b1Online trainings
Global Learning Portal

SAS BI Course Content:35-40hours

Course Outline
SAS Data Integration Studio 4.2

- Introduction * to SAS DIS Studio
- Features of SAS DIS Studio
- Tasks performed by SAS DIS Studio
- Navigation to SAS DIS Studio
- Registering Source Tables Metadata
- Register *metadata for existing SAS data sets
- Register metadata for a relational database accessed through an ODBC Driver
- Register metadata for an external flat file (.csv, .txt files)
- Registering *Target Tables Metadata
- Register target metadata for dimensional and fact tables
- Creating *a Job to load target tables
- Dimensional Tables
- Fact Table
- Creating the Star Schema Design (Implementing Slowly Changing Dimension Concepts)
- Applying *Transformations
- **Slowly Changing Dimensions**
- SCD Type2 Loader
- Fact Table Lookup
- Surrogate Key Generator
- Key Effective Date
- Data Transformations
- Proc SQL
- Lookup Table
- Append
- Extract
- Validate
- Return Code Check
- Data Transfer
- Sort
- Rank
- Splitter

- Control Table
- User Written Code
- Create Transformation Template
- Transpose
- **Data Access Transformations**
- File Reader
- File Writer
- Table Loader
- **Analysis Transformations**
- Frequency Report
- One-Way Frequency Report
- Summary Report
- Tabulate Report
- Print Report
- Standardize
- Converting a report job to a Stored Process
- Scheduling Jobs in DIS
- Metadata Sharing
- Metadata Synchronization
- Creating Project and Custom Repositories
- Setting up Change Management for Project Repository
- Creating a Job that contains Jobs
- Creating Status Handlers for the Jobs
- Impact and Reverse Impact Analysis

SAS OLAP Cube Studio 4.2

- OLAP Introduction
- OLAP* Components / ArchitectureOLAP Models
- ROLAP * MOLAP * HOLAP
- Discuss Dimensions / Facts / Hierarchies / Levels / Measures / Ragged Hierarchies / Aggregation
- Introduction to SAS OLAP * Cube Studio Tool
- Features of SAS OLAP Cube
- Tasks performed by SAS OLAP Cube

SAS OLAP Server benefits

- Navigation to SAS OLAP Cube Studio
- Steps to create an OLAP * Cube
- Creating an OLAP * Cube using the cube designer:
- Create an OLAP Cube from Detail Table (ROLAP)
- Create an OLAP Cube from Star Schema (ROLAP, HOLAP)

- Create an OLAP Cube from Summarized Table
- Create an OLAP * Cube with the following features:
- Dimensions * Levels * Hierarchies
- Measures * Aggregates
- Review the Cube design and structure
- Exploring OLAP * Cube with
- SAS Enterprise Guide
- SAS Information Map Studio
- Microsoft Office Excel
- SAS WRS
- Performing Cube Updates
- Incremental Update to OLAP Cube
- In-Place Cube Update
- Introduction to MDX queries

SAS Management Console 9.2

- Introduction to SAS Management Console
- Navigation in SAS Management Console
- SAS Open Metadata Architecture
- Introduction to Metadata * Centralized Metadata Management
- SAS Metadata Server
- Connecting to the Metadata Server
- Introduction and Working With Metadata Repositories
- Client / Server Interactions
- Create a Custom and Project Repository
- Replication and Promotion of Metadata
- User Manager plug-in
- Introduction to SAS Application Servers and defining the SAS Application Servers and various
- other servers from SAS Management Console
- Security planning for the user and user groups
- Access control planning
- Data Library Manager plug-in * Defining a data library
- Setting up Change Management
- Creating a new metadata profile from SAS ETL Studio
- Using Job Scheduler plug-in ** Define a SAS Batch Server
- Define a Scheduling Server
- Create and Schedule a job
- Introduction to Stored Process and creating Stored Process
- Additional Topics (Database Server, Database Schema, Data Library)

