



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

**Substantive Program Modification Program**

Use this form to request minor changes in existing programs (majors, minors, certificates, or specializations).

<b>UNIVERSITY:</b>	DSU
<b>CURRENT PROGRAM TITLE:</b>	<b>B.S. in Mathematics Education</b>
<b>CIP CODE:</b>	
<b>UNIVERSITY DEPARTMENT:</b>	<b>College of Arts and Sciences</b>
<b>UNIVERSITY DIVISION:</b>	<b>College of Arts and Sciences</b>

**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.*

<hr/> Vice President of Academic Affairs or President of the University	Click here to enter a date. <hr/> Date
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**1. This modification addresses a change in (place an "X" in the appropriate box):**

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Total credits required within the discipline | <input checked="" type="checkbox"/> Total credits of supportive course work |
| <input type="checkbox"/> Total credits of elective course work                   | <input type="checkbox"/> Total credits required for program                 |
| <input type="checkbox"/> Program name  | <input type="checkbox"/> Existing specialization                            |
| <input type="checkbox"/> CIP Code  | <input type="checkbox"/> Other (explain below)                              |

**2. Effective date of change: 8/1/2017**

**3. Program Degree Level (place an "X" in the appropriate box):**

Associate  Bachelor's  Master's  Doctoral

**4. Category (place an "X" in the appropriate box):**

Certificate  Specialization  Minor  Major

**5. If a name change is proposed, the change will occur (place an “X” in the appropriate box):**

- 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:** \_\_\_\_\_

*Reminder: Name changes may require updating related articulation agreements, site approvals, etc.*

**6. Primary Aspects of the Modification (add lines or adjust cell size as needed):**

<i>Existing Curriculum</i>				<i>Proposed Curriculum (highlight changes)</i>			
Prof.	Num.	Title	Cr. Hrs.	Prof.	Num.	Title	Cr. Hrs.
<b>System Wide General Education Requirement*</b>			30	<b>System Wide General Education Requirement*</b>			30
Majors must take INED 211 and MATH 123 as part of the System-wide General Education Requirement				Majors must take INED 211, <b>EPSY 210</b> and MATH 123 as part of the System-wide General Education Requirement			
<del>Institutional Graduation Requirement</del>			<del>44</del>				
<del>Majors must take EPSY 210 as part of the Institutional Graduation Requirement.</del>							
<del>Note: Students should complete professional education coursework concurrently with general education and content major coursework.</del>							
<b>Mathematics Component</b>			<b>35</b>	<b>Mathematics Component</b>			<b>35</b>
MATH	125	Calculus II	4	MATH	125	Calculus II	4
MATH	201	Introduction to Discrete Math	3	MATH	201	Introduction to Discrete Math	3
MATH	281	Introduction to Statistics	3	MATH	281	Introduction to Statistics	3
MATH	315	Linear Algebra	3	MATH	315	Linear Algebra	3
MATH	316	Discrete Mathematics	3	MATH	316	Discrete Mathematics	3
MATH	341	Math Concepts for Teachers I	3	MATH	341	Math Concepts for Teachers I	3
MATH	342	Math Concepts for Teachers II	3	MATH	342	Math Concepts for Teachers II	3
MATH	361	Modern Geometry	3	MATH	361	Modern Geometry	3
				<b>MATH</b>	<b>413</b>	<b>Abstract Algebra I</b>	<b>3</b>
MATH	488	Capstone	1	MATH	488	Capstone	1
Plus 9 credits from the following:			<b>9</b>	Plus <b>6</b> credits from the following:			<b>6</b>
MATH	225	Calculus III		MATH	225	Calculus III	
MATH	282	Mathematics of Games		MATH	282	Mathematics of Games	
MATH	318	Adv. Discrete Mathematics		MATH	318	Adv. Discrete Mathematics	
MATH	321	Differential Equations		MATH	321	Differential Equations	
MATH	381	Intro to Probability and Stats		MATH	381	Intro to Probability and Stats	
MATH	<del>413</del>	<del>Abstract Algebra I</del>					
MATH	418	Mathematical Modeling		MATH	418	Mathematical Modeling	
MATH	471	Numerical Analysis I	3	MATH	471	Numerical Analysis I	3
MATH	475	Operations Research	3	MATH	475	Operations Research	
MATH	492	Topics*		MATH	492	Topics *	

MATH	498	Undergrad Research/Scholarship		MATH	498	Undergrad Research/Scholar	
*May be repeated provided student does not enroll in the same topics course.				*May be repeated provided student does not enroll in the same topics course.			
<b>K-12 Education Technology Minor (Math), (SEED 401 is part of minor but listed in Professional Educational Courses, <del>CSC 105 and CIS 130 or CSC 123 or CSC 150 are also part of minor but listed with IGR requirements, minor is 18 credits)</del></b>				<b>K-12 Education Technology Minor – Math (SEED 401 is part of minor but listed in Professional Educational Courses, minor is 18-19 credits)</b>			
			11				17-18
				<b>CSC 105</b>		<b>Introduction to Computers</b>	<b>3</b>
				<b>CIS 130</b>		<b>Visual Basic Programming</b>	<b>3</b>
				<b>CSC 123</b>		<b>OR</b>	
				<b>CSC 150</b>		<b>Problem Solving &amp; Programming</b>	
						<b>OR</b>	
						<b>Computer Science I</b>	
CIS	350	Comp Hdw, Data Comm and Networking	3	CIS	350	Comp Hdw, Data Comm and Networking	3
EDER	415	Educational Assessment	2	EDER	415	Educational Assessment	2-3
		OR		ELED	422	OR	
		K-8 Science & Math Technology		<b>SEED 301</b>		<b>K-8 Science &amp; Math Technology</b>	
						<b>OR</b>	
EDFN	365	Computer-Based Technology & Learning	3	EDFN	365	<b>Technology for Math Teachers</b>	
						Computer-Based Technology & Learning	3
Choose 3 credits from the following			3	Choose 3 credits from the following:			3
CSC	206	Advanced Applications:		CSC	206	Advanced Applications:	
CSC	207	Advanced Applications: Spreadsheet		CSC	207	Advanced Applications: Spreadsheet	
CSC	208	Advanced Applications: Database		CSC	208	Advanced Applications: Database	
CSC	209	Advanced Applications: SAS		CSC	209	Advanced Applications: SAS	
				CSC	210	<b>Quickbooks</b>	
Professional Education Courses			28	Professional Education Courses			28
<b>Electives</b>			<b>5</b>	<b>Electives</b>			<b>9-10**</b>
				** one credit of the electives is completed with MATH 123 in general education, additional electives may be completed in the math program electives and/or the k-12 educational minor			
Total number of hours required for mathematics component of major (four embedded in general education)			74	Total number of hours required for mathematics component of major (four embedded in general education)			80-81
Total number of hours required for degree			120	Total number of hours required for degree			120

7. **Explanation of the Change:** EPSY 210 is a general education course that moves from an IGR to an SGR. Abstract Algebra becomes a required class now that the course is on the two year math rotation (fall, even years). SEED 301 is a proposed new course in the College of Education that would give math education majors a stronger background in using technology in the math classroom. The CSC 105 and a programming class are required in the K-12 Ed Tech minor (math) and thus move from the IGR requirements to the minor requirements. Also the new CSC 210 Quickbooks course is being added to the choose from list.