

# Introduction to Programming Concepts and Facilities for IBM i (iSeries, AS/400)

5 Days (65% Lecture, 35% Workshop)

This class provides an introduction to the IBM i (iSeries, AS/400) for Programmers and other technical staff that need to understand the technical capabilities of the IBM i.

The class focuses on the programming concepts and facilities, programming development tools, and DB/2 Database concepts and utilities. The class teaches the use of the IBM WDS Toolset including PDM, SEU and SDA. Several programs will be written, tested and debugged during this class. An introduction and overview of the IBM Rational Development Toolset (RDi) is also provided.

This class serves to fill the prerequisites for our Programming Workshops in RPG IV, COBOL/400 and Control Language.

**Prerequisites: None.**

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## Course Outline

### Introduction to IBM i, AS/400, iSeries

- Brief History of the IBM i
- IBM i Operating System Architecture
- Communication Capabilities
- Programming Languages

### The IBM i User Interface

- The Menu System
- The System's Control Language
  - The Command Line Interface
  - CL Commands and Parameters
  - The Command Prompt Facility
- Using the F1=Help Facility
- Tailoring Your Assistance Levels
- Using the ATTN and SysReq Keys
- Creating and Viewing Printed Reports
- Messages and Message Queues
  - Sending & Viewing Messages

### The Object Based Architecture

- Library and Object Concepts
- Object Types and Attributes
- The Job Library List – The QTEMP Library
- Libraries, Objects and Members

### Using PDM (Program Dev Manager)

- Working with Libraries, Objects and Members
- Working with PDM User Defined Options

### Using Source Entry Utility (SEU)

- The Source Code Edit Display
- SEU Line Commands
- Find/Change Browse/Copy Save Options

### Creating Control Language Programs

- Entering CL Source Code using SEU
- Compiling and the Compiler Options
- Running CL Programs

### Integrated Database Concepts

- DB2 Relational Database Support

- Database Capabilities
- Journaling and Commitment Control Usage
- Data Description Specifications
- Creating Physical Files
- Using Field Reference Files
- Creating Logical Files, Views and Indexes
- File Access Using Data File Utility (DFU)
- Using Interactive SQL with STRSQL

### Using IBM's Query for i

- Defining and Changing a Query
- Selecting Output and Reporting Options
- Defining Result Fields in Query
- Using Expressions in Query
- Joining Files in Query

### Using Data Areas

- Create, Access and Manipulate Data Areas
- The \*LDA and Persistent Data Areas

### System Values Overview

### Work Management Concepts

- Interactive and Batch Jobs
- The Job Description Object
- Controlling Jobs
- Submitting and Scheduling Jobs
- Understanding Job and Output Queues
- Finding and viewing your Printed Output

### Security Concepts Overview

- System Level Security
- Working with User Profiles
- Special Authorities & Limited Capabilities
- Object Authorities (Permissions, ACL)

### DDS for Display Files

### Using The Screen Design Aid (SDA)

- Creating IBM Style Menus
- Creating Simple Displays
- Adding Constants and Data Fields

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For more information, call (314) 932-2430 or (800) 936-3140  
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Importing Database Field References

**Other Considerations - Overview**

The Integrated File System

IBM i Navigator for Windows (OpsNav)

Intro to Rational Developer for IBM i

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