

# REXX Programming under TSO/ISPF

Learn via: **Classroom**

Duration: **3 Day**

<https://bilginc.com/en/training/rexx-programming-under-tso-ispf-2536-training/>

**Overview** REXX is a powerful multi-purpose and user-friendly programming tool used to exploit many IBM and third-party operational products. It is the tool of choice in most (if not all) of today's larger data centres for those who need to implement new operational procedures both quickly and effectively. This three-day course is designed for TSO/ISPF users who wish to learn how to create and use programs in the REXX language. The course is taught combining formal classroom teaching with many practical exercises and problem scenarios, thus ensuring a full understanding of this powerful procedural language. This course is also available for one-company, on-site presentations and for live presentation over the Internet, via the Virtual Classroom Environment service.

## Prerequisites

An understanding of programming at a conceptual level and a good knowledge of TSO and its commands. A superficial knowledge of ISPF/PDF is insufficient for those who wish to gain full value from this course.

## What You Will Learn

- describe the concepts and structure of the REXX language environment
- write and debug REXX programs executing in the TSO environment
- use the tracing and debugging aids effectively
- use the loop control and decision making instructions
- identify and put into practice the most commonly used REXX built in functions
- parse data strings
- use TSO commands and functions within REXX EXECs
- manage I/O using data stacks and stems
- use sub-routines and functions.

## Outline

### **Introduction to TSO REXX**

Executing REXX EXECs; elements of the REXX language: Clauses, Tokens, Labels, Assignments, Instructions and Commands; constant and variable symbols; Simple, Compound & Stem variable symbols; operators for concatenation, arithmetic, comparison & logical operations.

### **Tracing and Debugging**

Using TRACE instruction for debugging; using immediate commands HI, HT, TS and TE; use of EXECUTIL; interpreting TRACE output.

### **Parsing Strings**

Parsing variables and strings; basic parsing techniques; special templates; place holders, literal patterns and numeric patterns.

### **Control Instructions**

Decisions: IF, THEN, ELSE, SELECT, WHEN, OTHERWISE; creating and controlling loops: DO WHILE, UNTIL, FOREVER, LEAVE, ITERATE; introduction to sub-routines.

### **Sub-routines and Functions**

Internal and external sub-routines; how to create internal and external functions; passing arguments and results to and from sub-routines and functions; CALL; RETURN; EXIT; PROCEDURE; RESULT.

### **REXX Built-in Functions**

Introduction to REXX supplied built in functions; how to use the most useful ones: ARG, DATE, TIME, DATATYPE, LENGTH, POS, WORDS, LEFT, RIGHT, STRIP, SPACE, COPIES and WORD.

## **Data Stack Management**

LIFO and FIFO stacking; avoiding the stack; writing to the stack: PUSH and QUEUE; reading from the stack: PARSE PULL; creating and managing extensions to the stack: MAKEBUF, QBUF and DROPBUF; interrogating the stack: QUEUE, QELEM; creating and managing private stacks: NEWSTACK, DELSTACK and QSTACK.

### **Using TSO Commands & Functions**

Using TSO commands and functions: SYSDSN, LISTDSI, MSG, OUTTRAP, PROMPT and SYSVAR; reading and writing datasets with EXECIO.