



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

**Substantive Program Modification Form**

<b>UNIVERSITY:</b>	<b>SDSU</b>
<b>CURRENT PROGRAM TITLE:</b>	<b>Agricultural, Biosystems &amp; Mechanical Engineering (Ph.D.)</b>
<b>CIP CODE:</b>	<b>14.0301</b>
<b>UNIVERSITY DEPARTMENT:</b>	<b>Agricultural &amp; Biosystems Engineering</b>
<b>UNIVERSITY DIVISION:</b>	<b>Graduate School</b>

**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

4/27/2019

Vice President of Academic Affairs or  
President of the University

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 type="checkbox"/> Total credits required for program      |
| <input checked="" type="checkbox"/> Program name                                 | <input type="checkbox"/> Existing specialization                 |
| <input type="checkbox"/> CIP Code  | <input type="checkbox"/> Other (explain below)                   |

**2. Effective date of change:** 2020-2021 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: **Agricultural & Biosystems Engineering**

**6. Primary Aspects of the Modification:**

<i>Existing Curriculum</i>				<i>Proposed Curriculum (highlight changes)</i>			
Pref.	Num.	Title	Cr. Hrs.	Pref.	Num.	Title	Cr. Hrs.
ABE	763	Instrumentation	3	ABE	763	Instrumentation	3
ABME	790	Seminar	1	ABE	790	Seminar	1
ABME	792	Topics	3	ABME	792	Topics	3
ABME	898D	Dissertation	40-60	ABE	898D	Dissertation	40-60
GSR	601	Research Regulations	1	GSR	601	Research Regulations	1
ME	735	Modeling and Simulation	3	ME	735	Modeling and Simulation	3
ME	735L	Modeling and Simulation Lab	0	ME	735L	Modeling and Simulation Lab	0
STAT	541	Statistical Methods II	3	STAT	541	Statistical Methods II	3
		Electives ( <i>Selected by the individual with the committee</i> )	6-16			Electives ( <i>Selected by the individual with the committee</i> )	15-25
Total number of hours required for degree			60	Total number of hours required for degree			60
			90				90

## **7. Explanation of the Change:**

The Ph.D. in Agricultural, Biosystems, and Mechanical Engineering program as currently configured is a highly unusual format with a title that is not recognized in the participating disciplines. Qualified students with interest in pursuing research-based careers having backgrounds in Agricultural and Biosystems Engineering or Mechanical Engineering seek programs with names that reflect their specific disciplines. The Ph.D. in Agricultural, Biosystems, and Mechanical Engineering naming convention has hampered recruiting efforts and puts SDSU at a competitive disadvantage with its peers, not only in recruiting students and faculty, but also in competing for external funding. SDSU has requested authorization to offer a Ph.D. in Mechanical Engineering. This modification will update the Agricultural, Biosystems, and Mechanical Engineering program name to Agricultural and Biosystems Engineering.

The revisions to the Ph.D. in Agricultural, Biosystems, and Mechanical Engineering program are contingent upon approval of the Ph.D. in Mechanical Engineering.