Curriculum Proposal

Minneapolis State University, Mankato

Please type or select the requested information. Print completed forms, add appropriate paper attachments, and route through MSU’s curricular process for recommendations and decisions.

<table>
<thead>
<tr>
<th>College: Science, Engineering and Technology</th>
<th>Proposal #: 319</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Check all that apply): Undergraduate</td>
<td>Effective Date of Change:</td>
</tr>
<tr>
<td>Department: Information Systems &amp; Technology</td>
<td>Academic Year: 07-08</td>
</tr>
<tr>
<td>Program: Information Technology</td>
<td>(For Office Use Only)</td>
</tr>
<tr>
<td>CIP #: 11.010300</td>
<td>Course Designator and Number</td>
</tr>
<tr>
<td>Type of Change: PROGRAM PROPOSALS</td>
<td>12</td>
</tr>
<tr>
<td>Proposed: Redesign—New Degree in Related Area</td>
<td>Credits</td>
</tr>
<tr>
<td>Title Current:</td>
<td>(if applicable)</td>
</tr>
<tr>
<td>Title Proposed: Certificate in Software Development</td>
<td></td>
</tr>
<tr>
<td>24-Char. Abbrev: Cert. in Software Dev.</td>
<td></td>
</tr>
</tbody>
</table>

Include a course or program description for the Bulletin (30-40 words maximum for courses, 100 for programs):
The software development certificate provides the students with an understanding of the successful delivery of software projects that support organizational goals. Students gain knowledge in the use of tools necessary to organize project objectives, create realistic plans, and build and manage an accomplished team through every phase of the software development project. Students gain practical skills needed to meet today's demands for faster and more efficient development.

Rationale or Justification for change:
Software Development is currently one of the specialties and also is a minor (approved in fall 2007) in the existing IT program. The intent of this proposal is to redesign the specialization and the minor to have an undergraduate certificate program which will open opportunities for the students with the required background to get a certificate in one the important areas in IT and also for professionals in service to update or get a specialization in software development. All courses included are existing in the minor and in the specialization.

***For General Education or Cultural Diversity Courses Only***

<table>
<thead>
<tr>
<th>GE Category #</th>
<th>GE Category Name</th>
<th>(Maximum of 3 Categories)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N/A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

† For Writing Intensive Courses, attach a description of the kind and quantity of writing.
† For Upper Division Courses, include a description of the respects in which it is broad and general rather than narrow and specific, and so suitable as GE.

Attach paper copies of the following:

a. Syllabus or course outline.
b. Course’s student learning outcomes associated with each GE competency or CD designation.
c. List of strategies to be used to assess students' achievement of each GE competency or CD designation.

***For New Courses***

<table>
<thead>
<tr>
<th>(Check all that apply:)</th>
<th>Instructional Type:</th>
<th>Lecture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course is an elective.</td>
<td>Grading Format:</td>
<td>Grade</td>
</tr>
<tr>
<td>Course is required for program</td>
<td>P/N</td>
<td></td>
</tr>
<tr>
<td>Pre- or Co-requisites:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other courses are being changed or eliminated. (Explain.)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Course will be offered:

- Fall Semester
- Spring Semester
- Summer Session

Course content or title is similar to courses in other departments. (Attach copy of letter of agreement with other program(s) contacted. Indicate the nature of the discussions and/or resolution of differences or potential conflicts.)

Attach paper copies of the following:

a. Syllabus or course outline.
b. Course's student learning outcomes.
c. A list of resources required to offer and support this course.
d. A description of how teaching this course will affect department staffing.
e. If 400/500 level course, an explanation of added expectations of graduate students.