SAS Enterprise Guide 4.2

- Introduction to SAS Enterprise Guide
- SAS Enterprise Guide Framework ** SAS EG Building Blocks
- SAS EG Navigation
- Create a Project
- Add data to the Project: ** Adding local SAS table
- Accessing remote data (Self Study)
- Adding spreadsheet to a project
- Adding text file to a project as a SAS dataset
- Creating various Report * Tasks
- List Report
- Frequency Report
- One-Way Frequency Report
- Two-Way Frequency Report
- Generating Summary Statistics
- Create Tabular Summary Report
- Creating a Graph
- Create various Data * Transformation
- Filter * Sort * Rank
- Transpose * Splitter * Append
- Introduction to Query Builder ** Setting a filter and selecting columns
- Creating new columns in a query
- Replacing values in a query
- Joining *Tables
- Inner Joins
- Outer Joins
- Creating and applying custom formats
- Creating *Advanced Queries
- Controlling Query Output
- Creating and applying parameterized queries
- Grouping and Filtering data in a query
- Additional *Topics
- Automating projects and processes
- Creating customized Process Flow
- Modifying SAS Code
- Customizing Task Code
- Exporting SAS Code
- Customizing the Outputs
- Style Manager
- Document Builder
- Project View
- Viewing an OLAP Cube with SAS Enterprise Guide
- Viewing an Information Map with SAS Enterprise Guide

- Create and Register Stored Process from SAS Enterprise Guide

SAS Information Map Studio 4.2

- Introduction to SAS Information Map Studio
- Navigating SAS Information Map Studio
- Access and source data from SAS Information Map Studio
- Updating an Information Map with filters, prompts, folders and new data items
- Building an Information Map from:
- SAS Datasets (Relational SAS Information Map)
- OLAP Cube (Multi Dimensional Information Map)

SAS Web Report Studio 4.2

- Introduction and Navigation to SAS Web Report Studio Interface
- Understanding the Tasks performed within SAS Web Report Studio
- Creating Basic reports by using New Report and Report Wizard
- Create a Web Report from Detail table and OLAP cubes Information Maps
- Managing Existing Reports
- Searching a report
- Navigating report folders
- View report definitions
- Storage locations for reports
- Report actions available (Edit/Rename/Move/Copy/Delete/Rename/Schedule)
- Scheduling & Distributing Report

SAS Stored Process 4.2

- Introduction to SAS Stored Process
- Building Registering and * Testing Stored Process
- SAS Enterprise Guide 4.2 (Create, Register and Test)
- SAS Data Integration Studio (Create and Register)
- SAS Management Console (Registration)
- Access Stored Process from SAS Web Report Studio / SAS Information Map Studio / SAS Stored
- Process Web Applciation
- Create Stored Process with Prompts.

SAS Stored Process Web Application 4.2

- Introduction to SAS Stored Process Web Application

- Viewing SAS Stored Process from Web Application
- Managing Stored Process from Web Application

SAS Add-In for Microsoft Office 4.2

- Introduction and Navigation to SAS Add-In for Microsoft Office
- Connecting to the SAS Metadata Server from Microsoft Excel
- Inserting SAS Data into Microsoft Excel ** Accessing SAS data
- Filtering SAS data
- Sorting SAS data
- Selecting and Ordering columns
- Analyzing with SAS Tasks in Microsoft Office
- Access and Analyze SAS OLAP Cubes from Microsoft Office
- Running Stored Process from Microsoft Excel
- Customizing the Output Style

Data Warehousing and Business Intelligence Concepts Data Warehousing

- Data *Warehouse Introduction
- Steps to Design Data Warehouse
- Components of Data Warehouse
- Approaches to Data Warehouse Designing
- Data Modeling types: ** Normalized Data Model (Databases)
- Dimensional Data Model (Data Warehouses)

Business Intelligence

- Business Intelligence Introduction
- SAS Business Intelligence * Architecture
- Client Tier – Middle Tier – Server Tier
- Introduction to Metadata ** Types of Metadata
- SAS Centralized Metadata Repository
- Advantages of SAS Centralized Metadata Repository
- About Metadata Profile
- Data Model's ** Normalized Relational Data Model (Entity-Relationship)
- Dimensional Data Model ** Star Schema Design
- Snowflake Schema Design
- Dimension Tables
- Steps in designing Dimensional tables
- Conformed Dimensions
- Junk Dimensions
- Degenerate Dimension
- Slowly Changing Dimension (Type1, Type2 & Type3)

- Fact *Table
- Steps in designing Fact tables
- Types of Fact tables *Additive * Semi-Additive * Non-Addit