# Curriculum Proposal

## MATH-CS 16-17 #21

**Packet Contents**

1. **Summary**

**Course Drop**

1.2 CS 1108 Introduction to Computers II (3 credits)

**Program Modification**

1.4 Computer Information Systems, B.S. major

1.10 Computer Science, B.S. major

1.16 Computer Science minor

1.22 Geography, B.S. major, Geographic Information System Emphasis

1.28 Signatures
BSU Curriculum Forms

Form 1

Curriculum Modification Summary

College: Arts and Sciences
Department: Mathematics and Computer Science
Proposer: Marty J. Wolf
Proposer’s position: Sitting

Describe the modification(s) you propose, and how it (they) will work to students' advantage. (This description and explanation will be included in Curriculum Report packets forwarded to the Faculty Senate.):

I propose dropping CS 1108, Introduction to Computers II. The course has had consistently low enrollment and the intellectual needs of students addressed by the course can be met with students taking CS 1309, a course with a sufficient number of seats to handle the enrollment.

Modifications proposed (specify number of each):

_____Course Modification(s) (form 2)
_____New Course(s) (form 3)
___1__Course Drop(s) (form 4)
__4__Program Modification(s) (form 5)
_____New Program(s) (form 6)
_____Program Drop(s) (form 7)

The modifications affect (check):

_____Liberal Education
__X__ Undergraduate Curriculum
____Graduate Curriculum
_____Teacher Licensure Program(s)
BSU Curriculum Forms

Form 4

Course Drop Form
(Use this form to drop a course from the university curriculum file.
To drop a course from a program only, use Form 5 Program Modification Form)

Course Number: CS 1108
  Undergraduate:
  Graduate:

Course Title: Introduction to Computers II

New or current courses that will universally replace this dropped course for students remaining in the old curriculum: CS 1309, Problem Solving and Computation

This dropped course is a requirement or an elective in the programs/areas listed below.

  Non-licensure programs: Computer Information Systems Major, Computer Science major, Computer Science minor, Geography Major: GIS Emphasis

  Teacher Licensure programs: None

  Liberal Education: None

The above “service area” programs/departments were notified of this modification on 12 January 2017 (date) by email (mail, email, or phone).

Please check one of the items below:

____X____ No comments were received from other programs or departments within one week of the notification.

_______ Comments were received within one week of the notification, and are attached.
Reason(s) for dropping this course:

Consistently low enrollment. Further, the educational needs of these students can be met, albeit with different content and pedagogy, with CS 1309 Problem Solving and Computation where there is a sufficient number of seats.
BSU Curriculum Forms

Form 5

Program Modification Form

Program to be modified: Computer Information Systems, B.S. major

List all proposed change(s): I propose dropping CS 1108, Introduction to Computers II.

Reason(s) for the change(s): Consistently low enrollment. Further, the educational needs of these students can be met, albeit with different content and pedagogy, with CS 1309 Problem Solving and Computation where there is a sufficient number of seats.

Note: In order to avoid hidden prerequisites, if a course is being dropped from this program (but not from the entire curriculum), please check for which remaining courses may include this dropped course as a prerequisite. Course prerequisites may be found in the online catalog (http://www.bemidjistate.edu/academics/catalog/). Remedies for hidden prerequisites may be found under Curriculum Forms at (http://www.bemidjistate.edu/faculty_staff/faculty_association/forms/).

Note: If a course from another department/program was either added to or dropped from this program, please notify the chair/coordinator of that course's department/program and indicate the following:

The course’s home department/program was notified of the addition or dropping of their course(s) on ________ (date) by ___________________ (mail, email, or phone).

