

**Course name:** Advanced Fast Track New RPG Developers

**Course code:** ISAFT

**Duration:** 4 days

**Course cost:** £ 2150

**Course Outline:**

This course has been designed as an advanced fast track for new graduates or programmers in other languages, who have attended the Fast Track for new Developers in RPG course.

The course consists of 2 days covering advanced RPG functions: review of RPGIV and free format definitions, using date functions, arrays, data structures, data areas. Then 2 days covering an introduction to subfile programming and including SQL in RPG.

**Pre-requisites:**

This course is intended for delegates who have attended the Fast Track for new Developers in RPG course.

Note: The course content can be customised to suit your requirements if it is run onsite or at our premises for the same customer. Other topics available include: ILE concepts and modules, Journaling and Commitment Control, Sub-procedures. Please contact us for further details.

**Course Content:**

**RPGIV Review & Update**

- Free Format Coding
- Operation Codes & Built-In-Functions
- Control Specification (H-spec)
- File Declaration
- Variable Definitions

**Date and Time Variables**

- Introduction to Date, Time and Timestamp
- Data Conversions BIF's
- Built in Functions for data manipulation
- Date, Time, Timestamp validation (TEST)
- Null Capable Fields

## **Arrays**

- What is an Array?
- Array definition
- Array Data
- Array Functions
- Using Arrays

## **Data Structures**

- Introduction to Data Structures
- The Data Structure definition
- Special Data Structures (Program / File)
- Populating Data structures
- Free format Data Structure declaration
- External and Multiple definitions
- External Data Structures
- Overlaying Arrays
- Multiple Occurrence Data Structures
- Multi-Level Data Structures
- Sort & Search Multi-Level Data Structure

## **Data Areas**

- Data Areas
- Defining a Data area to RPG
- Auto controlled data areas
- Data In / Out / Unlock
- Free format Data Area Definition Statements

## **Introduction to Subfiles**

- Subfile Concepts
- Subfile Display file definition
- Subfile Control Keywords
- Full DDS for Review
- "Load All" Subfile
- "Load All" Technique
- Manage Subfile Data
- Use Subfile Data
- Current page and Error control
- Expanding Technique
- Coding PAGEUP/PAGEDOWN: DDS
- Expanding Subfile – Program Logic
- Load, Clear and Display
- Additional DDS Keywords
- Control Keywords
- Sample Control Keywords DDS
- Subfile Format Keywords
- More Than One Subfile on a Display

### Including SQL in RPG

- Introduction
- SQL Pre-Compilation
- Using Host Variables
- Using SELECT in RPG code
- Avoiding Run time errors - SQLCA
- INSERT, UPDATE, DELETE in RPG
- SQL Commands for file maintenance
- Add rows - INSERT INTO
- Maintain Rows - UPDATE or DELETE
- Transaction Integrity
- 'Journaling' commands
- Embedded SQL Statements
- Using a Results Table
- DECLARE CURSOR
- OPEN & CLOSE
- FETCH
- Maintenance of Current Row
- Dynamic Embedded SQL
- EXECUTE IMMEDIATE
- PREPARE / EXECUTE
- Parameter Markers
- PREPARE with CURSOR method
- Variable Field Selection

### Schedule 2024:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

We can run this course at our location or on your site – Please contact us for details.

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