

# CSP 587: Software Quality Management

## Texts

- S. Kan, *Software Quality engineering*, Addison-Wesley.

## Objectives

- Students will learn methods of software quality management.
- This will include exposure to software quality assurance, quality measures, and quality control.
- These quality management methods will be explained at the applications level.

## Prerequisites

- CS 487 or equivalent.

## Syllabus

• Quality Assurance Program	4 hours
◦ Software Product vs. Software process	
◦ Quality Assurance vs. Quality Control	
◦ Quality Management Process	
◦ Quality Cost	
• Quality Assurance Program	4 hours
◦ Types of Software Development Processes	
◦ Configuration Management	
• Software Quality Audits	3 hours
• Software Quality Attributes	3 hours
• Software Quality Metrics	5 hours
◦ Software Product Metrics	
◦ Software Process Metrics	
• Software Testing Techniques	3 hours
• Software Testing Strategies	3 hours
• Software Reviews	2 hours
• Software Reliability, Reliability Models	4 hours
• Software Quality Improvement	3 hours
• Statistical Software quality Assurance	6 hours
• Quality Appraisal Programs	5 hours
◦ SEI's Capability Maturity Model	
◦ ISO 9000	
Total	45 hours