Please check one of the items below:

______ No comments were received from other programs or departments within one week of the notification.

______ Comments were received within one week of the notification, and are attached.

Note: If this is a joint program, the signatures of both department chairs (and both deans, if different colleges) must be provided.
Alert: Attach a copy of the current program showing the marked changes. Please copy the current program from the online catalog (http://www.bemidjistate.edu/academics/catalog/) and paste it into Word. Then use either the Track Changes feature under Tools, or the underline and strikethrough Font feature under Format. (Please note that the Track Changes feature may be easily switched on and off by holding down the Ctrl+Shift+E keys.)
Computer Information Systems, B.S. major

Required Credits: 75
Required GPA: 2.25

I REQUIRED BASIC CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- ACCT 1101 Principles of Accounting I (3 credits)
- ACCT 1102 Principles of Accounting II (3 credits)
- BUAD 2220 Legal Environment (3 credits)
- BUAD 2231 Business Statistics I (3 credits)
  or STAT 2610 Applied Statistics (4 credits)
- BUAD 2280 Computer Business Applications (3 credits)
- BUAD 3223 Operations Management (3 credits)
- BUAD 3351 Management (3 credits)
- BUAD 3361 Marketing (3 credits)
- BUAD 3381 Management Information Systems (3 credits)
- BUAD 3771 Financial Management (3 credits)
- BUAD 4559 Strategic Management (3 credits)
- BUAD 4600 Senior Seminar: Business Administration (1 credit)
- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)
- MATH 2210 Discrete Mathematics (4 credits)

II ADDITIONAL REQUIRED COURSES

COMPLETE THE FOLLOWING COURSE(S):

- CS 1309 Problem Solving and Computation (3 credits)
  or

- CS 1107 Introduction to Computers (3 credits)
  and CS 1108 Introduction to Computers II (3 credits)

COMPLETE THE FOLLOWING COURSES:

- BUAD 3382 Business Application Development (3 credits)
- BUAD 3384 Systems Analysis and Design (3 credits)
- BUAD 4385 Data Modeling and Design (3 credits)
- CS 1309 Problem Solving and Computation (3 credits)
- CS 2321 Computer Science I (4 credits)
- CS 2322 Computer Science II (4 credits)
- CS 4390 Social, Ethical, and Professional Issues in Computing (2 credits)
III REQUIRED ELECTIVES

SELECT THREE OF THE FOLLOWING: At least TWO courses must be from Group B

GROUP A.
- BUAD 3281 Decision Support Systems (3 credits)
- BUAD 3283 E-Commerce Web Development (3 credits)
- BUAD 3383 Data Communications (3 credits)
- BUAD 4386 Applied Software Development Project (3 credits)
- BUAD 4387 Strategic Information Management (3 credits)
  May include 3 credits of
- BUAD 4970 Internship (1-12 credits)

GROUP B.
- CS 2270 Introduction to Web Programming (3 credits)
- CS 3270 Advanced Web Programming (3 credits)
- CS 3350 Event-Driven Programming in a Windows Environment (3 credits)
- CS 3360 Object-Oriented Software Development (3 credits)
- CS 3370 Mobile Application Development (3 credits)
- CS 3380 Game Development (3 credits)
- CS 3507 Introduction to Databases (3 credits)
- CS 3528 Data Structures and Algorithms (4 credits)
- CS 3560 Data Communications and Networks (3 credits)
- CS 4360 Software Engineering (3 credits)
- CS 4970 Internship (3 credits)
Computer Information Systems, B.S. major

Required Credits: 75
Required GPA: 2.25

I REQUIRED BASIC CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- ACCT 1101 Principles of Accounting I (3 credits)
- ACCT 1102 Principles of Accounting II (3 credits)
- BUAD 2220 Legal Environment (3 credits)
- BUAD 2231 Business Statistics I (3 credits)
  or STAT 2610 Applied Statistics (4 credits)
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- BUAD 3223 Operations Management (3 credits)
- BUAD 3351 Management (3 credits)
- BUAD 3361 Marketing (3 credits)
- BUAD 3381 Management Information Systems (3 credits)
- BUAD 3771 Financial Management (3 credits)
- BUAD 4559 Strategic Management (3 credits)
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- BUAD 4386 Applied Software Development Project (3 credits)
- BUAD 4387 Strategic Information Management (3 credits)
  May include 3 credits of
- BUAD 4970 Internship (1-12 credits)

GROUP B.