Revised September 2002
## Part A: General Information

<table>
<thead>
<tr>
<th>Institution</th>
<th>Minnesota State University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Award</td>
<td>Certificate</td>
</tr>
<tr>
<td>Full Program Name</td>
<td>Software Development</td>
</tr>
<tr>
<td>Short Program Name (up to 50 characters)</td>
<td>Software Development</td>
</tr>
<tr>
<td>Credit Length</td>
<td>12</td>
</tr>
<tr>
<td>Proposed 6-digit CIP Code</td>
<td>11.010300</td>
</tr>
<tr>
<td>Use 8-digit CIP Code for existing programs being redesigned, relocated, or replicated</td>
<td></td>
</tr>
<tr>
<td>Effective Term/Year</td>
<td>Fall 2008</td>
</tr>
<tr>
<td>Online Delivery (Y/N)</td>
<td>Mix – online and in class</td>
</tr>
<tr>
<td>Program Location(s)</td>
<td>Minnesota State University, Mankato</td>
</tr>
<tr>
<td>Collaborating institution(s), if any</td>
<td>None</td>
</tr>
</tbody>
</table>

**Brief catalog description:**
The software development certificate provides the students with an understanding of the successful delivery of software projects that support organizational goals. Students gain knowledge in the use of tools necessary to organize project objectives, create realistic plans, and build and manage an accomplished team through every phase of the software development project. Students gain practical skills needed to meet today's demands for faster and more efficient development.

## Part B: Verification

Consortial programs require verification (below) by all member institutions.

<table>
<thead>
<tr>
<th>Name</th>
<th>Email</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Author</td>
<td>Mahbubur Syed</td>
<td><a href="mailto:mahbubur.syed@mnsu.edu">mahbubur.syed@mnsu.edu</a></td>
</tr>
<tr>
<td>Contact Person</td>
<td>Leon Tietz</td>
<td><a href="mailto:Leon.tietz@mnsu.edu">Leon.tietz@mnsu.edu</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief Academic Officer</td>
<td>[Signature]</td>
<td>3/28/06</td>
</tr>
<tr>
<td>President</td>
<td>[Signature]</td>
<td>3/28/08</td>
</tr>
</tbody>
</table>

**NOTE:** Please review and update articulation agreements that may apply to this program.

September 24, 2007
**REDESIGN: Create a New Program based on a Related Program**

**Notice of Intent Form submitted (Y/N)**

**Part A: General Information**

<table>
<thead>
<tr>
<th>Institution</th>
<th>Minnesota State University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rationale for replacement or addition of proposed program</td>
<td>In fall 2007, the undergraduate program in the Department of Computer and Information Sciences was split into two departments – the Department of Information Systems and Technology (IST) and the Department of Computer Science (CS). Information Technology is one of the programs in the IST department. Software Development is currently one of the specializations and also is a minor (approved in fall 2007) in the existing IT program. The intent of this proposal is to redesign the specialization and the minor to have an undergraduate certificate program in Software Development which will open opportunities for the students with the required background to get a certificate in one the important areas in IT and also for professionals in service to update or get a specialization in software development. All courses included are existing in the minor and in the specialization. Accordingly, the redesigned program will not require any additional resources or faculty.</td>
</tr>
<tr>
<td>Will the existing program be closed? Y/N</td>
<td>The existing programs (IT program - ‘Software Development’ specialization and minor) will not be closed.</td>
</tr>
<tr>
<td>Proposed 6-digit CIP Code</td>
<td>11.010300 (current CIP code for IT program)</td>
</tr>
<tr>
<td>Effective Term/Year</td>
<td>Fall 2008</td>
</tr>
<tr>
<td>Online Delivery (Y/N)</td>
<td>Class room and Online Mixed</td>
</tr>
<tr>
<td>Collaborating Institutions, if any</td>
<td></td>
</tr>
<tr>
<td>Brief catalog description</td>
<td>As attached</td>
</tr>
</tbody>
</table>

