

SOUTH DAKOTA BOARD OF REGENTS

Academic and Student Affairs

AGENDA ITEM: 6 – D (1)
DATE: December 11-12, 2024

SUBJECT

New Undergraduate Certificate Request – SDSU – Gateway to Agriculture

CONTROLLING STATUTE, RULE, OR POLICY

[BOR Policy 2.3.2](#) – New Programs, Program Modifications, and Inactivation/Termination

BACKGROUND / DISCUSSION

South Dakota State University (SDSU) requests authorization to offer an undergraduate certificate in Gateway to Agriculture. The proposed certificate will provide a jumpstart for South Dakota high school students with a career interest in agriculture. Students will learn about different career paths in the agriculture, food and natural resources career cluster. The Agriculture, Food and Natural Resources (AFNR) cluster focuses on the production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.

This certificate is part of a larger initiative to offer certificates to high school students through the High School Dual Credit (HSDC) program.

IMPACT AND RECOMMENDATION

SDSU plans to offer the proposed certificate on campus and online. SDSU does not request new state resources. One new course will be required.

Board office staff recommends approval.

ATTACHMENTS

Attachment I – New Certificate Request Form: SDSU – Gateway to Agriculture
Attachment II – Gateway to Agriculture Marketing Flyer

DRAFT MOTION 20241211_6-D(1):

I move to authorize SDSU to offer an undergraduate certificate in Gateway to Agriculture, as presented.



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

New Certificate

UNIVERSITY:	SDSU
TITLE OF PROPOSED CERTIFICATE:	Gateway to Agriculture
INTENDED DATE OF IMPLEMENTATION:	Fall 2025
PROPOSED CIP CODE:	01.0000
UNIVERSITY DEPARTMENT:	College of Agriculture, Food and Environmental Sciences
BANNER DEPARTMENT CODE:	SCAF
UNIVERSITY DIVISION:	College of Agriculture, Food and Environmental Sciences
BANNER DIVISION CODE:	3F

Please check this box to confirm that:

- The individual preparing this request has read [AAC Guideline 2.3.2.2.C](#), which pertains to new certificate requests, and that this request meets the requirements outlined in the guidelines.
- This request will not be posted to the university website for review of the Academic Affairs Committee until it is approved by the Executive Director and Chief Academic Officer.

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.



Institutional Approval Signature
President or Chief Academic Officer of the University

11/04/2024

Date

1. Is this a graduate-level certificate or undergraduate-level certificate?

Undergraduate Certificate

Graduate Certificate

2. What is the nature/ purpose of the proposed certificate? Please include a brief (1-2 sentence) description of the academic field in this certificate.

The Gateway to Agriculture Certificate will allow South Dakota high school students the opportunity to learn about different career paths in the agriculture, food and natural resources career cluster. The Agriculture, Food and Natural Resources (AFNR) cluster focuses on the production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources. Jobs in this career cluster focus on working with agriculture, animals, agribusiness, food production, plants, natural resources and land. Students will learn about global food systems, the history of U.S. and world agriculture,

fundamentals of animal science, historical and current environmental topics, and the wide variety of ways that humans interact with urban and agricultural insects in today's world.

3. If you do not have a major in this field, explain how the proposed certificate relates to your university mission and strategic plan, and to the current Board of Regents Strategic Plan 2014-2020.

SDBOR Policy 1.2.5 states South Dakota State University's mission is to offer academic programs in the liberal arts and sciences and professional education in agriculture, education, engineering, home economics, business economics, nursing, and pharmacy. The agriculture nature of this certificate fits within the mission of South Dakota State University. SDSU is currently authorized to offer many AFNR-related majors including Agricultural Business, Agricultural Science, Agricultural Systems Technology, Agronomy, Animal Science, Agricultural Education, Communication and Leadership, Conservation Planning and Park Management, Dairy Manufacturing, Dairy Production, Ecology and Environmental Sciences, Economics – Agricultural Economics, Food Science, Horticulture, Natural Resource Law Enforcement, Precision Agriculture, and Wildlife and Fisheries Sciences.

