Introduction to PL/I Programming

INFORMATION SERVICES INTERNATIONAL
A SENCO COMPANY

Duration: 5 days **Course Number:** ISI-PLI-01

Description

This course will introduce students to the skills necessary to code PL/I programs in z/OS and OS/390 environments. The student will learn to:

- Use PL/I statements to perform stream I/O.
- Perform arithmetic calculations and character operations.
- Use such PL/I programming constructs as:
  - IF statements.
  - SELECT-WHEN constructs.
  - DO-WHILE and iterative DO loop sequences.
- Read and write sequential datasets.
- Code user-developed PL/I subroutines and functions.
- Use list-directed and edit-directed stream I/O.
- Use structures and picture variables.
- Use record I/O.
- Create, load, and search tables.
- Use automatic, static, based, and controlled variables.
- Compile and linkedit PL/I programs.

A series of written and lab exercises will be used to reinforce the classroom education.

Audience

Programmer, technical support personnel, and any other individuals that have a need to write PL/I programs.

Prerequisites

- **Introduction to z/OS**, or equivalent experience.
- **TSO/ISPF**, or equivalent experience.
- Previous experience in designing and coding application programs will enhance the results of this course.

Phone: 888-811-0204
Cellular: 916-549-6306
Fax: 419-844-5564
E-mail: ISI@sencoinc.com
1516 N. Elmhurst Road #168
Mt. Prospect, IL 60056

Course Agenda

Introduction to PL/I

PL/I Language Basics

- Statement Syntax
- Variables
- Assignment Statement
- GET LIST Statement
- PUT LIST Statement

Compiling and Executing Your Program

- JCL Requirements for Compiling and Linkediting the Program
- Interpreting the Compiler Output
- PL/I Compiler Directives
- Executing the PL/I program
- PL/I Debugging Facilities

Conditional Processing

- IF-THEN-ELSE Statement
- Do-Groups
- SELECT-WHEN Sequence
- Conditions and ON Units

DO Loops

- Iterative DO Sequence
- DO-WHILE-END Sequence
- DO-UNTIL Sequence
- DO LOOP Sequence
- LEAVE Statement
- ITERATE Statement
- EXIT Statement
- GOTO Statement

Phone: 888-811-0204
Cellular: 916-549-6306
Fax: 419-844-5564
E-mail: ISI@sencoinc.com
1516 N. Elmhurst Road #168
Mt. Prospect, IL 60056

Course Agenda (continued)

PL/I Built-in Functions

- String Functions
- Date/time Functions
- Arithmetic Functions
- Mathematical Functions
- Array-handling Functions

User-defined Subroutines and Functions

- Defining Subroutines
- Using Subroutines
- Defining Functions
- Using Functions

Files and Stream I/O

- Declaring Files
- List-directed I/O
- Edit-directed I/O

Record I/O and Structures

- Declaring Files
- READ Statement
- WRITE Statement
- Structures
- Pictures

Table Processing

- Overview
- Declaring Tables
- Loading Tables
- Searching Tables
- Limiting Table Searches

Phone: 888-811-0204
Cellular: 916-549-6306
Fax: 419-844-5564
E-mail: ISI@sencoinc.com
1516 N. Elmhurst Road #168
Mt. Prospect, IL 60056

Course Agenda (continued)

Advanced Variable Topics

- Scope Of Variables
- AUTOMATIC Variables
- STATIC Variables
- BASED Variables
- Pointer Variables
- CONTROLLED Variables
- Dynamic Arrays

Phone: 888-811-0204
Cellular: 916-549-6306
Fax: 419-844-5564

E-mail: ISI@sencoinc.com

1516 N. Elmhurst Road #168
Mt. Prospect, IL 60056