

# **TOPICAL COVERAGE**

- **Introduction to Software Engineering**
- **Software Estimation: Size, Effort and Cost**
- **Software Risk Management**
- **Quality Engineering for Software Quality Assurance**
- **Software Engineering Tools**
- **Systems Analysis**
- **Systems Design**
- **Introduction to Database Design**
- **User Interface Design**
- **Procedural Design and Use of Reusable Components**
- **Object Orientation and Object Basics**
- **The Unified Approach and Unified Modeling Language (UML)**
- **Object Oriented Analysis (OOA)**
- **Object Oriented Design (OOD)**
- **OODBMS: Object Store and DBMS**
- **Software Project Management**
- **Software Development Process Management**
- **Requirements Management**
- **Testing for Software Quality**
- **Special Topics in Software Engineering**
  - ☑ Web Applications Development Engineering
  - ☑ Component Based Software Engineering (CBSE)
  - ☑ Clean Room Software Engineering (CSE)
  - ☑ Software System Maintenance
  - ☑ Software Verification for QA
  - ☑ Software Engineering Support Tools
  - ☑ Software Project Management (PERT/CPM)
  - ☑ Re-engineering and Software Re-engineering
  - ☑ Software Configuration Management

## ➔ **Advanced Topics in Software Engineering**

- ☑ Development of Critical Systems
- ☑ Design: Issues and Guidelines
- ☑ Programming: Issues and Guidelines
- ☑ The Future of Software Engineering
- ☑ SE Code of Ethics and Social Responsibility