



SOUTH DAKOTA BOARD OF REGENTS  
ACADEMIC AFFAIRS FORMS

New Certificate

<b>UNIVERSITY:</b>	SDSU
<b>TITLE OF PROPOSED CERTIFICATE:</b>	Environmental Policy
<b>INTENDED DATE OF IMPLEMENTATION:</b>	2022-2023 Academic Year
<b>PROPOSED CIP CODE:</b>	03.0103
<b>UNIVERSITY DEPARTMENT:</b>	Grad Study Ness School of Management and Economics
<b>BANNER DEPARTMENT CODE:</b>	SGRS
<b>UNIVERSITY DIVISION:</b>	Graduate School
<b>BANNER DIVISION CODE:</b>	3G

**Please check this box to confirm that:**

- The individual preparing this request has read [AAC Guideline 2.7](#), 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

Click here to enter a  
 7-20-21  
 \_\_\_\_\_  
 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.**

South Dakota State University (SDSU) requests authorization to offer a graduate certificate in Environmental Policy. The proposed Environmental Policy Certificate will provide knowledge and practical experience for students to have an advanced experience with environmental economics, environmental laws, and environmental risks and management. Individuals who complete this certificate will be well prepared to advance in their career paths in identifying issues relating to resource and environmental policy, oversight, and corporate or non-profit management associated with Environment, Social, Governance (ESG) goals. Additional electives are available for those that wish to pursue this field further.

The graduate certificate is designed to be either a stand-alone, value-added, or stacked credential. The certificate stacks to the M.S. in Professional Science, one of seven proposed

certificates that would stack to that degree. The certificate will also stack to the M.S. in Economics.

SDSU does not request new state resources for the proposed certificate.

**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.**

SDSU is currently authorized to deliver an Ecology and Environmental Science (B.S.), Biological Sciences (M.S. and Ph.D.) – Natural Resource Management Specialization, Economics (M.S.), Economics – Agricultural Economics Specialization (B.S.), Agricultural Business (B.S.), and an undergraduate certificate in Agriculture and Environmental Law.

The Environmental Policy Certificate supports the mission of SDSU as provided in SDCL 13-58-1: *Designated as South Dakota's land grant university, South Dakota State University, formerly the state college of agriculture and mechanical arts, shall be under the control of the Board of Regents and shall provide undergraduate and graduate programs of instruction in the liberal arts and sciences and professional education in agriculture, education, engineering, home economics, nursing and pharmacy, and other courses or programs as the Board of Regents may determine.*

The proposed certificate also supports the goals stated in the South Dakota Board of Regents Strategic Plan 2014-2020:

*Goal 1 – Student Success*

- Increase total graduate degrees awarded.

*Goal 2 – Academic Quality and Performance*

- Continue to approve new graduate programs.
- Grow the number of students participating in experiential learning.
- Develop and grow high-quality and distinct academic programs to meet the needs of diverse students and market demands.

*Goal 3 – Research and Economic Development*

- Increase the number of graduates from STEM programs.

In addition, this graduate certificate aligns with the SDSU's Imagine 2023 strategic plan<sup>1</sup> by offering a student-centered education. Specifically, the courses and certificate will contribute to the attainment of *Strategic Goal 1 – Excellence through Transformative Education*. This will be a distinct and high-quality academic program designed to meet student and market demand.

**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.**

The graduate certificate is designed to be either a stand-alone, value-added, or stacked credential. Individuals who complete the Environmental Policy Certificate will be well prepared to advance in their career paths in resource and environment policy, oversight, and management. The certificate would benefit individuals in a variety of professional positions in

---

<sup>1</sup> <https://www.sdstate.edu/imagine-2023-aspire-discover-achieve>

agriculture, food, energy, government, military, policy making, environmental non-government organizations (NGOs), and non-profit organizations.

