

**Academic Program Assessment  
M.S. degree program in Statistics and Analytics (STANMS)  
Calendar Year 2020**

Submitted by Mark Arnold, Program Director  
5/3/2021

**Assessment of Student Learning**

**Indirect:**

**Curriculum and career advising before each semester (addresses outcomes (1-7).  
Scripted advising meeting includes student ratings of knowledge, skills and  
reflections of previous academic term.**

All of the students rated their knowledge and skill-set improvement as satisfactory to excellent.

**Annual student performance reviews (addresses outcomes 1-8).  
GSIE annual review form addended with STAN self-assessment form.**

53 of 55 STAN MS students as of 12/2020 made “satisfactory progress” toward their degree (our performance only distinguishes between “satisfactory” and “unsatisfactory” progress). In addition, the students who graduated 12/2020 or are cleared for graduation 5/2021 were not given performance reviews.

**Course grades (addresses outcomes 1-8).  
Graduation requires a grade point average of at least 3.0.**

STANMS had an enrollment 55 students in December 2020. The following statistics are based on all 55 as of the end of the Fall 2020 term: The average CGPA (each student weighted equally, not by number of completed hours) is 3.662. The lowest was 2.52, and the standard deviation was 0.35. STANGC (STAN Graduate Certificate) had an enrollment of 3 students, the average CGPA was 3.75.

**Formal exit interviews (addresses outcomes 1-8).  
Scripted interview requesting student ratings of their growth and their perspective  
on the health and efficacy of the program.**

17 students graduated from the STAN MS program (1/2020-12/2020). 9 are working in industry, 4 are enrolled in a PhD program, and 4 left US for work in their home country. All students indicated agreement with “This program encouraged personal growth toward my career goals” and “This program

facilitates stated skill and knowledge development”. Two students indicated desire for a STAN PhD degree program.  
Two students received a graduate certificate in 2020.

## **Direct:**

### **Annual student performance reviews (addresses outcomes 1-8). GSIE annual review form provides ratings of student progress by supervisor.**

53 of 55 currently enrolled STAN MS students made “satisfactory progress” toward their degree (our performance only distinguishes between “satisfactory” and “unsatisfactory” progress. In addition, 18 students graduated in 2020.

### **MS Comprehensive examination (addresses outcomes 1-8). Each track has examination rubric.**

Eight Students completed STAN *comprehensive examinations*. All passed on first attempt. The following is based on a scale of 0 (not pass), 1 (pass), 2 (good), 3 (very good) and 4 (excellent):

The average score was 3.1.

10 Students defended *MS theses*. All theses were accepted with revisions, and have been submitted. The following is based on a scale of 0 (not pass), 1 (pass), 2 (good), 3 (very good) and 4 (excellent):

The average score was 3.33.