REQUEST FOR PROGRAM CHANGE(S)
University of Central Oklahoma

Please note: All information contained in this form will be reviewed by persons outside of your college. Please use clear and concise language when completing this form.

Name of program-major or minor to be changed: (maximum of 30 spaces)
Existing Name:
Computer Science - Information Science

Proposed Name: (if changing) (maximum of 30 spaces)
* Remember when abbreviating names, this is how they will appear on student's transcripts.

Proposed Name: (full name of program/major if longer than 30 spaces)

Is this a:   ___ Program   ___ Major   ___ Minor   ___ Sequence of Courses

Proposed change:
___ Name Change
___ Degree Designation
___ Admission Requirement

___ Curriculum Change
___ GPA Requirement

___ Other: BS/PSM

Is this program:   ___ Undergraduate   ___ Graduate

Is this a teacher preparation program? (All courses required for any teacher preparation program must have approval from the Council on Teacher Education (CTE) before approval from AACC or Graduate Council.)
   Yes   ___ No   ___ If yes, send copy of proposal to the Director of Teacher Education, Dr. Bryan Duke.

CTE Approval (Stamp or initial) ____________________________

Computer Science
Department submitting the proposal

Evan Lemley  elemley@uco.edu
Person to contact with questions  email address

5473  Ext. number

Approved by:

Department Chair  Date

College Dean  Date

College Curriculum Committee Chair  Date
(Please notify department chair when proposal is forwarded to dean.)

Academic Affairs Curriculum or Graduate Council  Date
(Please notify department chair when proposal is forwarded to AA.)

Office of Academic Affairs  Date
Effective term for this program change
(Assigned by Academic Affairs)

Functional review: CF 9/29/20
(undergraduate proposals only)

Academic Affairs Form
May, 2014
Does this program change affect other programs or departments? 

<table>
<thead>
<tr>
<th>X</th>
<th>Yes</th>
<th>No</th>
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</table>

If yes, provide name(s) of department chair(s) contacted, date(s), and results of discussion(s).

The proposed accelerated degree program pipelines undergraduate students in a program in the Computer Science Department into a master's program under CREIC (Computational Research and Education in Interdisciplinary Computation). The Director of CREIC, Evan Lemley, and the Chair of Computer Science, Gang Qian, discussed this proposal on multiple occasions, the last of which was 01/23/2020, and they agreed to the contents of this proposal.

1. Proposed curriculum change(s):

**Please include entire major/minor as it exists and as it is proposed. Italicize and bold changes.**

<table>
<thead>
<tr>
<th>(Existing Catalog Requirements)</th>
<th>Minimum Required Hours</th>
<th>(Proposed Catalog Requirements)</th>
<th>Minimum Required Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Support Courses</strong></td>
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<tr>
<td><strong>Major Support Courses</strong></td>
<td>0-12</td>
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<td>0-12</td>
</tr>
<tr>
<td>Students majoring in Computer Science-Information Science are encouraged to complete the following courses in high school. A high school computer technology course using a word processor, spreadsheet, e-mail, browser, and search engines OR CMSC 1053 Professional Computer Applications and Problem Solving Advanced Placement High School Programming Course OR CMSC 1513 Beginning Programming *MATH 1533 Precalculus-Algebra OR MATH 1513 College Algebra OR Placement Score AND *MATH 1593 Plane Trigonometry OR Placement Score</td>
<td></td>
<td>Students majoring in Computer Science-Information Science are encouraged to complete the following courses in high school. A high school computer technology course using a word processor, spreadsheet, e-mail, browser, and search engines OR CMSC 1053 Professional Computer Applications and Problem Solving Advanced Placement High School Programming Course OR CMSC 1513 Beginning Programming *MATH 1533 Precalculus-Algebra OR MATH 1513 College Algebra OR Placement Score AND *MATH 1593 Plane Trigonometry OR Placement Score</td>
<td></td>
</tr>
<tr>
<td>*A grade of 'C' or better is required for either MATH 1513 or MATH 1533 and MATH 1593 to take MATH 2313. Upon completion of the above courses, corresponding university core requirements will be satisfied. (These courses are required for this major regardless of previous degrees conferred.)</td>
<td></td>
<td>*A grade of 'C' or better is required for either MATH 1513 or MATH 1533 and MATH 1593 to take MATH 2313. Upon completion of the above courses, corresponding university core requirements will be satisfied. (These courses are required for this major regardless of previous degrees conferred.)</td>
<td></td>
</tr>
</tbody>
</table>

**Major Requirements**

**Computer Science - Information Science**

Required...