According to the US Department of Labor, jobs as Environmental Scientists and Specialists are expected to grow by 8% nationally as well as in South Dakota, much faster than average.<sup>2</sup> Coursework in environmental policy and regulation are beneficial to this career path. The Environmental Policy Certificate could be paired with many of the science programs at SDSU to prepare students to enter this field. In addition, careers as Economists, including Environmental Economists, are expected to grow by 14% annually in the US.<sup>3</sup> The Environmental Policy Certificate paired with an M.S. in Economics from SDSU would prepare student well to enter this field. Heightened public interest in the environment, as well as increasing demands placed on the environment by population growth, are expected to spur demand for environmental scientists and policy analysts.

Many prospective students who would be attracted to this program would already be employed and benefit their career trajectories by obtaining this type of education. Given the trends and interest in resource and environmental policy and management, individuals with the type of training provided by this certificate program will be in high demand.

**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 University anticipates students enrolling to be undergraduates continuing onto a graduate degree and those already employed (new or returning to the university). The graduate certificate is designed to be either a stand-alone, value-added, or stacked credential. The certificate stacks to the M.S. in Professional Science, one of seven proposed certificates that would stack to that program. Students with a bachelor's degree, but with work experience in the field will particularly benefit from this certificate. In addition, the certificate will benefit graduates in natural resource management, agricultural and biosystems engineering, economics (including the agricultural economics specialization), agricultural business, and political science.

**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?**

Yes. Students may pursue the certificate as a stand-alone credential. As a stand-alone program the certificate will provide training in key elements for success in the policy, regulatory, and management aspects of environmental issues.

**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.**

---

<sup>2</sup> Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook*, Environmental Scientists and Specialists, at <https://www.bls.gov/ooh/life-physical-and-social-science/environmental-scientists-and-specialists.htm> (visited June 29, 2021).

<sup>3</sup> Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook*, Environmental Scientists and Specialists, at <https://www.bls.gov/ooh/life-physical-and-social-science/economists.htm> (visited July 14, 2021).

Yes. The certificate is intended to supplement a SDSU graduate education. The disciplines most likely to benefit would be: natural resource management, agricultural and biosystems engineering and economics (including the agricultural economics).

**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 Environmental Policy Certificate has been designed as a stackable credential that the credits will apply towards the Professional Science (M.S.) and Economics (M.S.).

**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).**

Prefix	Number	Course Title	Prerequisites for Course	Credit Hours	New (yes, no)
AGEC/BLAW	562	Environmental Law	None	3	No
AGEC/ECON	572	Resource and Environmental Economics	None	3	No
AGEC	579	Agricultural Policy	None	3	No
		Select one of the following			
ABE	632	Environmental/Ecological Risk Assessment	None	3	No
AGEC	571	Advanced Farm and Ranch Management	None	3	No
AST	563	Agricultural Waste Management	None	3	No
BLAW/HLTH	551	Public Health Law	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?**

Students in the Environmental Policy Certificate will:

- Understand and analyze the economic foundations of environmental and resource policy.
- Understand and conduct economic analysis of contemporary environmental and resource issues.
- Define and understand the legal foundations of environmental law, including various Acts.
- Apply environmental policy analysis in a range of specialties.

**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			
	AGEC 562	AGEC 572	AGEC 579	ABE 632, AGEC 571, AST 563, BLAW/ HLTH 551
Define and understand the legal foundations of environmental law, including various Acts	X			
Understand and conduct economic analysis of contemporary environmental and resource issues		X		
Understand and analyze the economic foundations of environmental and resource policy			X	
Apply environmental policy analysis in a range of specialties				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., UC Sioux Falls, Capital University Center, Black Hills State University-Rapid City, etc.) or deliver the entire program through distance technology (e.g., as an online program)?**

	Yes/No	Intended Start Date
<b>On campus</b>	Yes	2022-2023 Academic Year

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

	Yes/No	If Yes, identify delivery methods <i>Delivery methods are defined in AAC Guideline 5.5.</i>	Intended Start Date
<b>Distance Delivery (online/other distance delivery methods)</b>	Yes	015 - Internet Asynchronous– Term Based Instruction 018 - Internet Synchronous	2022-2023 Academic Year
<b>Does another BOR institution already have authorization to offer the program online?</b>	No	<b>If yes, identify institutions:</b>	

**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 online program)? This question responds to HLC definitions for distance delivery.**

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