



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

New Certificate

UNIVERSITY:	SDSU
TITLE OF PROPOSED CERTIFICATE:	New Product and Venture Development
INTENDED DATE OF IMPLEMENTATION:	2018-2019 Academic Year
PROPOSED CIP CODE:	52.0701
UNIVERSITY DEPARTMENT:	Economics
UNIVERSITY DIVISION:	Arts, Humanities & Social Sciences

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

6/4/2018

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?

The proposed certificate will equip undergraduate students with the skills essential to building innovative and entrepreneurial organizations and taking their product and service ideas to the market place. As a part of this certificate, students will learn to participate in creative thought processes, identify and assess new business opportunities, identify the steps to start an entrepreneurial venture in new and established organizational settings, as well as identify growth challenges and actions and steps related to harvest of an entrepreneurial venture.

3. Provide a justification for the certificate program, including the potential benefits to students and potential workforce demand for those who graduate with the credential.¹

The demand for the certificate in New Product and Venture Development relies on three major trends:

1. *Importance of small and medium-sized enterprises in job creation:*
According to the U.S. Small Business Administration, 96.2 percent of South Dakota businesses are small or medium sized. They provide 58.8 percent of jobs in South

¹ For workforce related information, please provide data and examples; data sources may include but are not limited to the South Dakota Department of Labor, the US Bureau of Labor Statistics, Regental system dashboards, etc.

- Dakota.² This is in line with national and international studies suggesting that new firms create the majority of new jobs.³ Thus, it is very likely that SDSU graduates will end up working for small and medium sized enterprises at some stage in their career and need skills that enable them to thrive in this environment.
2. *The importance of innovation for economic development:*
According to Organisation for Economic Co-operation and Development (OECD)⁴, innovation provides the foundation for new firm foundation and continued success of established organizations, driving economic growth and development. Thus, both new firms and established organizations need employees with strong innovation management skills.
 3. *Employer needs:*
Employers are increasingly looking for people who recognize the need for change and renewal and are able to lead it.⁵ They are also looking for individuals with a “T-shaped skill set”, referring to a depth of knowledge in their area of specialization in addition to skills enabling cross-disciplinary collaboration.^{6 7} A certificate in New Product and Venture Development provides students with those cross-disciplinary skills. For instance, an engineering student will be able translate in-depth expertise in nanotechnology to a commercial application using the skills provided by the certificate in New Product and Venture Development.

There is a growing need for all students, regardless of their major, to learn about new product and venture development, as innovation and continuous change through entrepreneurship have become major forces shaping today’s business world. Engineers, communication professionals, scientists and pharmacists, just to mention a few examples, who are able to lead their organizations' renewal and introduce new products and services to the market are needed. It is imperative for students of any field to learn the basics of innovative thinking and implementing innovative ideas in established organizations and in new venture settings. The certificate in New Product and Venture Development provides an opportunity for students outside of the Economics Department to become change-makers in their own fields by acquiring critical innovation and new venture skills.

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

The intended audience is very broad-based and includes all SDSU undergraduate students, including, but not limited to undergraduate students in the College of Engineering, College of Agriculture, Food and Environmental Sciences, College of Education and Human Sciences, and College of Pharmacy and Allied Health Professions. The Department of Economics expects most of the student interest to be from curriculum heavy colleges, such as Colleges of Engineering and Pharmacy and Allied Health Professions. Based on the feedback from these colleges, a nine-credit certificate, instead of a twelve-credit certificate, would appear more

² https://www.sba.gov/sites/default/files/advocacy/South_Dakota.pdf

³ Criscuolo, C., Gal, P. N., & Menon, C. (2017). Do micro start-ups fuel job creation? Cross-country evidence from the DynEmp Express database. *Small Business Economics*, 48(2), 393-412.

⁴ <http://ifuturo.org/documentacion/the%20innovation%20imperative.pdf>

⁵ <https://www.argusleader.com/story/news/business-journal/2016/10/04/entrepreneurial-mind-set-demand/91566232/>

⁶ Hansen, M. T., & Von Oetinger, B. (2001). Introducing T-shaped managers. *Harvard Business Review*, 79(3), 106-16.