4. Provide a justification for the certificate program, including the potential benefits to students and potential workforce demand for those who graduate with the credential. *For workforce related information, please provide data and examples. Data may include, but are not limited to the South Dakota Department of Labor, the US Bureau of Labor Statistics, Regental system dashboards, etc. Please cite any sources in a footnote.*

Agriculture is a global industry that is important in every country. The U.S. Bureau of Labor Statistics reports that there are 660,140 positions for individuals with a degree in agriculture.¹ Forty-four percent of these positions require an individual with a bachelor's degree. Almost 90% of these positions are in the areas of animal science, general agriculture, agriculture production and management, plant science and agronomy, or food science. The certificate will serve to generate interest in AFNR careers by providing opportunities to South Dakota high school students to explore different course work offered through the College of Agriculture, Food and Environmental Sciences.

5. Who is the intended audience for the certificate program (including but not limited to the majors/degree programs from which students are expected)?

The primary intended audience is high school students who are considering pursuing majors in agriculture, food and natural resources. It would also be open to any student who is interested in being introduced to the agriculture, food and natural resources industry.

6. Certificate Design

A. Is the certificate designed as a stand-alone education credential option for students not seeking additional credentials (i.e., a bachelor's or master's degree)? If so, what areas of high workforce demand or specialized body of knowledge will be addressed through this certificate?

No

¹ Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook*, Field of degree: Agriculture, at <https://www.bls.gov/ooh/field-of-degree/agriculture/agriculture-field-of-degree.htm> (visited September 9, 2024).

- B. Is the certificate a value added credential that supplements a student's major field of study? If so, list the majors/programs from which students would most benefit from adding the certificate.**

No

- C. Is the certificate a stackable credential with credits that apply to a higher level credential (i.e., associate, bachelor's, or master's degree)? If so, indicate the program(s) to which the certificate stacks and the number of credits from the certificate that can be applied to the program.**

Yes. The certificate will be stackable for any student pursuing a major at the associate or baccalaureate level. Students will be able to apply the 12 credits towards their major requirements and available electives.

- 7. List the courses required for completion of the certificate in the table below (if any new courses are proposed for the certificate, please attach the new course requests to this form). Certificate programs by design are limited in the number of credit hours required for completion. Certificate programs consist of nine (9) to twelve (12) credit hours, including prerequisite courses. In addition, certificates typically involve existing courses. If the curriculum consists of more than twelve (12) credit hours (including prerequisites) or includes new courses, please provide explanation and justification below.**

Prefix	Number	Course Title	Prerequisites for Course	Credit Hours	New (yes, no)
AFES	203	Global Food Systems	None	3	No
		Select one of the following courses:			
ENGL	101	Composition I (SGR #1)	None	3	No
CMST	101	Foundations of Communication (SGR #2)	None	3	No
		Select two of the following courses:			
AFES	263	History of U.S. and World Agriculture	None	3	Yes
AS	102	Fundamentals of Animal Science	None	3	No
NRM	110	People and the Environment	None	3	No
PS	105	Insects and Society	None	3	No
Subtotal				12	

8. Student Outcome and Demonstration of Individual Achievement.

Board Policy 2:23 requires certificate programs to "have specifically defined student learning outcomes.

- A. What specific knowledge and competencies, including technology competencies, will all students demonstrate before graduation? The knowledge and competencies should be specific to the program and not routinely expected of all university graduates.**

- 1. Agricultural Development:** Students will be able to analyze and describe the development of agriculture from its beginning in the Fertile Crescent of Mesopotamia to modern agricultural practices utilized in the 21st century.

2. **Global Agriculture:** Students will be able to describe the agricultural industry, food production techniques, societal/cultural values and agricultural challenges/issues from around the world.
3. **Agriculture and Society:** Students will evaluate the nature and scope of the agriculture, food and natural resources industry and the role that AFNR plays in society.
4. **Agricultural and Environmental Health:** Students will examine the importance of agricultural and environmental health across the agriculture, food and environmental industry including animal health, soil health, plant health, and environmental health.
5. **Communication:** Students will communicate clearly in a variety of situations (written, verbal, non-verbal) including agricultural contexts.

B. Complete the table below to list specific learning outcomes – knowledge and competencies – for courses in the proposed program in each row.

