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).

UNIVERSITY:	**DSU**
CURRENT PROGRAM TITLE:	**BS in Mathematics for Information Systems**
CIP CODE:	
UNIVERSITY DEPARTMENT:	**College of Arts and Sciences**
UNIVERSITY DIVISION:	**College of Arts and 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.

Vice President of Academic Affairs or President of the University

Click here to enter a date.
Date

1. This modification addresses a change in (*place an "X" in the appropriate box*):

☒	Total credits required within the discipline	☒	Total credits of supportive course work
☐	Total credits of elective course work	☐	Total credits required for program
☐	Program name	☐	Existing specialization
☐	CIP Code	☐	Other (explain below)

2. Effective date of change: 5/15/2017

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*):

Existing Curriculum				*Proposed Curriculum (highlight changes)*			
Pref.	**Num.**	**Title**	**Cr. Hrs.**	**Pref.**	**Num.**	**Title**	**Cr. Hrs.**
System Wide General Education Requirement*			30	System Wide General Education Requirement*			30
Majors must take MATH 123 as part of the System-wide General Education Requirement				Majors must take MATH 123 as part of the System-wide General Education Requirement			
~~**Institutional Graduation Requirement**~~			~~**11**~~				
~~Majors must take CIS 130 as part of the Institutional Graduation Requirement.~~							
Students obtaining a degree in Computer Science, Computer Game Design, Physical Science, Biology for Information Systems or Education in Biology, only need to complete the Mathematics Component of the program to obtain a second major in the Mathematics for Information Systems.				Students obtaining a degree in Computer Science, Computer Game Design, Physical Science, Biology for Information Systems or Education in Biology, only need to complete the Mathematics Component of the program to obtain a second major in the Mathematics for Information Systems.			
Mathematics Component			28	Mathematics Component			28
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
Plus 12 credits from the following			12	Plus 12 credits from the following			12
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	361	Modern Geometry		MATH	361	Modern Geometry	
MATH	381	Intro to Probability and Statistics		MATH	381	Intro to Probability and Statistics	
MATH	413	Abstract Algebra I		MATH	413	Abstract Algebra I	
MATH	418	Mathematical Modeling		MATH	418	Mathematical Modeling	
MATH	471	Numerical Analysis I		MATH	471	Numerical Analysis I	
MATH	475	Operations Research		MATH	475	Operations Research	
MATH	492	Topics		MATH	492	Topics	
MATH	498	Undergrad Research/Scholarship		MATH	498	Undergrad Research/Scholarship	
*May be repeated several times provided student does not enroll in the same topics course.				*May be repeated several times provided student does not enroll in the same topics course.			
Support Courses Component			~~**18**~~	**Support Courses Component**			**24**

				CSC	**105**	**Introduction to Computers**	**3**
				CIS **CSC**	**130** **Or** **150**	**Visual Basic Programming** **Or** **Computer Science I**	**3**
CIS	251	Business Applications Programming	3	CIS	251	Business Applications Programming	3
CIS	325	Management Information Systems	3	CIS	325	Management Information Systems	3
CIS	332	Structured Systems Analysis and Design	3	CIS	332	Structured Systems Analysis and Design	3
CIS	350	Comp Hdw, Data Comm and Networking	3	CIS **CSC**	350 **Or** **363**	Comp Hdw, Data Comm and Networking **Or** **Hardware, Virtualization and Communication**	3
CIS	484		3	CIS	484		3
CIS / CSC	Elective		3	CIS / CSC	Elective		3
Minor			**18-21**	**Minor**			**18-21**
Students choose from one of the following minors: Biology, Business Administration, Chemistry, Computer Forensics, Cyber Operation, Computer Science or Physics.				Students choose from one of the following minors: Biology, Business Administration, Chemistry, Computer Forensics, Cyber Operation, Computer Science or Physics.			
Electives			**12-15**	**Electives**			**17-20**
One of these credits will have been met upon completion of MATH 123 as part of the System-wide General Education Requirements.				One of these credits will have been met upon completion of MATH 123 as part of the System-wide General Education Requirements.			

Total number of hours required for major, minor, or specialization	64-67	Total number of hours required for major, minor, or specialization	**70-73**
Total number of hours required for degree	120	Total number of hours required for degree	120

7. Explanation of the Change:

This program modification reflects the removal of DSU's Institutional Graduation Requirements. CSC 105 and either CIS 130 or CSC 105 from IGR are being added to the major support component. The remaining credits are moving as part of the open electives which are increasing by 5 credits. CSC 363 is being added as a choice between CIS 350.