ASSESSMENT PLAN

Department/Program: **Department of Mathematics and Statistics, Analytics and Modeling Graduate Program**
Student Learning Objectives (SLO) for MAJORS

1. **Students will communicate effectively about mathematical and statistical concepts, models, and complex data analysis, in both written and verbal formats.**
2. **Students will implement mathematical models and solutions to analytical questions in language(s) and tools appropriate for computer-based solutions, and do so with awareness of performance and design considerations.**
3. **Students will apply the skills and methods of the major for problem solving in data-intensive fields such as economics, meteorology, and biology, among others.**
4. **Students will engage in critical evaluation of how analytical and statistical data-derived models and conclusions in the wider world can be and are used or misused.**
5. **Students will gain practical experience in analytics and modeling skills within business or academic research.**

Outcome Measure	SLO's	Description of Departmental Use of Data
Each student will complete a significant project in CS 525 Simulation and Modeling and IT 633 Data Mining. At least one of these will include an oral presentation.	1,2	Presentations and final reports are evaluated by two or more faculty members initially and then reviewed by a department committee annually, which makes recommendations to the department and program director for action.
Grades in courses exterior to the Departments of Mathematics and Statistics or Computer and Information Sciences will be tracked. As part of their internship experience students will reflect on how their courses impacted the internship.	3	Data is reported to the program director/department chair after each semester and reviewed annually by the program director, which makes recommendations to the department for further action
Departmentally approved case study on data-related ethics included STAT 540 or ECON 525	4	Instructors of courses will report student's grades on this case-study, including long-term tracking. Instructors will make recommendations on changes to the program director or chair as appropriate.
Internship Reflections, Research Papers, and Surveys and Reports from Internship sites.	1,5	Internship Instructor(s) or Research Mentor(s) will report annually at Departmental meetings, and adjustments planned for subsequent year(s).

1. **Results—**Review activities and findings by completing the Assessment Activities Table below. You can also provide a brief discussion afterward if you feel it would help the committee understand your assessment activities and findings during this cycle.

Assessment Activities Table

This year we assessed SLO(s)… (list each SLO in its own row)	**…using Outcome Measure(s) (OMs).** (See Report Instructions for description and example) Direct OM(s): Indirect OM(s):	**Findings:** **program-performance for these SLOs, as indicated by these OMs, is: Excellent/Satisfactory/Needs Improvement** (See Report Instructions for description and example)	**Strategies for Improvement** **(in selected areas):** (See Report Instructions for description and example)
SLO1			
SLO2			
SLO3			
SLO4			
SLO5			

Discussion (Optional):

2. What **revisions**, if any, to current SLOs and/or outcome measures did you make from previous plan?

3. **Plans**- What learning objectives will you be assessing in the next cycle?