**Program Characteristics**

<table>
<thead>
<tr>
<th>Program Characteristics</th>
<th>Existing Program</th>
<th>Proposed Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Program Name</td>
<td>Software Development Minor in IT, Software Development Specialization in IT</td>
<td>Certificate in Software Development</td>
</tr>
<tr>
<td>Short Program Name (up to 50 characters)</td>
<td>Software Development Minor in IT, Software Development Specialization in IT</td>
<td>Certificate in Software Development</td>
</tr>
<tr>
<td>ISRS Program ID</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Award</td>
<td>Software Development Minor in IT, Software Development Specialization in IT</td>
<td>Certificate in Software Development</td>
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</table>
### Part B: Curriculum Design [Program Design]

<table>
<thead>
<tr>
<th>Program Component</th>
<th>Credits in Existing Program</th>
<th>Credits in Proposed Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prerequisites to the major that are not</td>
<td></td>
<td></td>
</tr>
<tr>
<td>counted elsewhere</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major: Core common to all emphases</td>
<td>Minor – 20 credits</td>
<td>12</td>
</tr>
<tr>
<td>Major: Restricted electives, if any</td>
<td>Specialization – 16 credits</td>
<td></td>
</tr>
<tr>
<td>Major: Unrestricted Electives, if any</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major: Emphasis, if any, beyond the core</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(copy this line if award has more</td>
<td></td>
<td></td>
</tr>
<tr>
<td>than one emphasis)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minor, if any</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other graduation requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Upper Division Credits in degree (Baccalaureate Degrees Only)

### Part C: Evidence Required (Attachments)

Curriculum committee minutes documenting recommendation; include committee membership
Consortial programs require verification (below) by all member institutions.
Copies of current and proposed curricula with courses, course numbers, credit hours.

### Part D: Verification

<table>
<thead>
<tr>
<th>Name</th>
<th>Email</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Author</td>
<td>Mahbubur Syed</td>
<td>(507) 389 3226</td>
</tr>
<tr>
<td>Contact Person</td>
<td>Leor Tietz</td>
<td>(507) 389 5319</td>
</tr>
</tbody>
</table>

**Signature** **Date**

Chief Academic Officer

President

NOTE: Please review and update articulation agreements that may apply to this program.
UNDERGRADUATE CATALOG DESCRIPTION

Requirements for Certificate Programs in Information Technology
(Note: these requirements are same for all certificate programs in IT)

- Admission Requirements
  - Knowledge of programming (equivalent of IT 210 and IT 214) or equivalent programming experience.
- Prerequisites Requirements
  For the Undergraduate Certificate Programs in IT, all of the Certificates’ prerequisite requirements can be met through MSU coursework, transfers, substitutions and/or waivers, as may be appropriate.
- Completion Requirements
  Without exception, the twelve credits of coursework required for each Certificate must all be completed in the Department of Information Systems and Technology at Minnesota State University, Mankato.

Certificate in Software Development (12 credits)

The software development certificate provides the students with an understanding of the successful delivery of software projects that support organizational goals. Students gain knowledge in the use of tools necessary to organize project objectives, create realistic plans, and build and manage an accomplished team through every phase of the software development project. Students gain practical skills needed to meet today’s demands for faster and more efficient development.

Certificate in Software Development (12 credits)
Prerequisites: Students must have fundamental knowledge of or experience in systems analysis and design (equivalent of IT 380). Students planning to take IT 414 must also have basic knowledge of or experience in data structures and databases (equivalent of IT 310 and IT 340). Students planning to take IT 483 must have basic knowledge of or experience in databases (equivalent of IT 340).

Choose three of the following Courses (12 credits)
IT 414 Advanced Object-Oriented Programming w/ Design Patterns (4)
IT 480 Software Quality Assurance and Testing (4)
IT 482 Human Computer Interaction (4)
IT 483 Web Application and User Interface Design (4)
IT 484 Software Engineering (4)
Proposed
Certificate Program in Software Development

Requirements for the Certificate Programs in Information Technology
(Note: these requirements are same for all undergraduate certificate programs in IT)

- Admission Requirements
  - Knowledge of programming (equivalent of IT 210 and IT 214) or equivalent programming experience.
- Prerequisites Requirements
  For the Undergraduate Certificate Programs in IT, all of the Certificates’ prerequisite requirements can be met through MSU coursework, transfers, substitutions and/or waivers, as may be appropriate.
- Completion Requirements
  Without exception, the twelve credits of coursework required for each Certificate must all be completed in the Department of Information Systems and Technology at Minnesota State University, Mankato.