⁷ <https://www.psychologytoday.com/blog/career-transitions/201204/career-success-starts-t>

appealing to the target audience and easier to build into the overall curricula. In addition, the certificate will be offered as a standalone credential. For example, SDSU graduates may come back and complement their undergraduate degrees by learning more about new product and venture development to advance their careers.

The classes listed in this certificate are already included in the Entrepreneurial Studies major and minor. In addition, they may be taken as electives by students in Agricultural Business and Business Economics majors. As such, they may support graduates returning to rural environments in generating new enterprise.

5. 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):⁸

Prefix	Number	Course Title	Credit Hours	New (yes, no)
ENTR	236	Innovation and Creativity	3	No
ENTR	237	Entrepreneurship Development	3	No
ENTR	338	New Venture Creation	3	No
Subtotal			9	

6. Student Outcome and Demonstration of Individual Achievement.⁹

A. What specific knowledge and competencies, including technology competencies, will all students demonstrate before graduation?

Students will be able to:

- participate in innovative and creative thought processes.
- identify and assess innovative business opportunities.
- comprehend of business research and analysis and incorporate in oral and written communication.
- identify the steps to start an entrepreneurial venture in new and established organizational settings.
- evaluate opportunities for growth of entrepreneurial ventures.
- identify growth challenges and actions and steps related to harvest of an entrepreneurial venture.

B. Complete Appendix A – Outcomes using the system form. Outcomes discussed below should be the same as those in Appendix A.

See Appendix A.

7. Delivery Location.¹⁰

⁸ Regental system certificate programs typically are a subset of the curriculum offered in degree programs, include existing courses, and involve 9-12 credits for completion. Deviations from these guidelines require justification and approval.

⁹ Board Policy 2:23 requires certificate programs to “have specifically defined student learning outcomes.”

¹⁰ 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 on-line program)?

	Yes/No	Intended Start Date
On campus	Yes	2018-2019 Academic Year

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

	Yes/No	If Yes, identify delivery methods ¹¹	Intended Start Date
Distance Delivery (online/other distance delivery methods)	Yes	018 - Internet Synchronous	2020-2021 Academic Year

ENTR 236 Innovation and Creativity is currently offered online every summer. The whole certificate will be offered online by summer 2020.

The University of South Dakota currently has a related certificate in Small Business Entrepreneurship. The proposed SDSU certificate in New Product and Venture Development requires nine instead of twelve credits, making the certificate appealing and more likely to be completed by students in credit heavy programs. Even though there is only a one course (three credit) difference this allows students to complete the certificate within the 120 – 130 credits required for the target programs. This difference is crucial for SDSU’s target audience: non-economics students or graduates of SDSU with varied educational backgrounds in credit heavy programs (i.e. pharmacy, biosciences, engineering, design). Having an on-campus program (part of which can be taken online) is important for instilling a more entrepreneurial culture at SDSU as a whole and to provide SDSU students a more well-rounded educational experience.

The proposed certificate in New Product and Venture Development complements other online programs at SDSU by offering students an opportunity to complement their skills by learning more about new venture formation and innovation in existing organizations either during their studies at SDSU or after graduation. For instance, the students who were able to take only one class in new product and venture development during their undergraduate studies may complete the rest of the certificate online after graduation.

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)?¹²

¹¹ Delivery methods are defined in [AAC Guideline 5.5](#).

¹² This question responds to HLC definitions for distance delivery.

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

Appendix A
New Product and Venture Development Certificate – Student Learning Outcomes

Individual Student Outcome	Program Courses that Address the Outcomes		
	ENTR 236	ENTR 237	ENTR 238
Students will be able to participate in innovative and creative thought processes.	X		
Students will be able to identify and assess innovative business opportunities.	X	X	X
Students will be able to comprehend of business research and analysis and incorporate in oral and written communication.		X	X
Students will be able to identify the steps to start an entrepreneurial venture in new and established organizational settings.		X	X
Students will be able to evaluate opportunities for growth of entrepreneurial ventures.		X	X
Students will be able to identify growth challenges and actions and steps related to harvest of an entrepreneurial venture.		X	X