## Student Learning Outcomes (SLOs)

### Software Engineering Certificate – Graduate School

<table>
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<th>Outcome</th>
<th>Assessment Method</th>
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| **SLO1: Students will demonstrate the use of good software development models and techniques. (CSIS 602)** | **Measure 1:** Grade on a substantial software development project consisting of multiple deliverables covering both planning and execution. Each deliverable is evaluated independently.  
**Measure 2:** Exam question related to knowledge of software development models.  
**Performance Target:** For each measure, acceptable target achievement (short-term goal) – For each deliverable, grade of A- or better; ideal target (long-term goal) - 90% of projects with A average. Acceptable target achievement (short-term goal) – For each deliverable, grade of A- or better. Ideal target (long-term goal) - 90% of projects with A average without significant loss of scope. |
| **SLO2: Students will evaluate alternative designs and architectures for a software application.** | **Measure 1:** Team project: Details/Description: Students are required to complete a substantial software development project consisting of multiple deliverables, with emphasis on architecture and design. The ability to see architectural alternatives and make architectural decisions in the Software Architecture Document.  
**Performance Target** (short-term goal): 100% of teams will score 80% or higher on Software Architecture Document  
Ideal Target (long-term goal): 100% of teams will score 90% or higher on Software Architecture Document  
**Measure 2:** Exam question requiring students to demonstrate ability to evaluate alternative architecture designs. This is measured in CSIS 656. Acceptable target not set. |
| **SLO3: Students will demonstrate the ability to effectively work in a team.** | **Measure 1:** Summative assessment of teamwork on software development project at various points during the semester, including peer evaluations.  
**Performance Target** (short-term goal) – average rating of 4/5+ on team skills  
**Measure 2:** Presentations of software development project in CSCI 602  
**Performance Target:** No target set. |