Certificate in Software Development (12 credits)
Prerequisites: Students must have fundamental knowledge of or experience in systems analysis and design (equivalent of IT 380). Students planning to take IT 414 must also have basic knowledge of or experience in data structures and databases (equivalent of IT 310 and IT 340). Students planning to take IT 483 must have basic knowledge of or experience in databases (equivalent of IT 340).

Choose three of the following Courses (12 credits)
IT 414 Advanced Object-Oriented Programming w/ Design Patterns (4)  (Existing)
IT 480 Software Quality Assurance and Testing (4)  (Existing)
IT 482 Human Computer Interaction (4)  (Existing)
IT 483 Web Application and User Interface Design (4)  (Existing)
IT 484 Software Engineering (4)  (Existing)

Existing – Software Development Minor (Approved during Fall 2007)

Software Development Minor (20 credits)
IT 210 Fundamentals of Programming (4)
IT 214 Fundamentals of Software Development (4)
IT 310 Data Structures and Algorithms (4)
IT 380 Systems Analysis and Design (4)

Choose One of the following Courses
IT 414 Advanced Object-Oriented Programming w/ Design Patterns (4)
IT 480 Software Quality Assurance and Testing (4)
IT 484 Software Engineering (4)
Information Technology

College of Science, Engineering Systems & Technology
Department of Information Systems & Technology
273 Wissahickon Hall • 507-389-2968
Web site: www.cset.msu.edu/it

Chair: Leon Tetz

Gregg Asher, Cynis Azarbad, Lee Correll, Cesar Guerra-Salcedo, Allan Hart, Azaa Quade, Susan Schilling, James Slack, Mahluhbu Syed, Christopher Veltso, Michael Wells

Information Technology (IT) in the broadest sense encompasses all aspects of computing technology. IT, as an academic discipline, focuses on meeting the needs of users within an organizational and societal context through the selection, creation, application, integration and administration of computing technologies. The aim is to provide IT graduates with the skills and knowledge to take on appropriate professional positions in Information Technology upon graduation and grow into leadership positions or pursue research or graduate studies in the field. The IT program has two minors.

Admission to the IT program is granted by the department. Admission to the program is required before the student is permitted to take 300- and 400-level courses.

Requirements for admission to the IT program are:

- A minimum of 32 earned semester credits
- Completion of MATH 121 or MATH 181 with a grade of "C" or better
- Completion of ENG 104 with a grade of "C" or better
- Completion of IT 110 with a grade of "B" or better
- Completion of IT 210, and IT 214 with a grade of "C" or better and a GPA of 2.5 in these courses (or their equivalents).

INFORMATION TECHNOLOGY BS

Required General Education (27 or 28 credits)

ENG 101 Composition (4)
SPEE 100 Fundamentals of Speech Communication (3)
STAT 154 Elementary Statistics (3)
MATH 180 Mathematics for Computer Science (4)
IT 110 Foundations of Computing (4)
SPEE 233 Public Speaking for Technical Professionals (3)
PHIL 120 Introduction to Ethics (3)

Choose one of the following MATH Courses

MATH 121 Calculus I (4)
MATH 181 Calculus II (4)

Required Support Courses (4 credits)

ENG 271 Technical Communication (4)

Required for Major (36 credits)

IT 210 Fundamentals of Programming (4)
IT 214 Fundamentals of Software Development (4)
IT 320 Machine Structures and Operating Systems (4)
IT 340 Introduction to Database Systems (4)
IT 350 Information Security (4)
IT 360 Introduction to Data Communication and Networking (4)
IT 380 Systems Analysis and Design (4)
IT 483 Web Applications and User Interface Design (4)