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Minimum Required Hours</th>
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</thead>
<tbody>
<tr>
<td>^ CMSC 1613 Programming I</td>
<td>167</td>
</tr>
<tr>
<td>^ CMSC 1621 Programming I Laboratory</td>
<td></td>
</tr>
<tr>
<td>^ CMSC 2123 Discrete Structures</td>
<td></td>
</tr>
<tr>
<td>^ CMSC 2413 Visual Programming</td>
<td></td>
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<tr>
<td>^ CMSC 2613 Programming II</td>
<td></td>
</tr>
<tr>
<td>^ CMSC 2621 Programming II Laboratory</td>
<td></td>
</tr>
<tr>
<td>^ CMSC 2833 Computer Organization I</td>
<td></td>
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<tr>
<td>^ SE 3103 Object Oriented Software Design and Construction</td>
<td></td>
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<tr>
<td>^ CMSC 3303 Systems Analysis and Design OR SE 4283 Software Engineering I</td>
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<tr>
<td>^ CMSC 3413 Enterprise Programming</td>
<td></td>
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<tr>
<td>^ CMSC 3613 Data Structures and Algorithms</td>
<td></td>
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<tr>
<td>^ CMSC 3621 Data Structures/Algorithms Lab</td>
<td></td>
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<tr>
<td>^ CMSC 4003 Applications of Database Management Systems</td>
<td></td>
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<tr>
<td>^ CMSC 4063 Networks</td>
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<tr>
<td>^ CMSC 4153 Operating Systems</td>
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<tr>
<td>^ CMSC 4323 Computer and Network Security</td>
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<tr>
<td>^ CMSC 4401 Ethics in Computing</td>
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<tr>
<td><strong>CMSC 4513 Software Design and Development</strong></td>
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<tr>
<td>^ MATH 2313 Calculus 1</td>
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<tr>
<td>^ MATH 2323 Calculus 2</td>
<td></td>
</tr>
<tr>
<td>^ STAT 2113 Statistical Methods OR STAT 2103 Introduction to Statistics for Sciences OR</td>
<td></td>
</tr>
</tbody>
</table>
A grade of 'C' or better must be earned in all required CMSC, SE, MATH, and STAT courses.

* CMSC 4513 is recommended to be taken in the last semester prior to graduation.

Elective CMSC or SE courses
Any 3/4000 level CMSC or SE courses except SE 4513
No more than three (3) hours of Internship and Individual Study combined may be used to satisfy the CMSC or SE elective requirement.
Credit cannot be received for both CMSC 3303 and SE 4283.

Other areas of application
Selected from the following:
ACCT 3113 Managerial Accounting
FIN 3563 Fundamentals of Business Finance
ISOM 3323 Business Analytics
ISOM 4063 Computer Simulation
ISOM 4283 Developing Decision Support Systems
ISOM 4363 Information Systems Management
ISOM 4513 Virtualization

Electives to bring total to 124

Minimum Grade Requirements
Average in (a) all college course work, (b) course work at UCO, and (c) major courses 2.00

Accelerated BS/PSM
UCO's PSM (Professional Science Master's) in Computational Science has partnered with the BS in Computer Science - Information Science major so that approved students may take up to 9 credit hours of 5000-level CMSC courses during their senior year of the major. These courses will count toward both the BS and PSM degrees. A formal application to the PSM Computational Science program and an approval from the Department of Computer Science are required. Requirements for the PSM program are located in the UCO Graduate Catalog under Computational Science – Computer Science, P.S.M.

Up to nine credit hours of the following courses can be used to satisfy both the B.S. Computer Science – Information Science and the P.S.M.
CMSC 5043 Applications Database Systems
CMSC 5283 Software Engineering I
CMSC 6323 Computer and Network Security
Existing Designation: NA To: 

3. Change(s) in Minimum GPA Requirements: 
FROM (Existing Catalog Requirements) TO (Proposed Catalog Requirements) 
NA

4. Change(s) in Admission Requirements for the Program/Major: 
FROM (Existing Catalog Requirements) TO (Proposed Catalog Requirements) 
NA

5. Other requested action: 
NA

6. Will requested change require additional funds? Yes X No

If yes, please specify the amount of the additional costs, the source of the funds, and how they will be expended over the next three years, including new or re-allocated full or part time faculty/staff.

