

## **Certified Professional for Software Architecture (CPSA)**

1. Basic Concepts of Software Architecture
  - Definition of Software Architecture
  - Goals and Benefits of Software Architecture
  - Software Architecture as Part of Software Lifecycle
  - Task and Responsibilities
  - Role of Software Architects to Other Stakeholders
  - Correlation between development Approaches and Software Architecture
  - Short terms vs Long Term Goals
  - Explicit Statement and Implicit Assumptions
  - Software Architects Responsivities
  - Types of IT systems
  - Challenges in Distributed Systems
2. Design and Development of Software Architectures
  - Select and Use Approaches for Architecture Development
  - Design Software Architecture
  - Influence Software Architrave
  - Cross Cutting Concepts
  - Important Solutions Patterns
  - Design Principles
  - Dependencies between building blocks
  - Achieve Quality requirements
  - Design and Define Interfaces
  - Fundament of Software Deployment
3. Specification and Communication of Software Architectures
  - Technical Documentation
  - Communicate Software Architecture
  - Notation and Models
  - Use of Architectural View
  - Context View of Systems
  - Communication Cross Cutting Concepts
  - Interfaces
  - Architectural Decisions
  - Additional Resources and Tools for Documentation
4. Software Architecture and Quality
  - Quality Models and Characteristics
  - Quality Requirement for Software Architectures
  - Qualitive Analysis for Software Architectures
  - Quantitative Evaluation of Software Architectures
5. Example Of Software Architectures
  - Relation between Requirement, Constraint and Solutions
  - Solutions Technical Implementation