SOUTH DAKOTA BOARD OF REGENTS
ACADEMIC AFFAIRS FORMS

Substantive Program Modification Form

UNIVERSITY:	SDSU
CURRENT PROGRAM TITLE:	**Precision Agriculture Minor**
CIP CODE:	**01.0301**
UNIVERSITY DEPARTMENT:	**Agricultural & Biosystems Engineering; Agronomy, Horticulture & Plant Science**
BANNER DEPARTMENT CODE:	**SPRA**
UNIVERSITY DIVISION:	**Agricultural, Food and Environmental Sciences**
BANNER DIVISION CODE:	**3F**

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.

_____   _____
Vice President of Academic Affairs or   Date
President of the University

1. **This modification addresses a change in:**
   - ☒ Total credits required within the discipline   ☐ Total credits of supportive course work
   - ☒ Total credits of elective course work   ☐ Total credits required for program
   - ☐ Program name   ☐ Existing specialization
   - ☐ CIP Code   ☐ 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:

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

Existing Curriculum				Proposed Curriculum (<mark>Highlight Changes</mark>)			
Pref	**Num**	**Title**	**Cr Hrs**	**Pref**	**Num**	**Title**	**Cr Hrs**
Required Coursework			**16**	**Required Coursework**			**11**
AST	426-426L	Emerging Technologies in Agriculture and Lab	3	AST	426-426L	<mark>Technology Applications for Precision Agriculture & Lab</mark>	3
PRAG	203-203L	Introduction to Precision Agriculture and Lab	2	~~PRAG~~	~~203-203L~~	~~Introduction to Precision Agriculture and Lab~~	~~2~~
PRAG	304-304L	Electrical Diagnostics for farm Machinery and Lab	3	PRAG	304-304L	Electrical Diagnostics for farm Machinery and Lab	3

	Existing Curriculum				Proposed Curriculum (==Highlight Changes==)		
Pref	**Num**	**Title**	**Cr Hrs**	**Pref**	**Num**	**Title**	**Cr Hrs**
PRAG	410-410L	Soil Geography and Land Use Interpretation and Lab	3	==PRAG==	==410-410L==	~~Soil Geography and Land Use Interpretation and Lab~~	==3==
PRAG	427	Precision Ag Data Mapping	2	PRAG	427	Precision Ag Data Mapping	2
PRAG	440-440L	Crop Management with Precision Farming and Lab	3	PRAG	440-440L	Crop Management with Precision Farming and Lab	3
Electives – Select 2-3 credits from the following list of courses			**2-3**	**Electives – Select 7-8 credits from the following list of courses**			**7-8**
AST	313-313L	Farm Machinery Systems Management and Lab	3	AST	313-313L	Farm Machinery Systems Management and Lab	3
AST	412-412L	Fluid Power Technology and Lab	3	AST	412-412L	Fluid Power Technology and Lab	3
				==PRAG==	==203-203L==	==Introduction to Precision Agriculture and Lab==	==3==
				==PRAG==	==410-410L==	==Soil Geography and Land Use Interpretation and Lab==	==3==
PRAG	424	Wheat Production	2	PRAG	424	Wheat Production	2
PRAG	425	Soybean Production	2	PRAG	425	Soybean Production	2
PRAG	426	Corn Production	2	PRAG	426	Corn Production	2
		Total number of hours required	18-19			Total number of hours required	18-19

7. Explanation of the Change:

Precision agriculture has expanded tremendously since this minor was introduced, and topics have expanded as well. PRAG 203-203L and PRAG 410- 410L are being moved from required to elective options. This is to allow more flexibility in the minor in an effort to make the minor more attainable to a variety of student.

AST 426-426L Emerging Technologies in Agriculture and Lab was taught as part of the ag systems technology curriculum before being added to the precision agriculture curriculum and as such the course has evolved to meet the needs of both programs and to fit amongst the new precision agriculture coursework introduced. The revised title will reflect this course is an advanced course in precision agriculture technologies.