

## Business Analysis Training Curriculum

### BA Introduction:

- SDLC (Software Development Life Cycle)
- Benefits of Business Analysis
- Role of Business Analyst
- Business process improvement
- Business Model
- Requirements Gathering process (System requirements, User Requirements)
- System Architecture Overview
- Analyzing requirements
- Group Case Study
- Defining Use Cases
- Requirements vs Use Cases
- Cause and Effect analysis for business analysis
- Decision tree for analysis
- Prototyping and simulation
- Wire frames
- Usability and User Experience
- Sequence and collaboration diagrams
- RDBMS Concepts (3 Normal Forms and BCNF, Data Schema)
- OLTP VS OLAP (Online Transactional Processing VS Online Analytical Processing)
- Relational VS Dimensional (normalized VS De-normalized)
- Different forms of data model – Conceptual, Logical and Physical data models
- Cardinality

- Defining entities and attributes

### Data Modeling Concepts:

- Entity Relationship model.
- Special Entity types. Associative entities and sub type entities.
- Identifying entities.
- Relationships – One to one, many to many and one to many.
- Classifying relationships using cardinality, degree of relationship.
- Nature of relationship – mandatory or non-mandatory
- Relationship syntax
- Direction of an entity – Parent and child entity or Independent and dependent entity.
- ER Notations – IE (information engineering), Barker, UML, IDEF1X.
- Assigning Keys – Primary and Foreign Keys, alternate keys.
- Non – Key attributes.
- Rules for primary keys

### Data Modeling Concepts & Erwin:

- ERWIN

### Data Modeling Hands on, Erwin:

- Using domains
- Using Industrial and IDEF1X notations.
- Using subject areas.
- Using Identifying and non-identifying relationships
- Forward and reverse engineering
- Erwin Hands on
- Generate schema (tables and synonyms) using the output from data modeling