To: Connie Foster, Chancellor  
116 North Hall  
University of Wisconsin-River Falls

From: David Rainville, Chair  
Faculty Senate  
University of Wisconsin-River Falls

May 26, 2009

RE: UW-RF Faculty Senate Motion 2008/2009/92

At the May 6, 2009 meeting of Wisconsin-River Falls Faculty senate, motion 2008-2009/92 was passed and is effective immediately. This motion is forwarded for your action.

A motion from AP&P to make a change in the Computer Science and Information Systems-Information Systems Option; including a change in major/minor, and a change in number of credits.

X Approved

Disapproved

Connie Foster, Chancellor  5-29-09 Date
TRANSMITTAL for UNDERGRADUATE PROGRAMS: Changes or Proposals

INFORMATION

1. Program title:  Computer Science (Csis)
2. Department(s):  Computer Science And Information Systems (Csis)
3. College(s):  CBE
4. Proposal prepared by:  Ahmad Abuhejah/Hossein Najafi Date:  4/10/2009

5. Check all that apply:

☐ New program
☐ Change in course name
☒ Change in Major
☐ Change in course content
☒ Existing program
☒ Change in number of credits
☒ Change in Minor
☐ Change in Emphasis/Option

6. Other Programs/Departments Consulted  (Requires letters of support from all Departments or Programs substantially affected):

1.
2.
3.
4.

7. Date of Implementation:  Fall Semester  2009 Year

8. Have all courses in this program been approved?  Yes ☒ No ☐ If “No,” which ones?

9. Attach Request Narrative.  (Include description of program before and after proposed changes).

UNIT APPROVALS: Requires signatures of all Departments Chairs and Deans whose programs will be affected by the changes or proposal. Signature lines for the affected Departments and Colleges (Noted in 6 above), are on the back of this form. These signatures should be obtained prior to review by all other shared governance levels.

Department Chair

Signature

Date  4/16/09

College Curriculum Cmmt. Chair

Date  4/16/09

Dean of College

Signature

Date  4/16/09

University Curriculum Cmmt. Chair

Signature

Date  4/17/09

Academic Policy & Programs Cmmt. Chair

Signature

Date  4/27/09

Faculty Senate Chair

Signature

Date  5/1/09

Provost / Vice Chancellor

Signature

Date  5/14/09

Chancellor

Signature

Date  5/18/09

NOTE: The master copy of this transmittal and accompanying documents must be filed in the Provost’s office upon final approval. The Provost’s office will notify all appropriate administrative offices [Registrar, Dean(s), and Department Chair(s)] of approvals and necessary actions to implement changes.

Rev. 11/08
TRANSMITTAL for UNDERGRADUATE PROGRAMS: Changes or Proposals

DEPARTMENT & COLLEGE APPROVAL SIGNATURES

Department Chair ________________________
__________________________ 4/16/09
Signature

College Curriculum Cmtt. Chair ________________________
__________________________
Dean of College ________________________

____________________________________

Department Chair ________________________
__________________________ 4/16/09
Signature

College Curriculum Cmtt. Chair ________________________
__________________________
Dean of College ________________________

____________________________________

Department Chair ________________________
__________________________ 4/16-09 (Econ.)
Signature

College Curriculum Cmtt. Chair ________________________

Dean of College ________________________

____________________________________

Rev. 11/08
Narrative for Program Changes

The CSIS department plans to revise the curriculum for the IS option to better meet the new guidelines for IS curriculum released by the ACM (Association of Computing Machinery)/AIS (Association of Information Systems) joint task force on undergraduate IS curriculum. Further, the accrediting body for programs in computing, ABET, also provides specific recommendations for IS programs. These recommendations were also taken into consideration so that it could create an option for the CSIS department to possibly pursue ABET accreditation in future.

The ACM/AIS task force emphasizes that IS graduates should have

I. IS specific knowledge and skills such as
   a. Identifying and designing opportunities for IT-enabled organizational improvement
   b. Analyzing trade-offs
   c. Designing and implementing information systems solutions
   d. Managing ongoing information technology operations

II. Foundational knowledge and skills such as
   a. Leadership and collaboration
   b. Communication
   c. Negotiation
   d. Analytical and critical thinking
   e. Mathematical thinking

III. Knowledge and skills related to domain fundamentals such as
   a. Knowledge of business models, business process design and improvement, organization theory and business strategy
   b. Business functions such as finance, accounting, operations management etc.
   c. Evaluation of business performance such as business intelligence and business analytics
The ABET criteria for accrediting Information Systems programs provides the following recommendation for coursework:

One year that includes:

- Coverage of the fundamentals of a modern programming language, data management, networking and data communications, systems analysis and design and the role of Information Systems in organizations.

- Advanced coursework that builds on the fundamental coursework to provide depth.

One-half year of coursework that focuses on information systems environment:

- Courses on topics that provide background in an environment in which the information systems will be applied professionally such as business or health care.

Further students need to take coursework in quantitative analysis or methods including statistics.