<table>
<thead>
<tr>
<th>Additional Funds</th>
<th>20</th>
<th>20</th>
<th>20</th>
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</thead>
<tbody>
<tr>
<td>Amount of additional costs</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Source of funds</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>How funds will be expended</td>
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<td></td>
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</tbody>
</table>

7. Please provide a summary of the requested changes. (This is a listing of the changes requested) (This information will be submitted to the OSRHE)

These changes will enable students admitted to the proposed accelerated BS/PSM program in this undergraduate major, to take up to nine hours of graduate coursework while seniors. These courses will be used to satisfy the requirements of both this undergraduate program and the PSM program.

8. The reason(s) for this change are based on which of the following: (Check all that apply; explain and document in Question #10)

- Specialized Accreditation
- SSCI (Self Study for Continuous Improvement)
- Benchmark (e.g. comparison to peer institutions)
- Assessment Data
- Faculty Knowledge/Discipline Expertise
- Advisory Board/Outside Professional Group
- Other

9. For all items checked in Question #9, please provide a concise, yet comprehensive, statement that explains the reasons for requesting the change including any necessary documentation. (The information provided here will be submitted to the OSRHE)

Discussions with senior UCO students have shown their interest in the proposed accelerated BS/PSM program. In open house and career fairs in which the PSM director has marketed the PSM program, this is the most common question from UCO students. The proposed changes would clearly ease the pathway to obtaining a master's degree and doing it in less time for UCO students in this undergraduate major.
Thank you for your desire to have an Accelerated Degree Program approved through the Graduate College curriculum review process, which involves a recommendation from the Graduate Council’s Curriculum Committee.

Given that Accelerated Degree Programs permit an undergraduate student to enroll in graduate courses and to count the completed graduate courses toward their undergraduate degree, these curriculum proposals are approved through both undergraduate (Academic Affairs Curriculum Committee) and graduate (Graduate Council) curricular processes. The Academic Affairs Curriculum Committee reviews Accelerated Degree Program proposals and makes recommendations to the Graduate Council.

In order for the Graduate Council to review the proposal submitted, this form should be completed and submitted with the undergraduate curriculum proposal. If approved, the information provided below will be used by the Graduate College to develop the Accelerated Degree Program paragraph in the Graduate Catalog degree sheet; a sample Degree Sheet paragraph is provided below.

**Undergraduate Degree Faculty Contact:**
Dr. Gang Qian

**Undergraduate Degree Department:**
Department of Computer Science

**Name of the Undergraduate Degree in the Accelerated Degree Program:**
Computer Science - Information Science

**Name of the Graduate Degree in the Accelerated Degree Program:**
Computational Science-Computer Science

**Name of the Graduate Program Advisor for the ADP Graduate Degree:**
Evan Lemley
### Specific Graduate Courses to Be Counted Toward the Undergraduate and Graduate Degrees:

<table>
<thead>
<tr>
<th>Graduate Course Prefix</th>
<th>Graduate Course No.</th>
<th>Graduate Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMSC</td>
<td>5043</td>
<td>Applications Database Systems</td>
</tr>
<tr>
<td>CMSC</td>
<td>5323</td>
<td>Computer and Network Security</td>
</tr>
<tr>
<td>CMSC</td>
<td>5283</td>
<td>Software Engineering I</td>
</tr>
</tbody>
</table>

**Please Note:** No more than 10 hours of graduate coursework in an Accelerated Degree Program may be double-counted for both a graduate and undergraduate degree. No undergraduate coursework may be counted toward a graduate degree. All students are required to apply to the Graduate College for ADP admission and are subject to Graduate College policies upon graduate admittance.
Sample Accelerated Degree Program Graduate Catalog Degree Sheet Paragraph

Accelerated Degree Program
Students who are accepted to the undergraduate degree in B.S. Computer Science – Information Science may apply to take [see table of approved 5000-level courses up to a maximum of nine hours] during their senior year of the bachelor's degree. These courses will count toward both the B.S. Computer Science – Information Science and P.S.M. Computational Science – Computer Science. The approved graduate courses are: CMSC 5043 Applications Database Systems, CMSC 5283 Software Engineering I, CMSC 5323 Computer and Network Security. These courses are specified on the degree sheet. During the last semester of their junior year or within 30 hours of graduation, an undergraduate student with a 3.0 overall GPA may apply for admission to the Accelerated Degree Program.