Choose one of the following

IT 497 Internship (4)
IT 498 Information Technology Capstone (4)

Required Electives (16 credits) from Category A and B courses

Category A (12 credits):

Choose one sequence of courses from the following groups:

Database Technologies

IT 440 Database Management Systems II (4)
IT 442 Database Security, Auditing, and Disaster Recovery (4)
IT 444 Data Warehousing and Mining (4)

Networking and Information Security

IT 450 Information Warfare (4)
IT 456 Network and Security Protocols (4)
IT 462 Network Administration and Programming (4)

Software Development

IT 414 Advanced Object-Oriented Programming w/ Design Patterns (4)
IT 480 Software Quality Assurance and Testing (4)
IT 484 Software Engineering (4)

Category B (4 credits):

Choose 4 credits from the following list:

IT 310 Data Structures and Algorithms (4)
IT 311 Business Applications Programming (4)
IT 412 Graphics (4)
IT 430 Intelligent Systems (4)
IT 432 Robotics (4)
IT 464 Applications of Wireless and Mobile Networks (4)
IT 482 Human Computer Interaction (4)
IT 488 Rapid Application Development (4)
IT 495 Seminar in Information Technology (1-4)
IT 496 Selected Topics in Information Technology (1-4)
IT 499 Individual Study in Information Technology (1-2)

The following courses are not to be used in the Information Technology major:
IT 160, IT 201, IT 296, IT 321.

Required Minor: Yes, Any (Computer Science excluded)

COMPUTER INFORMATION SCIENCE MINOR

Required for Minor (Core, 20 credits)

IT 210 Fundamentals of Programming (4)
IT 214 Fundamentals of Software Development (4)

Choose three of the following Courses

IT 483 Web Applications and User Interface Design (4)
IT 320 Machine Structures and Operating Systems (4)
IT 340 Introduction to Database Systems (4)
IT 362 Introduction to Data Communication and Networking (4)
IT 380 Introduction to Software Engineering (4)

COMPUTER TECHNOLOGY MINOR

Required for Minor (Core, 20 credits)

IT 110 Foundations of Computer (4)
IT 200W Computers in Society (4)
IT 210 Fundamentals of Programming (4)
IT 380 Systems Analysis and Design (4)

Choose One of the following Courses

IT 214 Fundamentals of Software Development (4)
IT 430 Intelligent Systems (4)

POLICIES/INFORMATION

GPA Policy. Candidates for the major degrees in the department must maintain a 2.0 grade-point average in all coursework in the major field, in addition to the 2.0 overall average required by the university for graduation. Students must earn
Certificate in Software Development
Student Learning Outcome

The software development certificate provides the students with an understanding of the successful delivery of software projects that support organizational goals. Students gain knowledge in the use of tools necessary to organize project objectives, create realistic plans, and build and manage an accomplished team through every phase of the software development project. Students gain practical skills needed to meet today's demands for faster and more efficient development.

The student learning outcomes are as follows.

After completion of the Software Development certificate the students will:

1) Have developed a competency with respect to a variety of object-oriented programming techniques and concepts.

2) Have competency with respect to some major industrial-strength integrated development environments.

3) Have knowledge of the software development process for successful delivery of software projects that support organizational goals.

4) Have knowledge of team dynamics and the ability to work effectively in a team environment.

5) Be able to match organizational needs to an efficient software development model that addresses real-world requirements and challenges.

6) Be able to plan and manage software development projects at each stage of the development process.

7) Have the skills for tracking and controlling software deliverables.

8) Understand and be able to develop a software quality assurance plan for a software project.
Resource Requirements for the Certificate in Software Development:

Resources required to offer and support the certificate program

Resources currently in place within the department are adequate to support this certificate program. All courses included in the certificate are currently offered by the department. Sufficient seats are available in the classes because of current low enrollments.