- CS 2270 Introduction to Web Programming (3 credits)
- CS 3270 Advanced Web Programming (3 credits)
- CS 3350 Event-Driven Programming in a Windows Environment (3 credits)
- CS 3360 Object-Oriented Software Development (3 credits)
- CS 3370 Mobile Application Development (3 credits)
- CS 3380 Game Development (3 credits)
- CS 3507 Introduction to Databases (3 credits)
- CS 3528 Data Structures and Algorithms (4 credits)
- CS 3560 Data Communications and Networks (3 credits)
- CS 4360 Software Engineering (3 credits)
- CS 4970 Internship (3 credits)
BSU Curriculum Forms

Form 5

Program Modification Form

Program to be modified: Computer Science, B.S. major

List all proposed change(s): I propose dropping CS 1108, Introduction to Computers II.

Reason(s) for the change(s): Consistently low enrollment. Further, the educational needs of these students can be met, albeit with different content and pedagogy, with CS 1309 Problem Solving and Computation where there is a sufficient number of seats.

Note: In order to avoid hidden prerequisites, if a course is being dropped from this program (but not from the entire curriculum), please check for which remaining courses may include this dropped course as a prerequisite. Course prerequisites may be found in the online catalog (http://www.bemidjistate.edu/academics/catalog/). Remedies for hidden prerequisites may be found under Curriculum Forms at (http://www.bemidjistate.edu/faculty_staff/faculty_association/forms/).

Note: If a course from another department/program was either added to or dropped from this program, please notify the chair/coordinator of that course's department/program and indicate the following:

The course’s home department/program was notified of the addition or dropping of their course(s) on _________ (date) by _________________ (mail, email, or phone).

Please check one of the items below:

_____ No comments were received from other programs or departments within one week of the notification.

_____ Comments were received within one week of the notification, and are attached.

Note: If this is a joint program, the signatures of both department chairs (and both deans, if different colleges) must be provided.
Alert: Attach a copy of the current program showing the marked changes. Please copy the current program from the online catalog (http://www.bemidjistate.edu/academics/catalog/) and paste it into Word. Then use either the Track Changes feature under Tools, or the underline and strikethrough Font feature under Format. (Please note that the Track Changes feature may be easily switched on and off by holding down the Ctrl+Shift+E keys.)
Computer Science, B.S. major

Required Credits: 60
Required GPA: 2.25

I REQUIRED CORE COURSES

Additional requirement: Successful completion of the degree requires students to earn 15 credits from areas I and II at the 3000/4000 level while in residence at BSU.

COMPLETE THE FOLLOWING COURSE:

- CS 1309 Problem Solving and Computation (3 credits)
  or
  CS 1107 Introduction to Computers (3 credits)
  and CS 1108 Introduction to Computers II (3 credits)

COMPLETE THE FOLLOWING COURSES:

- CS 1309 Problem Solving and Computation (3 credits)
- CS 2321 Computer Science I (4 credits)
- CS 2322 Computer Science II (4 credits)
- CS 2810 Computer Organization and Assembly Language Programming (3 credits)
- CS 3528 Data Structures and Algorithms (4 credits)
- CS 4390 Social, Ethical, and Professional Issues in Computing (2 credits)

II REQUIRED ELECTIVES

Select 21 credits from among the following courses, with at least 3 courses from Section A and 3 courses from Section B. Note: Courses may have prerequisites either not included or not required in this major.

