

MAINFRAME APPLICATION PROGRAMMING

COURSE CURRICULUM | COURSE CODE C006

8

MODULES

60 hrs

TOTAL INSTRUCTION

EVILT

DELIVERY METHOD

None

PREREQUISITES

MAINFRAME APPLICATION PROGRAMMING CURRICULUM

MODULES 1 – 3

MODULE

1

Introduction

You will be understanding the concepts of Z series Mainframe and its Operating System. Learn the evolution of Mainframes.

- Introduction to Z Series Mainframe, ZOS and Software used in the System
- ZOS Concepts
- Connecting Mainframe Server thru Emulator
- Online Vs Batch Processing

MODULE

2

TSO-ISPF

You will be learning how to connect to Mainframe and start using the Menus and its varied Options.

- Creating PS and PDS
- Working with Datasets using Primary commands and Line commands
- Using Utility Options 3.2, 3.3, 3.4, 3.13, 3.14

MODULE

3

JCL

You will be learning the concepts of JCL (Job Control Language) that acts as an interface with ZOS and Programs. Also, you will be learning about IBM utility programs.

- JCL Introduction, JES3 subsystem
- Job card and its Parameters (Positional and Keyword)
- IBM Utility IEFBR14
- IBM Utility IEBGENER
- Temp Files, COND parameter
- IBM Utility IEBCOPY
- IBM Utility SORT
- PROC (Catalog)
- RESTART / Overriding Parameters

MAINFRAME APPLICATION PROGRAMMING CURRICULUM

MODULES 4 – 5

MODULE 4	VSAM	You will be learning advanced file management system namely VSAM and how to create and store data in it. VSAM and its Advantages over PS. • VSAM file Types • Data Organization in VSAM files • ESDS and KSDS file Creation and REPRO • LISTCAT • AIX Creation • Build Index
MODULE 5	COBOL	You will be learning on how to use one of the most used programming languages of the World namely COBOL and how to write logical programs with data from varied sources like SYSIN, files and Database. • COBOL Introduction • DIVISION, SECTIONS, PARAS, SENTENCES, STATEMENTS • ACCEPT / DISPLAY / STOP RUN Commands • Evaluation Expression like IF, EVALUATE • MOVE Command in detail • PARAs • INLINE and OUTLINE PERFORM • Arithmetic Expressions • ROUNDED, ON SIZE ERROR • Arrays • SEARCH / SEARCH ALL • Sequence control statements GO TO, SEQUENCE, EXIT, CONTINUE, NEXT SENTENCE, GOBACK • Using PS files as Input and Output • Using VSAM files as Input and Output • VSAM files in Random and Dynamic Processing • Common Production Abends • Sub programs • Static and Dynamic Calls • Report Writing concepts • Page Break Logic • Using Copybooks

MAINFRAME APPLICATION PROGRAMMING CURRICULUM

MODULES 6 – 7

MODULE

6

DB2

You will be learning about Basic SQL and how to create Table and use the Table. You will be learning on how to write COBOL programs with data from DB2 Tables.

- Views
- Different types of Joins
- Union, Union All
- Sub queries
- DCLGEN (Host Variables)
- SQLCA
- Writing simple COBOL-DB2 Programs
- Reading a file and inserting data into an Empty Table
- Cursors
- Commit / Rollback
- Db2 Compilation procedure

MODULE

7

CICS

You will be learning how to write real time programs using CICS command level programs by embedding CICS commands in COBOL programming language.

- BMS Concepts
- Creating Multiple Maps in a Mapset
- Creation of Symbolic Map
- Pseudo Conversational Programming Technique
- Writing Pseudo Conversational Programs
- Understanding Mapfail condition
- Understanding variables in DFHEIBLK
- COMMAREA
- Copybooks DFHAID, DFHBMSCA
- LINK / XCTL
- Using VSAM KSDS files in Online
- Writing Programs using KSDS files
- Using Db2 Tables in Online CICS Region
- ASKTIME, FORMAT TIME
- TSQ and TDQ on a high level

MAINFRAME APPLICATION PROGRAMMING CURRICULUM

MODULES 8 – 8

MODULE

8

Capstone Project

3 Weeks

- Soft skills (1 Week): Written Communication, Visual Communication, Non-Verbal Communication, Body Language, Leadership
- Aptitude skills (1 Week)
- Resume Preparation (1 Day)
- Interview Preparation (1 Week)
- Mock Tests (2 Days)
- Mock Interviews (2 Days)

COURSE DETAILS

Course Overview

- Learn all the necessary skills of Mainframe Software Technology and Industry required soft skills to become a full-fledged Mainframe Software Engineer and create Full Stack Applications in 3 months' time
- Learn tips on how to come up with programming logic from user requirements
- Learn how to write complex programs with multiple input and output files and databases
- Learn how to design Online Screens and write full stack programs
- Learn how to quickly debug coding errors and resolve run time Abends
- Learn the art of Softskills like written communication, email etiquette, Body language required for a Software Industry

Course Activities

- Full stack concepts of JCL, VSAM, COBOL, DB2 & CICS are covered as a part of the course with complete HANDS ON
- A Strong foundation on fundamental concepts that are necessary in Real time Projects are covered
- Softskills Training to improve your communication, Aptitude skills and many more
- 100% Assured placement considering your performance and market dynamics

Target Audience

1. Engineers who wanted to kick start their IT career
2. BSc/BCA/MCA Graduates who wanted to join the revolution of IT Industry
3. Graduates who couldn't enter into Software Industry for last 3 years since they have passed out
4. Graduates who need a better foundation for a Successful IT career

Delivery Method

Ez-Learn Virtual Instructor Led Training (EVILT)

Course Duration

60 Hrs

Prerequisites

None

Recommended Training

Batch of People (Online)

Learning Path

<https://www.ez-learn.global/mainframe-application-programmer/>