Academic Program Assessment M.S. degree program in Statistics and Analytics (STANMS) Calendar Year 2022 Submitted by Mark Arnold, Program Director 6/19/2023

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.

29 of 30 STAN MS students as of 12/2021 made "satisfactory progress" toward their degree (our performance only distinguishes between "satisfactory" and "unsatisfactory" progress). In addition, the students who graduated 12/2022 or are cleared for graduation 5/2023 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 30 students in December 2021. The following statistics are based on all 30 as of the end of the Fall 2021 term: The average CGPA (each student weighted equally, not by number of completed hours) is 3.719, the lowest was 2.83, and the standard deviation was 0.326.

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.

11 students graduated from the STAN MS program (1/2022-12/2022). 6 are working in industry in US, 3 are enrolled in a PhD program, and 2 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". One student indicated a desire for a STAN PhD degree program.

Direct:

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

29 of 30 currently enrolled STAN MS students made "satisfactory progress" toward their degree (our performance only distinguishes between "satisfactory" and "unsatisfactory" progress. In addition, 11 students graduated in 2021.

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

7 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 3.3.

4 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 3.2.