A. Core Computer Science

- CS 3507 Introduction to Databases (3 credits)
- CS 3560 Data Communications and Networks (3 credits)
- CS 3752 Data Mining (3 credits)
- CS 4298 Compiler Construction (3 credits)
- CS 4627 Theory of Computation (3 credits)
- CS 4840 Operating Systems (3 credits)
- MATH 3720 Numerical Methods (3 credits)

B. Application Development Techniques

- CS 3270 Advanced Web Programming (3 credits)
- CS 3350 Event-Driven Programming in a Windows Environment (3 credits)
- CS 3360 Object-Oriented Software Development (3 credits)
- CS 3370 Mobile Application Development (3 credits)
- CS 3380 Game Development (3 credits)
- CS 4360 Software Engineering (3 credits)

III REQUIRED OUTSIDE COURSES

- MATH 1470 Precalculus (5 credits)
  or MATH 2471 Calculus I (5 credits)
- MATH 2210 Discrete Mathematics (4 credits)
- MATH 3310 Linear Algebra (4 credits)
  or STAT 2610 Applied Statistics (4 credits)
  or STAT 3631 Probability And Statistics I (4 credits)
- SPCM 1100 Public Speaking (3 credits)

Select one of the following courses:

- ENGL 2150 Technical Writing (3 credits)
- ENGL 3150 Writing In The Disciplines (3 credits)
- ENGL 3155 Professional Writing (3 credits)
Computer Science, B.S. major

Required Credits: 60
Required GPA: 2.25

I REQUIRED CORE COURSES

Additional requirement: Successful completion of the degree requires students to earn 15 credits from areas I and II at the 3000/4000 level while in residence at BSU.

COMPLETE THE FOLLOWING COURSES:

- CS 1309 Problem Solving and Computation (3 credits)
- CS 2321 Computer Science I (4 credits)
- CS 2322 Computer Science II (4 credits)
- CS 2810 Computer Organization and Assembly Language Programming (3 credits)
- CS 3528 Data Structures and Algorithms (4 credits)
- CS 4390 Social, Ethical, and Professional Issues in Computing (2 credits)

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- MATH 3310 Linear Algebra (4 credits)
  *or* STAT 2610 Applied Statistics (4 credits)
  *or* STAT 3631 Probability And Statistics I (4 credits)
- SPCM 1100 Public Speaking (3 credits)

Select one of the following courses:

- ENGL 2150 Technical Writing (3 credits)
- ENGL 3150 Writing In The Disciplines (3 credits)
- ENGL 3155 Professional Writing (3 credits)
BSU Curriculum Forms

Form 5

Program Modification Form

Program to be modified: Computer Science minor

List all proposed change(s): I propose dropping CS 1108, Introduction to Computers II.

Reason(s) for the change(s): Consistently low enrollment. Further, the educational needs of these students can be met, albeit with different content and pedagogy, with CS 1309 Problem Solving and Computation where there is a sufficient number of seats.

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Computer Science minor

Required Credits: 15-20
Required GPA: 2.00

*****************************************************************

COMPUTER SCIENCE MINOR REQUIREMENTS WEB EMPHASIS:MUST COMPLETE
ALL AREAS WITH A TOTAL OF AT LEAST 15 SEMESTER CREDITS AND A 2.00 GPA

Additional requirement: Successful completion of the minor requires at least one Computer
Science course at the 3000/4000 level taken while in residence at BSU.

I REQUIRED COURSES

COMPLETE THE FOLLOWING COURSE:

• CS 1309 Problem Solving and Computation (3 credits)
  or
  CS 1107 Introduction to Computers (3 credits)
  and CS 1108 Introduction to Computers II (3 credits)

II REQUIRED EMPHASIS-WEB EMPHASIS

COMPLETE THE FOLLOWING COURSES:

• CS 2270 Introduction to Web Programming (3 credits)
• CS 3270 Advanced Web Programming (3 credits)

SELECT 6 SEMESTER CREDITS FROM THE FOLLOWING COURSES:

• CS 2321 Computer Science I (4 credits)
• CS 2322 Computer Science II (4 credits)
• CS 2810 Computer Organization and Assembly Language Programming (3 credits)
• CS 3370 Mobile Application Development (3 credits)
• CS 4390 Social, Ethical, and Professional Issues in Computing (2 credits)

