Software Design Review Course

Learning Objectives:

1. Outline the software design process, and demonstrate how the essential design principles are applied within it.

2. Apply the concepts of concurrency, data persistence, error handling and security to a typical software design project.

3. Illustrate the essential elements of software structure and architecture in terms of styles, patterns and families of programs and frameworks.

4. Explain the application of user interface design to a software development project, including essential principles, interaction modalities, information presentation and the UI design process.

5. Demonstrate the application of quality analysis and evaluation principles, including quality attributes, analysis and evaluation techniques, and quality measures.

6. Explain through example the concept of design notations in terms of structure and behavioral descriptions.

7. Employ function, object, data-structure and component-based design methodologies in a typical software design project.