



**SOUTH DAKOTA BOARD OF REGENTS
ACADEMIC AFFAIRS FORMS**

Substantive Program Modification Form

UNIVERSITY:	SDSU
CURRENT PROGRAM DEGREE:	Ph.D.
CURRENT PROGRAM MAJOR/MINOR:	Electrical Engineering
CURRENT SPECIALIZATION:	N/A
CIP CODE:	14.1001
UNIVERSITY DEPARTMENT:	McComish Department of Electrical Engineering and Computer Science
BANNER DEPARTMENT CODE:	SEEC
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

4/16/2025

Date

1. This modification addresses a change in:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Total credits required within the discipline | <input type="checkbox"/> Total credits of supportive course work |
| <input checked="" type="checkbox"/> Total credits of elective course work | <input checked="" type="checkbox"/> Total credits required for program |
| <input type="checkbox"/> Program name | <input type="checkbox"/> Existing specialization |
| <input type="checkbox"/> CIP Code | <input type="checkbox"/> Other (explain below) |
| <input type="checkbox"/> Modification requiring Board of Regents approval | |

Must have prior approval from Executive Director or designee

2. Effective date of change: 2025-2026 Academic Year

3. Program Degree Level:

Associate Bachelor's Master's Doctoral

4. Category:

Certificate 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:

6. Is the program being modified associated with a current articulation agreement? Yes No

- a. If yes, will the articulation agreement need to be updated with the partner institution following the approve of the program change? Please explain:**

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				60 Credit Plan	
EE	790	Seminar	3	EE	790	Seminar	3
EE	7XX	Courses with 700 level (EE prefix)	9	EE	7XX	Courses with 700 level (EE prefix)	9
EE	898D	Dissertation	36	EE	898D	Dissertation	36
		Additional Electives	12			Additional Electives	12
		90 Credit Plan				90 Credit Plan	
EE	790	Seminar	3	EE	790	Seminar	3
EE	7XX	Courses with 700 level (EE prefix)	12	EE	7XX	Courses with 700 level (EE prefix)	12
EE	898D	Dissertation	60	EE	898D	Dissertation	60
		Additional Electives	15			Additional Electives	15
						72 Credit Plan	
				EE	898D	Dissertation	30
						Select 6-8 credits from the following list:	6-8
				EE	536	Photovoltaic Systems Engineering	3
				EE	536L	Photovoltaic Systems Engineering Lab	1
				EE	554	Biomedical Instrumentation and Electrical Safety	3
				EE	560	Sensors and Measurements	2
				EE	560L	Sensors and Measurements Lab	1
				EE	569	Fundamentals of High-Performance Computing	3
				EE	575	Digital Image Processing	3
				EE	733	Advanced Power System Analysis	3
				EE	733L	Advanced Power System Analysis Lab	1
						Electives	34-36
						*Students may apply up to 24 credits of coursework and up to 6 research credits from a previous M.S. degree to the Ph.D. requirements, subject to approval by the student's graduate advisory committee. The 6 research credits transferred must be EE 798 Thesis or equivalent coursework.	
Total number of hours required for major			60 90	Total number of hours required for major			72
Total number of hours required for degree			60 90	Total number of hours required for degree			72

8. Explanation of the Change:

The McComish Department of Electrical Engineering and Computer Science is requesting an exception to SDSU Policy 2:17, which mandates that doctoral programs require a minimum of 90 credits. A 60- credit program may be completed provided the student has first completed a master's degree in a similar discipline. The department proposes a 72-credit Ph.D. program in Electrical Engineering. Students may apply up to 24 credits of coursework and up to 6 research credits from a prior M.S. degree to the Ph.D. requirements, subject to approval by the student's

graduate advisory committee. The 6 research credits transferred must be EE 798 Thesis or equivalent coursework.

These changes aim to streamline the Ph.D. program and align it with modern offerings at regional universities. The revised program will focus on courses directly supporting specific research areas. The seminar course is being discontinued in favor of specific graduate student professional development activities available from SDSU's Center for Professional Enrichment and Teaching Excellence (CPETE) program and the SDSU Graduate School.