Impact on staffing in the department to support the certificate program

This certificate will be able to be offered with the current staffing. All courses included in the certificate are currently offered by the department and there is sufficient seating in the classes because of low enrollments. No new sections will be required.

List of additional library holdings required for this certificate program

Resources currently in place within University Library will support this new certificate.
## Certificate in Software Development Assessment Plan (page 1/2)

<table>
<thead>
<tr>
<th>Student Learning Outcomes (performance, knowledge, attitudes)</th>
<th>Related College Goals</th>
<th>Related Univ. Goals</th>
<th>Method(s) of Assessment</th>
<th>Who Assessed (Students from what courses - population)</th>
<th>When Assessed (dates)</th>
<th>Standard of Mastery/ Criterion of Achievement</th>
<th>What is Hoped to Be Learned?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Have developed a competency with respect to a variety of object-oriented programming techniques and concepts.</td>
<td>1, 2, 4</td>
<td>2</td>
<td>A1, A2, A3</td>
<td>Courses in the certificate</td>
<td>semester end</td>
<td>&gt;80% passing</td>
<td>Object-oriented programming</td>
</tr>
<tr>
<td>2) Have competency with respect to some major industrial-strength integrated development environment.</td>
<td>1, 2, 4</td>
<td>2</td>
<td>A1, A2, A3,</td>
<td>Courses in the certificate</td>
<td>semester end</td>
<td>&gt;80% passing</td>
<td>Development environments</td>
</tr>
<tr>
<td>3) Have knowledge of the software development process for successful delivery of software projects that support organizational goals.</td>
<td>1, 2, 3, 4</td>
<td>2</td>
<td>A1, A2, A3,</td>
<td>Courses in the certificate</td>
<td>semester end</td>
<td>&gt;80% passing</td>
<td>Development tools and methodologies</td>
</tr>
<tr>
<td>4) Have knowledge of team dynamics and the ability to work effectively in a team environment.</td>
<td>1, 2, , 4</td>
<td>2</td>
<td>A1, A2, A3,</td>
<td>Courses in the certificate</td>
<td>semester end</td>
<td>&gt;80% passing</td>
<td>Work effectively in team</td>
</tr>
<tr>
<td>5) Be able to match organizational needs to an efficient software development model that addresses real-world requirements and challenges.</td>
<td>1, 2, 3, 4</td>
<td>2</td>
<td>A1, A2, A3, A4, A5</td>
<td>Courses in the certificate</td>
<td>semester end</td>
<td>&gt;80% passing</td>
<td>Requirements analysis</td>
</tr>
<tr>
<td>6) Be able to plan and manage software development projects at each stage of the development process.</td>
<td>1, 2, 3, 4</td>
<td>2</td>
<td>A1, A2, A3, A4</td>
<td>Courses in the certificate</td>
<td>semester end</td>
<td>&gt;80% passing</td>
<td>Software development project management</td>
</tr>
<tr>
<td>7) Have the skills for tracking and controlling software deliverables.</td>
<td>1, 2, 4</td>
<td>2</td>
<td>A1, A2, A3, A4, A5</td>
<td>Courses in the certificate</td>
<td>semester end</td>
<td>&gt;80% passing</td>
<td>Tracking and controlling tools</td>
</tr>
<tr>
<td>8) Understand and be able to develop a software quality assurance plan in a software project.</td>
<td>1, 2, 3, 4</td>
<td>2</td>
<td>A1, A2, A3, A5</td>
<td>Courses in the certificate</td>
<td>semester end</td>
<td>&gt;80% passing</td>
<td>Software quality assurance</td>
</tr>
</tbody>
</table>
Certificate in Software Development Assessment Plan (page 2/2)

What will the program do with results of information? The department will use the results of information to determine what changes may be needed to improve the certificate program, and to implement those changes.