MAY INCLUDE I:

• GEOG 4275 Advanced Geographic Information Systems (3 credits)
  or ENGL 3179 Elements of Electronic Rhetoric (3 credits)
  or TADD 3549 Interactive Design (4 credits)

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COMPUTER SCIENCE MINOR REQUIREMENTS

PROFESSIONAL EMPHASIS: MUST COMPLETE ALL AREAS WITH A TOTAL OF AT LEAST 20 SEMESTER CREDITS AND A 2.00 GPA

Additional requirement: Successful completion of the minor requires at least one Computer Science course at the 3000/4000 level taken while in residence at BSU.

I REQUIRED COURSES

COMPLETE THE FOLLOWING COURSE:

- CS 1309 Problem Solving and Computation (3 credits)
  or
  CS 1107 Introduction to Computers (3 credits)
  and CS 1108 Introduction to Computers II (3 credits)

II REQUIRED EMPHASIS-PROFESSIONAL EMPHASIS

COMPLETE THE FOLLOWING COURSES:

- CS 2321 Computer Science I (4 credits)
- CS 2322 Computer Science II (4 credits)

SELECT 9 SEMESTER CREDITS FROM THE FOLLOWING COURSES:

- CS 2810 Computer Organization and Assembly Language Programming (3 credits)
- PHYS 2500 Electronics I (4 credits)
- COMPUTER SCIENCE COURSES AT THE 3000 AND 4000 LEVELS
Computer Science minor

Required Credits: 15-20
Required GPA: 2.00

*****************************************************************

COMPUTER SCIENCE MINOR REQUIREMENTS WEB EMPHASIS:MUST COMPLETE ALL AREAS WITH A TOTAL OF AT LEAST 15 SEMESTER CREDITS AND A 2.00 GPA

Additional requirement: Successful completion of the minor requires at least one Computer Science course at the 3000/4000 level taken while in residence at BSU.

I REQUIRED COURSE

COMPLETE THE FOLLOWING COURSE:

- CS 1309 Problem Solving and Computation (3 credits)

II REQUIRED EMPHASIS-WEB EMPHASIS

COMPLETE THE FOLLOWING COURSES:

- CS 2270 Introduction to Web Programming (3 credits)
- CS 3270 Advanced Web Programming (3 credits)

SELECT 6 SEMESTER CREDITS FROM THE FOLLOWING COURSES:

- CS 2321 Computer Science I (4 credits)
- CS 2322 Computer Science II (4 credits)
- CS 2810 Computer Organization and Assembly Language Programming (3 credits)
- CS 3370 Mobile Application Development (3 credits)
- CS 4390 Social, Ethical, and Professional Issues in Computing (2 credits)

MAY INCLUDE 1:

- GEOG 4275 Advanced Geographic Information Systems (3 credits)
  or ENGL 3179 Elements of Electronic Rhetoric (3 credits)
  or TADD 3549 Interactive Design (4 credits)

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COMPUTER SCIENCE MINOR REQUIREMENTS PROFESSIONAL EMPHASIS: MUST COMPLETE ALL AREAS WITH A TOTAL OF AT LEAST 20 SEMESTER CREDITS AND A 2.00 GPA

Additional requirement: Successful completion of the minor requires at least one Computer Science course at the 3000/4000 level taken while in residence at BSU.

I REQUIRED COURSE

COMPLETE THE FOLLOWING COURSE:

- CS 1309 Problem Solving and Computation (3 credits)

II REQUIRED EMPHASIS-PROFESSIONAL EMPHASIS

COMPLETE THE FOLLOWING COURSES:

- CS 2321 Computer Science I (4 credits)
- CS 2322 Computer Science II (4 credits)

SELECT 9 SEMESTER CREDITS FROM THE FOLLOWING COURSES:

- CS 2810 Computer Organization and Assembly Language Programming (3 credits)
- PHYS 2500 Electronics I (4 credits)
- COMPUTER SCIENCE COURSES AT THE 3000 AND 4000 LEVELS
BSU Curriculum Forms

Form 5

Program Modification Form

Program to be modified: Geography. B.S. major, Geographic Information System Emphasis

List all proposed change(s): I propose dropping CS 1108, Introduction to Computers II.

