prerequisite knowledge and skills for the following classes:

- RPG IV and the Integrated Language Environment
- RPG IV Modules, Procedures & Service Programs

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### What You Will Accomplish

At the end of the course, students will be able to:

- Recognize the various RPG IV specifications and their use in a program
- Define work fields, arrays, data structures, and named constants
- Recognize the data types supported by RPG IV, and when to use them
- Assign values using EVAL
- Use RPG IV built-in functions in calculations
- Use externally described database files in a program



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- Build a simple interactive application
  - Perform program-to-program calls, passing parameters
  - Use data areas in a program
  - Handle errors that may occur during program execution
  - Understand and use modular procedures and service programs
  - Understand the use and basic concepts associated with subfile programming

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### **What You Will Receive**

Each student receives:

- Custom printed handout, containing class notes
- Completion certificate

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### **Course Outline**

The class covers these topics:

- RPG Background
- Specification Overview
- Externally Described Files
- Defining Data with Definition Specifications
- Defining Data Structures
- Using Data Areas
- Using Arithmetic Operations and Functions
- Processing Character Data
- Processing Dates
- Controlling Program Workflow
- Using Arrays and Tables
- File Access and Record Manipulation
- Writing Interactive Applications
- Calling Programs
- Passing Parameters
- Modular Programming Concepts and ILE
- Creating Procedures
- Creating and Maintaining Service Programs
- Error Handling
- Introduction to Subfiles

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### **Hands-on Labs**



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- Writing a basic report program
  - Using Definition Specifications
  - Using calculations and built-in functions
  - Using externally described files
  - File access and update
  - Writing an interactive application
  - Writing procedures
  - Using service programs