Individual Student Outcome	Program Courses that Address the Outcomes						
	AFES 203*	ENGL 101	CMST 101	AFES 263	AS 102	NRM 110	PS 105
Agricultural Development: Students will be able to analyze and describe the development of agriculture from its beginning in the Fertile Crescent of Mesopotamia to modern agricultural practices utilized in the 21 st century.				X			
Global Agriculture: Students will be able to describe the agricultural industry, food production techniques, societal/cultural values and agricultural challenges/issues from around the world.	X						
Agriculture and Society: Students will evaluate the nature and scope of the agriculture, food and natural resources industry and the role that AFNR plays in society.	X			X	X	X	X
Agricultural and Environmental Health: Students will examine the importance of agricultural and environmental health across the agriculture, food and environmental industry including animal health, soil health, plant health, and environmental health.					X	X	X
Communication: Students will communicate clearly in a variety of situations (written, verbal, non-verbal) including agricultural contexts.		X	X	X			

9. Delivery Location.

Note: The accreditation requirements of the Higher Learning Commission (HLC) require Board approval for a university to offer programs off-campus and through distance delivery.

- A. Complete the following charts to indicate if the university seeks authorization to deliver the entire program on campus, at any off campus location (e.g., USD Community College for Sioux Falls, Black Hills State University-Rapid City, Capital City Campus, etc.) or deliver the entire program through distance technology (e.g., as an on-line program)?**

	Yes/No	Intended Start Date
On campus	Yes	2025-2026 Academic Year

	Yes/No	If Yes, list location(s)	Intended Start Date
Off campus	No		

	Yes/No	If Yes, identify delivery methods <i>Delivery methods are defined in AAC Guideline 5.5.</i>	Intended Start Date
Distance Delivery (online/other distance delivery methods)	Yes	015 - Online Asynchronous	2025-2026 Academic Year
Does another BOR institution already have authorization to offer the program online?	No	If yes, identify institutions:	

B. Complete the following chart to indicate if the university seeks authorization to deliver more than 50% but less than 100% of the certificate through distance learning (e.g., as an on-line program)? This question responds to HLC definitions for distance delivery.

	Yes/No	If Yes, identify delivery methods	Intended Start Date
Distance Delivery (online/other distance delivery methods)	No		

10. Additional Information:



HIGH SCHOOL DUAL CREDIT GATEWAY TO AGRICULTURE

ARE YOU INTERESTED IN AGRICULTURE? VIEW THE FOLLOWING MAJORS AVAILABLE AT SOUTH DAKOTA'S PUBLIC UNIVERSITIES AND GET A HEAD START WITH HIGH SCHOOL DUAL CREDIT (HSDC).

POTENTIAL DEGREES: SOUTH DAKOTA STATE UNIVERSITY

Agricultural Science

Agricultural Education, Communication, and Leadership

Agricultural Systems Technology

Precision Agriculture

Agronomy

Horticulture

Animal science

Dairy production

Dairy Manufacturing

Food Science

Wildlife and Fisheries Sciences

Ecology and Environmental Science

Natural Resource Law Enforcement

Conservation Planning and Park Management

Note: Some courses may only be available during one semester; make sure to research this when creating your certificate plan.

CERTIFICATE PLAN

If you're considering a career in agriculture, below are some courses we recommend.

AFES 203 Global Food Systems

Take one of the following:

CMST 101 Foundations of Communication

ENGL 101 Composition I

Take two of the following:

AFES 263 History of U.S. and World Agriculture

AS 102 Fundamentals of Animal Science

NRM 110 People and the Environment

PS 105 Insects and Society

INDIVIDUAL STUDENT OUTCOMES

- **Agricultural Development:** Students will be able to analyze and describe the development of agriculture from its beginning in the Fertile Crescent of Mesopotamia to modern agricultural practices utilized in the 21st century.
- **Global Agriculture:** Students will be able to describe the agricultural industry, food production techniques, societal/cultural values and agricultural challenges/issues from around the world.
- **Agriculture and Society:** Students will evaluate the nature and scope of the agriculture, food and natural resources industry and the role that AFNR plays in society.
- **Agricultural and Environmental Health:** Students will examine the importance of agricultural and environmental health across the agriculture, food and environmental industry including animal health, soil health, plant health, and environmental health.
- **Communication:** Students will communicate clearly in a variety of situations (written, verbal, non-verbal) including agricultural contexts.



**UPON COMPLETION: UNDERGRADUATE
GATEWAY TO AGRICULTURE CERTIFICATE**