Reason(s) for the change(s): Consistently low enrollment. Further, the educational needs of these students can be met, albeit with different content and pedagogy, with CS 1309 Problem Solving and Computation where there is a sufficient number of seats.

Note: In order to avoid hidden prerequisites, if a course is being dropped from this program (but not from the entire curriculum), please check for which remaining courses may include this dropped course as a prerequisite. Course prerequisites may be found in the online catalog (http://www.bemidjistate.edu/academics/catalog/). Remedies for hidden prerequisites may be found under Curriculum Forms at (http://www.bemidjistate.edu/faculty_staff/faculty_association/forms/).

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Geography. B.S. major

Required Credits: 54
Required GPA: 2.25

I REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- BUAD 2231 Business Statistics I (3 credits)
  or PSY 3401 Basic Statistics for Research (4 credits)
  or STAT 2610 Applied Statistics (4 credits)
- ENGL 2150 Technical Writing (3 credits)
  or ENGL 3150 Writing In The Disciplines (3 credits)
- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)
- GEOG 2400 Introduction to Planning (3 credits)
- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOG 4190 Qualitative Methods in Geographic Research (3 credits)
- GEOG 4265 Spatial Analysis (3 credits)

II GEOGRAPHIC INFORMATION SYSTEM EMPHASIS

REQUIRED GIS COURSES
COMPLETE THE FOLLOWING COURSES:

- GEOG 3226 Cartography (3 credits)
- GEOG 3232 Intermediate Geographic Information Systems (3 credits)
- GEOG 3255 Introduction to Remote Sensing (3 credits)
- GEOG 4275 Advanced Geographic Information Systems (3 credits)

PHYSICAL GEOGRAPHY ELECTIVE
SELECT 1 OF THE FOLLOWING COURSES:

- GEOG 3125 Weather and Climate (3 credits)
- GEOG 3630 Conservation Biology (3 credits)
  or BIOL 3630 Conservation Biology (3 credits)
- GEOG 4130 Biogeography (3 credits)
- GEOG 4140 Landscape Ecology (3 credits)

HUMAN GEOGRAPHY ELECTIVE
SELECT 1 OF THE FOLLOWING COURSES:

- GEOG 2300 Economic Geography (3 credits)
- GEOG 3531 Political Geography (3 credits)
- GEOG 4120 Urban Geography (3 credits)
- GEOG 4210 The History and Development of Geographic Thought (3 credits)

REGIONAL GEOGRAPHY ELECTIVES
SELECT 1 OF THE FOLLOWING COURSES:

- GEOG 3410 Geography of North America (3 credits)
- GEOG 3800 Regional Geography (1-3 credits)
- GEOG 3810 Geography of Europe (3 credits)
- GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)
- GEOG 3840 Geography of Africa (3 credits)
- GEOG 3850 Geography of the Middle East (3 credits)
- GEOG 3860 Geography of Latin America and the Caribbean (3 credits)

COGNATE FIELD ELECTIVES
SELECT 2 OF THE FOLLOWING COURSES:

- BUAD 4385 Data Modeling and Design (3 credits)
- CS 1309 Problem Solving and Computation (3 credits)
- or
  - CS 1107 Introduction to Computers (3 credits)
  - CS 1108 Introduction to Computers II (3 credits)
- CS 2270 Introduction to Web Programming (3 credits)
- CS 2321 Computer Science I (4 credits)
- CS 2322 Computer Science II (4 credits)
- CS 3270 Advanced Web Programming (3 credits)
- CS 3507 Introduction to Databases (3 credits)
- TADT 1460 2D Graphics And Laser Etching (3 credits)

