



SOUTH DAKOTA BOARD OF REGENTS
ACADEMIC AFFAIRS FORMS
New Site Request

UNIVERSITY:	University of South Dakota
DEGREE(S) AND PROGRAM:	Elementary Education MA with Science/Technology/Math specialization [UMA.ELE-SNM] and Secondary Education MA with Science/Technology/Math specialization [UMA.SED-SNM]
NEW SITE(S):¹	Online
INTENDED DATE OF IMPLEMENTATION:	Summer 2020
CIP CODE:	13.0203
UNIVERSITY DEPARTMENT:	Curriculum and Instruction
UNIVERSITY DIVISION:	School of Education E2

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.

President of the University _____
Date

1. What is the need for offering the program at the new physical site or through distance delivery?

Adding an online delivery format provides greater flexibility for working professionals pursuing a graduate study in rural areas, and in areas outside of South Dakota. A recent needs survey conducted for the School of Education indicated more than 100 respondents would like to pursue advanced study in STM and the majority of respondents would prefer online delivery of courses. It is clear that teachers, professors, administrators, and other potential stakeholders believe that they can more easily access the courses through distance delivery and prefer this modality. Because there is a shortage of prepared STM teachers in many rural areas in South Dakota and there is a shortage of teacher educators and other stakeholders with skill and knowledge of best practices in STM, on-line delivery of coursework is warranted to meet the needs of the field.

The graduate degree at USD offers coursework that helps the learner understand the history, research, and theory that form the foundation of best practices for science, technology and math pedagogy. There is a growing need for STM in the state of South Dakota and in the nation. Practicing teachers need to be prepared to teach the STM subjects in an integrative way given the current trends in STM education. Additionally, 43 districts in South Dakota received a STM classroom innovation grant which provides funding for teacher training and customized learning tools. The USD program would provide stakeholders in these schools the effective skills for integrating STM into their districts. Offering this degree in an online format will allow USD to reach a much larger pool of potential students who are interested in advancing their knowledge and skill in this area.

¹ If the request is for a new physical location, include an address for the location. Delivery methods are defined in [AAC Guideline 5.5](#).

2. Are any other Regental universities authorized to offer a similar program at the proposed site(s) or through distance delivery? If “yes,” identify the institutions and programs and explain why authorization is requested.

USD currently offers the MA in Elementary Education with a specialization in Science Technology Math and the MA in Secondary Education with a specialization in Science Technology Math as a combination of face-to-face, hybrid, and on-line delivery. The USD degree program focuses on history, foundations, trends, issues, research literature in the field, and designing projects and environments.

As evidenced by the following websites, SDSU (<https://www.sdstate.edu/academics/graduate-professional-degrees>), BHSU (<https://www.sdstate.edu/academics/graduate-professional-degrees>), and DSU (<https://sgaes.desu.edu/>) do not have Master's or Doctoral level programs similar to USD's STM focused MA.

NSU's STEM Certificate

(http://catalog.northern.edu/preview_program.php?catoid=11&poid=2726) is geared to give K-12 teachers a set of five courses which focus on digital technology, the overlap of math and engineering looked at through applications, and science applications in STEM. The courses in NSU's certificate appear to have different foci than USD's focus on STM which prepares graduates to teach the STM subjects in an integrative way. STM is an intentional integration of content, pedagogy/practice, and technology. USD's ELED/SEED- STM graduate degree provides teachers with the knowledge, understandings, skills, and tools to design and develop projects and environments which are truly integrative. These courses are built on the history, foundations, trends, issues and current research in STM education. It is an intensive program designed to prepare professionals as researchers, teacher educators, researcher-practitioners, and education specialists. Due to these differences in foci, it would appear that each program would attract slightly different students into their programs.

3. Are students enrolling in the program expected to be new to the university or redirected from other existing programs at the university? Complete the table below and explain the methodology used in developing the estimates.