Following these sets of guidelines, the CSIS department proposes to modify the requirements for the CSIS Major with IS option and for the CSIS minor with IS option.
Current CSIS Major – IS Option Requirements

Total Credits: 47-48

A. Required Courses: 25 Cr. hrs.
   a. CSIS 161 Programming I 3 Cr.
   b. CSIS 162 Programming II 3 Cr.
   c. CSIS 237 Data Structure and Algorithm 3 Cr.
   d. CSIS 247 Introduction to Computer Networks 3 Cr.
   e. CSIS 333 Database Management Systems 3 Cr.
   f. CSIS 355 Computer Organization and Assembly Language 3 Cr.
   g. CSIS 423 Introduction to System Analysis I 3 Cr.
   h. CSIS 433 Design Analysis MIS 3 Cr.
   i. CSIS 484 Seminar (writing intensive) 1 Cr.

B. Directed Electives: 12 Cr. hrs.
   a. To be selected from 200-400 CSIS courses in consultation with adviser.

C. Required supporting courses: 10-11 Cr. hrs.
   a. MATH 156 or 166, 236. 7-8 Cr. hrs. total
   b. CBE 100, CBE 200 and CBE 300 3Cr. total
Proposed CSIS Major – IS Option Requirements

Changes made: CSIS 237 and CSIS 355 were removed from the required courses. CSIS 215, CSIS 235 and CSIS 440 have been added as required courses. Courses to be taken as directed electives have been specified. Math 236 was removed as a required supporting course and Math/Econ 226 has been added as a required supporting course instead. Since CBE 200 is no longer a required supporting course for all CBE majors, it was removed. The revised CBE 100 and CBE 300 will each be a ½ credit course. New courses from the business domain have been added as required supporting courses.

Total Credits: 53

A. Required Core Courses (28 Credits)

i. CSIS 161 Programming I 3 Cr.

ii. CSIS 162 Programming II 3 Cr.

iii. CSIS 215 Information Systems for Business Management 3 Cr.

iv. CSIS 235 Object-Oriented Programming

v. CSIS 247 Introduction to Computer Networks 3 Cr.

vi. CSIS 333 Database Management Systems 3 Cr.

vii. CSIS 423 Introduction to System Analysis 3 Cr.

viii. CSIS 433 Design Analysis MIS 3 Cr.

ix. CSIS 440 Information Systems Project Management 3 Cr.

x. CSIS 484 Seminar (writing intensive) 1 Cr.

B. Required Supporting Courses (19 Credits)

a. Business Domain (12 Credits)

i. CSTA 116 Business and Professional Communication 3 Cr. OR ENGL 266 Business Writing 3 Cr.

ii. MNGT 300 Management and Organizational Behavior 3 Cr.

iii. One course from MNGT 320 OR ACCT 231 OR MNGT 361 3 Cr.

iv. MNGT 365 Business Process Management 3 Cr.
b. Math (6 credits)
   i. Math 156/166 3 Cr.
   ii. Econ 226/Math 226 3 Cr.

c. CBE required courses for all majors (1 Credit)
   i. CBE 100 ½ Cr.
   ii. CBE 300 ½ Cr.

C. Directed Electives (6 credits) – Two courses to be selected from below

a. Web Development
   i. CSIS 225 Web Development I 3 Cr.
   ii. CSIS 325 Web Development II 3 Cr.

b. Quantitative Analysis and Decision Making
   i. MNGT 318 Operations Research 3 Cr.
   ii. MNGT 350 Decision Making 3 Cr.
   iii. Econ 326 Statistics for Economics and Business 3 Cr.
Current CSIS Minor – IS Option Requirements

A. Required Courses: 18 Cr. hrs.

   a. CSIS 161 Programming I 3 Cr.
   b. CSIS 162 Programming II 3 Cr.
   c. CSIS 237 Data Structure and Algorithm 3 Cr.
   d. CSIS 247 Introduction to Computer Networks 3 Cr.
   e. CSIS 333 Database Management Systems 3 Cr.
   f. CSIS 423 Introduction to System Analysis I 3 Cr.

B. Directed Electives: 6 Cr. hrs.

   a. To be selected from 200-400 CSIS courses in consultation with adviser.

C. Required supporting Math courses: 7-8 Cr. hrs.

   a. MATH 156 or 166, 236. 7-8 Cr. hrs.
**Proposed CSIS Minor – IS Option Requirements**

**Changes made:** CSIS 237 was dropped as a required course. CSIS 215 has been included as a required course since it is an introductory survey course for the IS discipline. Math 236 was removed as a required supporting math course. Math/Econ 226 has been included as a required supporting math course instead. A list of specific courses to be taken as electives has been provided.

**A. Required Core Courses (18 Credits)**

i. CSIS 161 Programming I 3 Cr.

ii. CSIS 162 Programming II 3 Cr.

iii. CSIS 215 Information Systems for Business Management 3 Cr.

iv. CSIS 247 Introduction to Computer Networks 3 Cr.

v. CSIS 333 Database Management Systems 3 Cr.

vi. CSIS 423 Introduction to System Analysis I 3 Cr.

**B. Required Math Supporting Courses (6 Credits)**

i. Math 156/166 3 Cr.

ii. Econ 226/Math 226 3 Cr.

**C. Directed Electives (6 credits) – Two courses to be selected from below**

i. CSIS 225 Web Development I 3 Cr.

ii. CSIS 235 Object-Oriented Programming

iii. CSIS 325 Web Development II 3 Cr.

iv. CSIS 433 Design Analysis MIS 3 Cr.

v. CSIS 440 Information Systems Project Management 3 Cr.