**REQUEST TO COLLEGE CURRICULUM COMMITTEE FOR CURRICULAR IMPROVEMENTS**

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<th>DEPARTMENT:</th>
<th>PROPOSED EFFECTIVE SEMESTER:</th>
<th>COLLEGE:</th>
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<tr>
<td>Academic Program</td>
<td>Substantive Course Changes</td>
<td>Misc Course Changes</td>
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<tr>
<td>□ New degree*</td>
<td>□ New course</td>
<td>□ Title</td>
</tr>
<tr>
<td>□ New major*</td>
<td>□ Pre or Co-requisites</td>
<td>□ Description (attach current &amp; proposed)</td>
</tr>
<tr>
<td>□ New curriculum*</td>
<td>□ Deletion (required by others)</td>
<td>□ Deletion (not required by others)</td>
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<tr>
<td>□ New concentration*</td>
<td>□ Course #, different level</td>
<td>□ Course #, same level</td>
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<td>□ New certificate</td>
<td>□ Credit hours</td>
<td>□ Variable credit</td>
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<tr>
<td>□ New minor</td>
<td>□ Enrollment restriction</td>
<td>□ Credit/no credit</td>
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<td>□ Revised major</td>
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<td>□ Revised minor</td>
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<td>□ Admission requirements</td>
<td>(attach current &amp; proposed)</td>
<td><strong>XX Other (explain</strong>*)</td>
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<td>□ Graduation requirements</td>
<td>□ General education (select one)</td>
<td>Not Applicable</td>
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<tr>
<td>□ Deletion □ Transfer</td>
<td>□ Other (explain***)</td>
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<tr>
<td>□ Other (explain***)</td>
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</tbody>
</table>

**Other: "numbering" change to match accreditation requirements**

Title of degree, curriculum, major, minor, concentration, or certificate: **Computer Science**

Existing course prefix and #: Proposed course prefix and #: Credit hours:

Existing course title:

Proposed course title:

Proposed course prerequisite & co-requisite(s):

Proposed course prerequisite(s):
   If there are multiple prerequisites, connect with "and" or "or". To remove prerequisites, enter "none."

Proposed course co-requisite(s):
   If there are multiple corequisites, they are always joined by "and."

Proposed course prerequisite(s) that can also be taken concurrently:
   Is there a minimum grade for the prerequisites or corequisites?
   The default grades are D for undergraduates and C for graduates.

Major/minor or classification restrictions:
   List the Banner 4 character codes and whether they should be included or excluded.

For 5000 level prerequisites & corequisites: Do these apply to: (circle one) undergraduates graduates both

Specifications for University Schedule of Classes:

a. Course title (maximum of 30 spaces):

b. Multi-topic course: □ No □ Yes
c. Repeatable for credit: □ No □ Yes
d. Mandatory credit/no credit: □ No □ Yes
e. Type of class and contact hours per week (check type and indicate hours as appropriate)
   1. □ Lecture
   2. □ Lab or discussion
   3. □ Lecture/lab/discussion
   4. □ Seminar or □ studio
   5. □ Independent study
   6. □ Supervision or practicum

CIP Code (Registrar's use only):

Chair/Director: 

Date: 2/8/17

Chair, College Curriculum Committee: 

Date: 

Dean: 

Date: 

Graduate Dean: 

Date: 

Curriculum Manager: Return to dean □ Date Forward to: 

Date: 

Chair, COGE/PEB / FS President: 

Date: 

FOR PROPOSALS REQUIRING GSC/USC REVIEW:

☐ Approve ☐ Disapprove Chair, GSC/USC: 

Date: 

☐ Approve ☐ Disapprove Provost: 

Date: 

Revised May 2007. All previous forms are obsolete and should not be used.
1. Explain briefly and clearly the proposed improvement.

Catalog currently numbers the student outcomes as 1, 2, ... 11. To correspond to the accreditation conventions, these should be identified as a, b, ... k

2. Rationale. Give your reason(s) for the proposed improvement. (If your proposal includes prerequisites, justify those, too.)

Correspond to accreditation conventions

3. Effect on other colleges, departments or programs. If consultation with others is required, attach evidence of consultation and support. If objections have been raised, document the resolution. Demonstrate that the program you propose is not a duplication of an existing one.

NA

4. Effect on your department's programs. Show how the proposed change fits with other departmental offerings.

NA

5. Effects on enrolled students: Are program conflicts avoided? Will your proposal make it easier or harder for students to meet graduation requirements? Can students complete the program in a reasonable time? Show that you have considered scheduling needs and demands on students' time. If a required course will be offered during summer only, provide a rationale.

NA

6. Student or external market demand. What is your anticipated student audience? What evidence of student or market demand or need exists? What is the estimated enrollment? What other factors make your proposal beneficial to students?

NA

7. Effects on resources. Explain how your proposal would affect department and University resources, including faculty, equipment, space, technology, and library holdings. Tell how you will staff additions to the program. If more advising will be needed, how will you provide for it? How often will course(s) be offered? What will be the initial one-time costs and the ongoing base-funding costs for the proposed program? (Attach additional pages, as necessary.)

NA

8. General education criteria. For a general education course, indicate how this course will meet the criteria for the area or proficiency. (See the General Education Policy for descriptions of each area and proficiency and the criteria. Attach additional pages as necessary. Attach a syllabus if (a) proposing a new course, (b) requesting certification for baccalaureate-level writing, or (c) requesting reapproval of an existing course.) NA

9. List the learning outcomes for the proposed course or the revised or proposed major, minor, or concentration. These are the outcomes that the department will use for future assessments of the course or program. NA

10. Describe how this curriculum change is a response to assessment outcomes that are part of a departmental or college assessment plan or informal assessment activities. NA

11. (Undergraduate proposals only) Describe, in detail, how this curriculum change affects transfer articulation for Michigan community colleges. For course changes, include detail on necessary changes to transfer articulation from Michigan community college courses. For new majors or minors, describe transfer guidelines to be developed with Michigan community colleges. For revisions to majors or minors, describe necessary revisions to Michigan community college guidelines. Department chairs should seek assistance from college advising directors or from the admissions office in completing this section. NA
OLD CATALOG COPY

Student Outcomes:
Students will have:

1. an ability to apply knowledge of computing and mathematics appropriate to the discipline
2. an ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
3. ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs
4. an ability to function effectively on teams to accomplish a common goal
5. an understanding of professional, ethical, legal, security and social issues and responsibilities
6. an ability to communicate effectively with a range of audiences
7. an ability to analyze the local and global impact of computing on individuals, organizations, and society
8. recognition of the need for and an ability to engage in continuing professional development
9. an ability to use current techniques, skills, and tools necessary for computing practice
10. an ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the trade-offs involved in design choices
11. an ability to apply design and development principles in the construction of software systems of varying complexity

NEW CATALOG COPY

Student Outcomes:
Students will have:

a. an ability to apply knowledge of computing and mathematics appropriate to the discipline
b. an ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
c. ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs
d. an ability to function effectively on teams to accomplish a common goal
e. an understanding of professional, ethical, legal, security and social issues and responsibilities
f. an ability to communicate effectively with a range of audiences
g. an ability to analyze the local and global impact of computing on individuals, organizations, and society
h. recognition of the need for and an ability to engage in continuing professional development
i. an ability to use current techniques, skills, and tools necessary for computing practice
j. an ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the trade-offs involved in design choices
k. an ability to apply design and development principles in the construction of software systems of varying complexity