



## AS07: System i RPG IV Version 5 Programming Intermediate Workshops

Course code	AS07VN	Delivery type	Classroom (Hands-on labs)
Duration	4.0 days	Course type	Public or Private on-site

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List price                      Call for price

This course teaches programmers who can write basic RPG IV programs using the i5 (iSeries) RPG IV compiler (Version 5), additional skills and techniques. This class is a comprehensive exposure to intermediate features and functions of RPG IV for Version 5.

### Abstract

This class is a comprehensive exposure to intermediate features and functions of RPG IV for Version 5.

### Audience

This course is the second in a series of three classes designed for programmers who are new to RPG IV. Basic programming experience using RPG IV is mandatory. The student should have attended AS06/S6197.

This course is not designed for RPG III programmers who want RPG IV. RPG III programmers should attend the Moving from RPG/400 to iSeries and AS/400e RPG IV class (OE85/S6126) rather than this class. RPG III programmers should review the agenda carefully before they make a decision to attend this class.

In those geographies where OE85/S6126 is not offered, PRG III programmers can attend this course, assuming they meet all prerequisites.

Note: This course focuses entirely on the latest features of the RPG IV for Version 5 compiler and the features that this compiler provides.

Previous techniques and the maintenance of programs written using legacy techniques are not covered in the classroom. Some additional material and the bibliography will assist the students in the maintenance of legacy applications.

### Pre-requisites

Before attending this course, the student should be able to:

- Use a Windows-based PC
- Run PC applications using menus, icons, tool bars, etcetera

The following skills are taught in OL49/S6149:

Use basic OS/400 navigation tools including:

- Use and prompt CL commands
- Use online Help
- Manage output using WRKSPLF and related commands
- Perform basic problem determination using DSPMSG, DSPJOB, and so forth

Use and display iSeries print queues

Use basic CL commands such as WRKJOB and DSPMSG

Use the Program Development Manager, Source Entry Utility or RSE LPEX editor to create and maintain RPG IV source members

Create and maintain physical and logical files

The following skills are taught in AS06/S6197:

- Write simple RPG IV version 5 programs to produce reports
- Write simple RPG IV version 5 inquiry programs that interact with displays
- Use the editor to enter and modify source programs compile RPG IV programs
- Review compilation listing, find and correct compilation errors
- Maintain existing applications written in the RPG IV (version 5) language
- Use the Debugger tool to determine the cause of incorrect results
- Use many popular RPG IV Built in Functions

Students must have attended these courses prior to attending this class:

- *Introduction to System i for New Users (OE98/S6108)*
- *Application Programming Facilities Workshop for System i (OL49/S6149)*
- *RPG IV Programming Fundamentals Workshop for System i (AS06/S6197)* **or** have equivalent experience.

Attendance at *System i Application Development using WDSC V6 (AS86/S6586)* is strongly recommended.

### Objective

After completing this course, you should be able to:

- Use OVERLAY and related DDS keywords to develop efficient interactive programs
- Write interactive programs that support inquiry of subfiles
- Write interactive programs that support maintenance of subfile records
- Use arrays and data structures in RPG IV programs

- Develop RPG IV programs that anticipate and manage common errors and exceptions
- Define date and time data
- Calculate durations between two dates
- Extract month, day or year components of date data
- Use prototyping to Call other programs
- Write RPG IV subprocedures
- Write ILE modules and include those modules in program objects using bind by copy and bind by reference

### **Key topics**

- Welcome and Administration
- Managing Display Record Formats
- Using Arrays
- Using Data Structures and Data Areas
- Using Subfile Displays
- Managing Exceptions and Handling Errors
- Processing Date and Time Data
- Prototyped Calls
- Using Subprocedures
- Introduction to ILE
- What's Next?