<i>Estimates</i>	Fiscal Years*			
	1st	2nd	3rd	4th
	FY 21	FY 22	FY 23	FY 24
Students new to the university	7	10	10	10
Students from other university programs	0	0	0	0
=Total students in the program at the site	7	10	10	10
Program credit hours (major courses)**	210	300	300	300
Graduates	7	10	10	10

*Do not include current fiscal year.

**This is the total number of credit hours generated by students in the program in the required or elective program courses. Use the same numbers in Appendix B – Budget.

Because the program is relatively new, we expect to see growth in enrollment. More than 100 potential students responded to a needs survey indicating they would be interested in pursuing advanced degree work in STM-Pedagogy and the majority preferred online delivery of coursework. Therefore we expect to see new students enrolling in the program.

4. **What is the perceived impact of this request on existing programs in the Regental system?**
 Because we currently offer many of the courses as on-line, we expect little impact to other programs in the Regental system. Students who are currently in our program will benefit from the option of completing the full program on-line.
5. **Complete the table and explain any special circumstances. Attach a copy of the program as it appears in the current catalog. If there are corresponding program modifications requested, please attach the associated form. Explain the delivery of the new courses and attach any associated new course request forms.**

Elementary Education MA with Science/Technology/Math specialization [UMA.ELE-SNM] And Secondary Education MA with Science/Technology/Math specialization [UMA.SED-SNM]	Credit hours	Credit hours currently available from this university at this site	Credit hours currently available from other universities available at this site	Credit hours currently available via distance	Credit hours new to this university
Required Courses		18		18	0
Electives or Minor		12		12	0
<i>Total</i>		30		30	0

Existing Curriculum

Elementary Education MA with Science/Technology/Math specialization [UMA.ELE-SNM]

And

Secondary Education MA with Science/Technology/Math specialization [UMA.SED-SNM]

Pref.	Num.	Title	Cr. Hrs.
Required Courses:			
EDER	761	Graduate Research & Design	3
ELED/SEED	700	STEM Methods I: History, Foundations, Trends and Issues of STEM	3
ELED/SEED	710	STEM Methods II: Research Literature in STEM Education	3
ELED/SEED	720	Designing Projects and Environments in STEM Educ.	3
ELED/SEED	773	Research Based Methods in C&I	3
ELED/SEED	794	Practicum	3
Subtotal:			18
Electives:			
ELED/SEED	766	Technology Integration for Effective Instruction	3
ELED/SEED	776	Theory & Pedagogy for Diverse Learners	3
LT	712	Instructional Technologies for Active Learning	3
LT	716	Systematic Design of Instruction	3
LT	731	Multimedia Production	3
TET	732	Emerging Technologies in Teaching and Training	3
Also accepted: Any graduate level math and science courses will be accepted should the students be qualified and interested to take such courses			3
Note: Plan A (thesis) also available. Four credit hours of thesis are required in lieu of an elective.			
Sub-total			12
Total Hours Required			30

6. How will the university provide student services comparable to those available for students on the main campus?

Student services will be provided by the Division of Curriculum and Instruction as well as Academic Affairs. Services will be similar to those provided for other online programs. Curriculum and Instruction has been offering online coursework for over 15 years and is accustomed to working with students from a distance. We also have available the expertise of faculty and support personnel in the I.D. Weeks library, the CTL, and ITS to assist online students (and faculty serving students) in accessing and using resources to further their education.

7. Is this program accredited by a specialized accrediting body? If so, address any program accreditation issues and costs related to offering the program at the new site(s).

This program is not accredited by a specialized body – no costs will be added.

8. Does the university request any exceptions to Board policy for delivery at the new site(s)? Explain requests for exceptions to Board policy.

No exemptions are requested for delivery at the new site.

9. Cost, Budget, and Resources related to new courses at the site: Explain the amount and source(s) of any one-time and continuing investments in personnel, professional development, release time, time redirected from other assignments, instructional technology & software, other operations and maintenance, facilities, etc., needed to implement the proposed minor.

The MA Elementary Education/Secondary Education Science, Technology, and Math Pedagogy Graduate Degree is offered through a combination of on-line, hybrid, and face-to-face delivery at USD. Offering it online requires no additional costs.

10. Additional Information: N/A