**Introduction to SSAS**

▪ **Data warehouse Concepts**

▪ **SSAS: Tabular & Multidimensional**

**Data warehouse Architecture**

▪ **Need for Cubes and Measures**

▪ **Identifying Facts and Dimensions**

▪ **Identifying Measures and Aggregates**

▪ **Identifying Attributes and Hierarchies**

▪ **Data warehouse Design Principles**

▪ **Staging operations and usages**

**Basic SSAS Entities**

▪ **Data Source and Data Source Views**

▪ **Manipulating structures in DSV**

▪ **Computed and Named Queries**

▪ **Building Entity Relationships**

▪ **Deciding Datawarehouse Schema**

**Dimension Wizard**

▪ **Creating Dimensions and Builds**

▪ **Attributes and Member Names**

▪ **Choosing Dimension Templates**

▪ **Applying Time Dimensions**

▪ **Need for Hierarchies** **and** **Limitations**

▪ **Attribute Relations and Uses**

▪ **Building Levels and Hierarchies**

▪ **Need for Composite Attribute Keys**

▪ **Creating empty Dimensions**

**Cube Wizard**

▪ **Planning for Cube Design**

▪ **Identifying Cube Entries**

▪ **Measures and Additives**

▪ **Creating Measure Groups**

▪ **Cube Customizations and Options**

▪ **Empty Cubes and Enhancements**

**Cube Operations**

▪ **Dimension Usage and Flexible Cubes**

▪ **Building Fact Dimensions**

▪ **Calculations and Conditional Colors**

▪ **MDX Scripting for Calculations**

▪ **Calculation Sets and Options**

▪ **Defining KPIs and Goals**

▪ **Perspectives and Uses**

▪ **SSAS Actions and Coding**

**SSAS Partitions and Aggregations**

▪ **Need for Cube Partitions**

▪ **Local and Remote Partitions**

▪ **Need for Storage Models**

▪ **Generation of Aggregations**

**MDX Specifics and Functions**

▪ **Need of MDX Language**

▪ **Complex MDX Queries**

▪ **MDX Functions & Limitations**

▪ **PARALLELPERIOD specifics**

▪ **Conditional MDX JOINS**

▪ **Cube and Dimension Writebacks**

▪ **MDX Transactions & Limitations**

**Managing Security**

▪ **SSAS Security Roles and Scope**

▪ **Object Level Access and MDX**

▪ **Drill-Through Security and MDX**

▪ **Item Level Security and DAX**

▪ **Dynamic Security Implementation**

▪ **Windows Level Authentications**

▪ **Security Audits and Query Logs**