SOUTH DAKOTA BOARD OF REGENTS
ACADEMIC AFFAIRS FORMS
Substantive Program Modification Form

UNIVERSITY:	**SDSU**
CURRENT PROGRAM DEGREE:	**Ph.D.**
CURRENT PROGRAM MAJOR/MINOR:	**Computational Science and Statistics**
CURRENT SPECIALIZATION:	**Statistics**
CIP CODE:	**27.0303 – Major CIP** **27.0501 – Specialization CIP**
UNIVERSITY DEPARTMENT:	**Mathematics & Statistics**
BANNER DEPARTMENT CODE:	**SMAS**
UNIVERSITY COLLEGE:	**Jerome J. Lohr College of Engineering**
BANNER COLLEGE CODE:	**3E**

University Approval
To the Board of Regents and the Executive Director: I certify that I have read this proposal, that I believe it to be accurate, and that it has been evaluated and approved as provided by university policy.

Dennis D. Hedge — Vice President of Academic Affairs or President of the University

3/11/2026 — Date

1. **This modification addresses a change in:**
   - [X] Total credits required within the discipline
   - [X] Total credits of elective course work
   - [ ] Program name
   - [ ] CIP Code
   - [ ] Modification requiring Board of Regents approval
     Must have prior approval from Executive Director or designee
   - [ ] Total credits of supportive course work
   - [X] Total credits required for program
   - [X] Existing specialization
   - [X] Other: Admission Requirements
2. **Effective date of change: 2026-2027 Academic Year**
3. **Program Degree Level:**
   [ ] Associate [ ] Bachelor's [ ] Master's [X] Doctoral
4. **Category:**
   [ ] Certificate [X] Specialization [ ] Minor [ ] Major
5. **If a name change is proposed, the change will occur:**
   - [ ] On the effective date for all students
   - [ ] On the effective date for students new to the program (enrolled students will graduate from existing program)

   Proposed new name: ____
   Reminder: Name changes may require updating related articulation agreements, site approvals, etc.
6. **Is the program associated with a current articulation agreement?** No
   a. **If yes, will the articulation agreement need to be updated with the partner institution as a result of this minor program modification? Why or why not?**
7. **Primary Aspects of the Modification:**

Existing Curriculum				*Proposed Curriculum (highlight changes)*			
Pref.	**Num.**	**Title**	**Cr. Hrs.**	**Pref.**	**Num.**	**Title**	**Cr. Hrs.**
		60 Credit Plan				**72 Credit Plan**	
				CSS OR GE OR GE	890 701 702	Select two credits from the following courses: Seminar (1) Research Colloquium 1 (1) Research Colloquium 2 (1)	2
CSS	898D	Dissertation	21	CSS	898D	Dissertation	33
MATH OR MATH	515 770	Advanced Linear Algebra Numerical Linear Algebra	3	MATH ~~OR~~ ~~MATH~~	515 ~~770~~	Advanced Linear Algebra ~~Numerical Linear Algebra~~	3
MATH	571	Numerical Analysis I	3	~~MATH~~	~~571~~	~~Numerical Analysis I~~	~~3~~
MATH	625	Advanced Calculus	3	MATH	625	Advanced Calculus	3
MATH	741	Measure and Probability	3	MATH	741	Measure and Probability	3
MATH	773	Numerical Optimization	3	~~MATH~~	~~773~~	~~Numerical Optimization~~	~~3~~
STAT	684	Statistical Inference I	3	STAT	684	Statistical Inference I	3
STAT	685	Statistical Inference II	3	STAT	685	Statistical Inference II	3
STAT	686	Regression Analysis I	3	STAT	686	Regression Analysis I	3
STAT	687	Regression Analysis II	3	STAT	687	Regression Analysis II	3
STAT	715	Multivariate Analysis I	3	STAT	715	Multivariate Analysis I	3
STAT	716	Asymptotic Statistics	3	~~STAT~~	~~716~~	~~Asymptotic Statistics~~	~~3~~
STAT	721	Statistical Computing and Simulation	3	STAT	721	Statistical Computing and Simulation	3
STAT	752	Advanced Data Science	3	~~STAT~~	~~752~~	~~Advanced Data Science~~	~~3~~
				STAT	779	Advanced Statistical Synthesis	1
						CSS, MATH, or STAT Electives (approved by advisor)	9
						*Students may apply up to 24 credits of coursework from a previous M.S. degree to the Ph.D. requirements, subject to approval by the student's graduate advisory committee.	
		Total number of hours required for degree	60			Total number of hours required for degree	72

Additional Admission Requirements

Current:
GRE: Not required
TOEFL: 90 Internet-based
TOEFL Essentials: 9.5
IELTS: 6.5
Duolingo: 115

Three letters of reference with one being from master's advisor, a letter of research interest and intent with a focus on area of research interest, transcripts, and a resume.

Proposed:
GRE: Not required
TOEFL: 90 Internet-based
TOEFL Essentials: 9.5
IELTS: 6.5
Duolingo: 115

- Three letters of recommendation from individuals familiar with the applicant's academic performance, research potential, or professional experience (such as faculty members, research supervisors, or employers in a relevant field)
- Statement of research interests and intent, clearly outlining the proposed area of research

- Official transcripts from all previous academic institutions
- Current resume or curriculum vitae (CV)

8. Explanation of the Change:

The Department of Mathematics and Statistics is requesting approval to offer a 72-credit Ph.D. program for the Computational Science and Statistics (Ph.D.) – Statistics Specialization. The current program is a 60-credit plan of study that requires all Ph.D. students to hold a master's degree in a closely related discipline. The department proposes replacing the existing 60-credit program with a 72-credit program. The department proposes a 72-credit program which will be open to anyone who has a B.S. degree in mathematics, statistics, or a closely related field. Under the revised structure, students may apply up to 24 credits of coursework from a prior M.S. degree toward the Ph.D. requirements, pending approval from the student's Graduate Advisory Committee. This change will make the Ph.D. program available to more students instead of limiting the application pool to just those who have a master's degree.