

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