

# Systems Analysis & Design

Class: COSC 2710

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## Basic Definitions

Stake Holder

Automated Testing

System Analysis

Process of studying an existing system to understand its requirements, identify problems, and define what the new system must work.

System Design

Takes requirements from analysis phase and creates a technical plan for building the software, including the architecture, databases, and user interfaces.

Systems

Group of interrelated components working together toward a common goal.

Process

logic and workflows that govern how data is moved and transformed within the system.

Technology

tools used to implement the solution.  
Examples: languages, servers, databases.

## Software Crisis

### Causes

Intangibility Software cannot be seen, touched, or measured.  
Complexity Software systems are inherently more complex than building bri-

### Symptoms(four horsemen)

Cost Overruns.  
Time First 90% of code takes 10% of time, last 10% takes another 90%.  
Quality Bugs, failures, poor performance.  
Expectations The final product often do what the user wants.