Codes for methods of Assessment:

A1 Evaluation of student performances in their exams, home works, quizzes
A2 Course Evaluation
A3 Student Survey
A4 Research papers
A5 Project report submission

Numbers Used for Related College Goals column:
Extracted from: http://cset.mnsu.edu/about/mission-goals.html
1. Provide students an in-depth knowledge of their discipline, accompanied with critical thinking skills, laboratory skills and problem solving skills,
2. Assure that all graduates of the college have strong oral and written communication skills.
3. Provide each major a thorough understanding of the ethical nature of their discipline and its application to societal needs.
4. Commit to life-long learning through a variety of technologies and research tools so each learner can adapt their knowledge base to new situations.

Numbers used for Related Univ. Goals column:
Extracted from: http://www.mnsu.edu/supersite/about/mission.html

2. The University will prepare students for careers and for life-long learning by providing a clearly defined general education program and focused undergraduate preprofessional, professional, and liberal arts programs.
Information Systems & Technology Faculty Meeting, 12-11-07

In attendance: Syed, Slack, Tietz, Wells, Veltos, Azarbad

Meeting called to order @ 2:45pm.

Cornell moved to approve the minutes from 10-14-07. Azarbad seconded the motion. Voice vote taken, motion passed.

Regarding distribution and policy for indirect cost returns: Cornell made the motion to recommend to the Dean we (the department) keep in place the current balances of the indirect accounts for our department. The PI will direct the expenditures by 3-1-08. Azarbad seconded the motion. Voice vote taken, motion passed.

Potential Laptop initiative for ISYS/IT department: Cornell moved that the department move forward with the implication of a laptop initiative Fall/2009. Wells & Cornell will seek input from the COB, IT Services and the Dean’s office regarding the details of startup. Wells seconded the motion. Discussion. Motion passed by voice vote.

Registering for ISYS or IT sections of cross-listed courses: If a student is a IT major they should register for IT components of cross listed courses. It appears that some students have registered in the iSYS component because the IT section of a course happens to be full. How can we prevent this from happening on a regular basis. Discussion. Consensus being, the Chair should send email to students list, regarding making sure they are to register for correct major indicator.

Review of Prerequisites on iSYS & IT websites: Wells recommended that IT 480 be the listed prerequisite to IT 484. Cornell seconded the motion. Voice vote taken, motion passed.

Portfolio Requirement: Slack made the motion that the entire department adopt “eportfolio policy”. See page 198 of current undergrad bulletin for how iSYS has set the “eportfolio” up as a requirement. Azarbad seconded the motion. Voice vote taken, motion passed.

110 & 210 taken concurrently, permitted for sophomores and above: Motion made by Cornell, seconded by Azarbad. Voice vote taken, motion passes.

Letter grade of “B” or better should be required for admission to major. Cornell made the motion and Azarbad seconded the motion. Voice vote taken, motion passes.

Preview of January IT curriculum plans/deadlines: Syed handed out initial proposals for Information Technology MS & IT undergraduate certificate. After much discussion, department asked Syed to rework the MS document and submit it to all for vote electronically.

Undergraduate Certificate Programs in IT: Cornell made the motion that for the Undergraduate Certificate Programs in IT, all of the Certificate’s prerequisite requirements can be met through MSU coursework, transfers, substitutions and/or waivers, as may be appropriate. Without exception, the twelve credits of additional coursework required for each Certificate must all be completed at MSU. Wells seconded the motion. Voice vote was taken and motion passed.

Meeting adjourned at 4:45pm

Respectfully Submitted

Mary Asher
Minnesota State University, Mankato  
College of Science, Engineering and Technology  
Curriculum Committee Meeting Minutes  
Trafton Center 126, Wednesday 13 February 2008

Present: Mary Guy (Math & Statistics), Beth Proctor (Bio. Science), Jim Rife (Chem. & Geol., arrives at 9:30 am), Jim Slack (IST), Youwen Xu, Chair (Physics & Astronomy), Karen Chou, Secretary (ME & CIVE), Julio Sanchez (CS), Scott Fee (IDCM)  
Absent: Bruce Jones (AMET), and Rajiv Kapadia (ECET).  
Guests: David Haglin (Dean’s office), Mahbubur Syed, (UCAP-CSET rep.), Angie Bomier (Advising Ctr.), Leon Tietz (IST Chair), Cyrus Azarod (IST)

