

# Topics in Software Engineering Course

## Multi-part Project Requirements

### Part 1: Software Security Planning

Students will create a hypothetical project they will use throughout the course. It can be anything you wish to do (medical records, smart phone app, machine learning app, anything you wish). This project will grow throughout the semester. For this first assignment you will hand in the following:

1. A document describing the system. This should broadly identify requirements, goals (remember the SMART acronym), purpose, and objectives. The document should also describe CONOPS and OPSCON. The document should also broadly describe major decision gates.
2. One engineering document. This can be your choice between a SEMP or Mission Element Needs Statement (MENS)

### Part 2: Requirements Engineering

Using your hypothetical project from lesson 1, you will create requirements documents. You will hand in a traceability matrix and at least one of the following:

1. Stakeholder requirements specification (StRS)
2. System Requirements Document (SRD)
3. A System Requirements Specification (SyRS)

### Part 3: System Design

Continuing with your hypothetical project you will create a minimum of 3 SysML/UML diagrams for your project

### Part 4: Testing Plan

You will create testing plans for your hypothetical project that will include how you will test, techniques you will use, how you will report tests, etc.