III CAPSTONE PROJECT

SELECT 1 OF THE FOLLOWING COURSES:

- GEOG 4910 Directed Independent Study (4 credits)
- GEOG 4970 Internship (4 credits)
- GEOG 4990 Thesis (3 credits)
Geography. B.S. major

Required Credits: 54
Required GPA: 2.25

I REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- BUAD 2231 Business Statistics I (3 credits)
  or PSY 3401 Basic Statistics for Research (4 credits)
  or STAT 2610 Applied Statistics (4 credits)
- ENGL 2150 Technical Writing (3 credits)
  or ENGL 3150 Writing In The Disciplines (3 credits)
- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)
- GEOG 2400 Introduction to Planning (3 credits)
- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOG 4190 Qualitative Methods in Geographic Research (3 credits)
- GEOG 4265 Spatial Analysis (3 credits)

II GEOGRAPHIC INFORMATION SYSTEM EMPHASIS

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- GEOG 3630 Conservation Biology (3 credits)
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- GEOG 4130 Biogeography (3 credits)
- GEOG 4140 Landscape Ecology (3 credits)

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SELECT 1 OF THE FOLLOWING COURSES:
• GEOG 2300 **Economic Geography** (3 credits)
• GEOG 3531 **Political Geography** (3 credits)
• GEOG 4120 **Urban Geography** (3 credits)
• GEOG 4210 **The History and Development of Geographic Thought** (3 credits)

**REGIONAL GEOGRAPHY ELECTIVES**
**SELECT 1 OF THE FOLLOWING COURSES:**

• GEOG 3410 **Geography of North America** (3 credits)
• GEOG 3800 **Regional Geography** (1-3 credits)
• GEOG 3810 **Geography of Europe** (3 credits)
• GEOG 3820 **Geography of East, South, and Southeast Asia** (3 credits)
• GEOG 3840 **Geography of Africa** (3 credits)
• GEOG 3850 **Geography of the Middle East** (3 credits)
• GEOG 3860 **Geography of Latin America and the Caribbean** (3 credits)

**COGNATE FIELD ELECTIVES**
**SELECT 2 OF THE FOLLOWING COURSES:**

• BUAD 4385 **Data Modeling and Design** (3 credits)
• CS 1309 **Problem Solving and Computation** (3 credits)
• CS 2270 **Introduction to Web Programming** (3 credits)
• CS 2321 **Computer Science I** (4 credits)
• CS 2322 **Computer Science II** (4 credits)
• CS 3270 **Advanced Web Programming** (3 credits)
• CS 3507 **Introduction to Databases** (3 credits)
• TADT 1460 **2D Graphics And Laser Etching** (3 credits)

**III CAPSTONE PROJECT**

**SELECT 1 OF THE FOLLOWING COURSES:**

• GEOG 4910 **Directed Independent Study** (4 credits)
• GEOG 4970 **Internship** (4 credits)
• GEOG 4990 **Thesis** (3 credits)
BSU Curriculum Forms

Form 8
Updated: 09.18.15

Signatures

Mary J Wolf / Professor of Computer Science / 01.19.17
Proposer / Title / Date

Derek Webb / Chair of Math and Computer Science / 01.19.17
Chair or Director / Department or Program / Date
Note: "All departmental recommendations [on curriculum] must be reviewed and approved by the department's faculty."--IFO/MnSCU Master Agreement 2009-2011, 20.A.3 (p. 80).

At this point, packet goes to Records Office/Curriculum Coordinator to be logged in to the Curriculum Proposal Progress Grid.

Colleen Greer / Dean of College of Arts and Sciences / 01.23.17
Dean / College / Date

Note: If proposal is sent back to the Proposer, please notify the Curriculum Coordinator. If approved, packet goes to Academic Affairs Office.