1. The meeting was called to order at 9:00 am.
2. Meeting minutes from 2/6/2008 meeting was not prepared for approval.
3. The committee reviewed and approved proposals 0896, 0897, 08110, and 08109 with modification on cover sheet and inclusion of program assessment.
4. The committee suggested that proposals 08100 to 08108 be withdrawn for this academic year since new courses will replace some of the existing courses and a program re-design is needed to show how all these new courses fit into their curriculum for accreditation. The committee suggested that these proposals should be included in the package of proposals to be submitted next fall with their program redesign. Scott Fee agreed to withdraw the proposals.
5. The committee revised proposals 0888, 0892 to 0894 which were tabled from 2/6/2008 meeting due to lack of time. IST didn’t submit the suggested statement because the suggestions were not approved by the committee. The discussion was then focused on the purpose of the college curriculum committee since programs don’t have to respond to the college curriculum committee as long as MnSCU does not request the information. The proposals were passed with the modification that TOEFL requirement be removed from admission criteria. There were five yes, two abstains, and three absence.
6. The committee reviewed proposal 0898 – program re-design to add a new MS degree in ITS. The proposal was passed with the modification distributed during the meeting. There were five yes, two abstains, and three absence.
7. The committee reviewed proposal 0899 – program re-design to add a new BS degree in Informatics. The proposal was passed with the modification to remove the sentence under “required minor”. There were five yes, three abstains, and two absence.
8. Proposal 08111 to 08114 were submitted passed deadline (Jan. 28). The committee members agreed to meet on Thursday, Feb. 14 to review the proposal.
9. David Haglin distributed a bulletin change proposal (08115) on behalf of Computer Science Department.
10. The next committee meeting was scheduled for Thursday 14 February 2008 at 9:00 am in TR-C126.
11. The meeting was adjourned at 9:50 am.

Respectfully submitted,

Karen Chou
Minnesota State University, Mankato
College of Science, Engineering and Technology
Curriculum Committee Meeting Minutes
Trafton Center 126, Wednesday 6 February 2008

Present: Mary Guy (Math & Statistics), Beth Proctor (Bio. Science), Jim Rife (Chem. & Geol.), Jim Slack (IST), Youwen Xu, Chair (Physics & Astronomy), Karen Chou, Secretary (ME & CIVE), Julio Sanchez (CS), Bruce Jones (AMET), Scott Fee (IDCM)
Absent: Rajiv Kapadia (ECET)
Guests: David Haglin (Dean’s office), Mahbubur Syed, (UCAP-CSET rep.), Angie Bomier (Advising Ctr.), Leon Tietz (IST Chair)

1. The meeting was called to order at 9:00 am.

2. Meeting minutes from 11/8/2007 was approved as distributed.

3. All proposals that were approved in the previous committee meeting have been signed off and given to the Dean’s Office.

4. The committee reviewed and approved with modification on cover sheet on proposals 0889 to 0891, and 0895.

5. The committee spent the rest of the meeting reviewed and discussed proposals 0888, 0892 to 0894. These are new undergraduate certificate program proposals. Discussion was focused on the target students, need for certificate programs, and assessment of pre-requisites of non-traditional students (currently full time workers). There was also discussion on whether CSET Curriculum Committee has the authority to raise these questions since MnSCU does not require the information. It was suggested IST to provide a statement on potential target students taking the certificate programs. No motion was offered. Proposals were tabled to next meeting due to the lack of time.

6. The next committee meeting was scheduled for Wednesday 13 February 2008 at 9:00 am in TR-C126.

7. The meeting was adjourned at 9:50 am.

Respectfully submitted,

Karen Chou