

# Stony Brook University Corporate Education & Training

Vice President for Economic Development



## Software Engineering and Design

### Unified Modeling Language (UML)

UML modeling techniques with real-world examples and case studies. This course emphasizes what these UML diagrams are intended to do and how to integrate them into the object-oriented requirement analysis and design processes. Attendees will practice modeling techniques that they can apply to their own projects.

- **UML Diagrams**
- **Communications Diagrams**
- **Class and Object Diagrams**
- **Composite Structures**
- **Component Diagrams**
- **Use Cases**

10-hours Fee: \$450 Begins Wednesday, June 7, 2006

### Software Engineering

This course presents a broad perspective on software system engineering, with a focus on fundamental techniques for developing complex software systems where reliability and dependability are essential system attributes.

- **Software Engineering Processes**
- **Requirement Engineering**
- **Critical Systems Specifications**
- **Distributed Systems Architecture**
- **Project Management**
- **System Modeling**
- **Architectural Design**
- **Object-oriented Design**

20-hours Fee: \$825 Begins Friday, June 9, 2006

### Software User Interface Design and Development

Software user interface design processes and user-centric development techniques. High-quality user interfaces for desktop, Web-based, and mobile interactive systems; introduces guidelines and principles of user interface design.

- **Direct Manipulation**
- **Command and Natural Languages**
- **Hands-on Programming**
- **Interaction Devices**
- **Interface Design**
- **Design Techniques**

20-hours Fee: \$825 Begins Thursday, June 15, 2006

### Software Testing and Quality Assurance

The most effective and efficient software quality assurance strategies and techniques, planning and testing, software development. Attendees will practice testing techniques that they can apply to their own projects.

- **Functional Cases (BlackBox)**
- **Structural Cases (Glass Box)**
- **Software Development**
- **Testing Techniques**
- **Integration Testing**
- **Assurance Strategies**

10-hours Fee: \$450 Begins Wednesday, July 12, 2006

Instructor: Dr. Zhao is a research assistant professor in Department of Computer Science at Stony Brook University. Dr. Zhao has extensive university teaching and corporate training experience.

**For complete course descriptions and schedules call 631-632-8433.**

Courses are held at

## Stony Brook University Center for Emerging Technologies

3500 Sunrise Highway, Suite D105 in Great River, NY

For a complete library of our course offerings:

**[www.sunysb.edu/sbucet](http://www.sunysb.edu/sbucet)**  
**631-632-8433**

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