A statewide transfer agreement that identifies the community college courses needed to transfer to any Oregon public university as a junior seeking a Bachelor of Science in Computer Science.
Statewide Transfer Articulation Agreement:

Major Transfer Map in Computer Science

90-100 Credits or Optimal Transfer Point

From: All Oregon Community Colleges

To: All Oregon Public Universities
Introduction: Major Transfer Maps (MTMs) represent a streamlined path for students transferring from an Oregon community college to an Oregon university who know which major/bachelor’s degree program they want to pursue. In contrast to other statewide transfer tools that prioritize university general education requirements (i.e. AAOT and ASOT), MTMs specify clear course-taking paths necessary for on-track progress towards a specific major/bachelor’s degree, with a guarantee of transfer from any Oregon community college to any Oregon public university. MTMs build on the 30-credit general education foundation defined by the generic Core Transfer Map (CTM), although MTMs may specify particular relevant/required General Education courses as part of the 30-credit CTM component of the MTM.

The statewide Computer Science Major Transfer Map (MTM) will use the format of an Associate of Science Transfer degree.

The MTMs identify the optimal and specific set of community college courses students need to take to transfer efficiently into the major at the university. The successful completion of the MTM allows students to receive status at the public university, based on the number of academic credits referenced in the transfer agreement, including at least 30 credits of general education satisfied, that is comparable to the status of students with the same number of academic credits in the major course of study who began their postsecondary studies at the public university. The students will not be required to retake a course, as long as the minimum required grades have been earned.

Students must have earned a cumulative grade point average of 2.0 and meet the residency requirements at the community college awarding the MTM.

When students complete an MTM, the general education courses in the “Core Transfer Map” portion of the MTM, for which minimum required grades have been earned, are guaranteed to transfer into general education, degree, or major requirements for a bachelor’s degree at any Oregon public university (ORS 350.404). However, while CTM-related courses are guaranteed to transfer into general education, degree, or major requirements, students completing an MTM will not be awarded a CTM also.

Students who want to transfer prior to completing the MTM should talk with their community college advisor and an advisor at their target university prior to transfer about how their courses will count towards general education requirements and degree/major requirements. If the MTM is not awarded advisors can guide students to determine if they are eligible for a CTM.

Students are responsible for informing the admissions counselor or intake advisor at their receiving four-year institution that they are completing an MTM. It is important for students to understand that completing the MTM in two years and the bachelor’s degree in four years requires them to complete a minimum average of 15 credits per quarter (or 45 credits per year).

The guarantees and limitations below describe the minimum requirements to which all participating institutions have agreed. If an institution is not meeting the guarantees described below a complaint can be filed with the Oregon Transfer Advisory Committee (OTAC).  

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2 Sections of this contract are modified versions of contracts from Colorado and Washington.
Part 1: Guarantees
Students who complete all the requirements of an MTM (i.e. an MTM associate’s degrees or an MTM non-degree package when optimal transfer requires fewer than 90 credits) as defined in the specific MTM agreement, who have earned the minimum required grades and a cumulative 2.0 GPA or higher, meet residency requirements, and who are admitted to the receiving institution’s corresponding major/degree program are guaranteed the following:

1. Status within the major at the public university that is comparable to the status of students with the same number of academic credits in the major course of study who began at the public university (when the MTM is equal to at least 90 credits this would equate to receiving “junior status in the major course of study at the public university”).
2. Eligibility to graduate following the degree/major requirements in effect at the university during the academic year the student first enrolled in the community college that awarded the MTM. If the student does not complete the degree within 7 years of the first enrollment at the community college awarding the MTM, they should meet with an advisor to determine which catalog to use.
3. All courses in the MTM will transfer individually. If a student transfers before completing the MTM, all courses will still transfer but may not apply in the same way as they would if the MTM was completed. If the CTM has been awarded, the guarantees inherent in the CTM apply.
4. The ability to file a complaint with the Oregon Transfer and Articulation Committee (OTAC) if the guarantees of the MTM are not being met. OTAC will review complaints submitted to the Higher Education Coordinating Commission (HECC) or to OTAC regarding Oregon’s statewide transfer tools and degrees and recommend next steps that support dispute resolution. Note:
   • Students should first follow their home institution’s internal complaint process (e.g. talk to their academic advisor, academic unit, Registrar, or Provost)
   • The HECC has authority to handle student complaints but only if they are related to discrimination or retaliation
5. While OTAC does not have legal authority over transfer complaints, as the only statewide transfer advisory body, OTAC can make recommendations and assist institutions and students in resolving compliance issues.
6. Students who successfully complete the MTM at a community college will have the MTM notated on their transcript. If the MTM takes the form of an associate’s degree, it will be reflected in the standard degree posting format used by the community college. If the MTM is not an associate’s degree, but rather an optimal transfer point with fewer than 90 credits, it will be posted as a notation on the community college transcript.

Part 2: Limitations
Completion of the prescribed curriculum in the statewide transfer articulation agreement does not guarantee admission to a participating receiving institution. Students must meet all admission and application requirements at the receiving institution in place at the time of admission, including the submission of all required documentation by stated deadlines.

1. Minimum grades required for general transfer and for application to major requirements and prerequisites may vary by each Oregon public university and by each degree/major. Each MTM agreement will specifically list the minimum grade requirements that will guarantee transfer including minimum required grades for major courses and Pass/No Pass limitations. All schools
accept a grade of a “C-" or better in all general education courses. Students should contact the admissions counselor or intake advisor at the university they intend to transfer to for more information.

2. Completion of an MTM and admission to a receiving institution does not guarantee enrollment in a specific degree program. Some programs at receiving institutions have controlled and/or competitive entry due either to space limitations or academic requirements.

3. The credit and course transfer guarantees described in the specific MTM agreements apply only to the specific degree programs covered by the agreement. Therefore, if a student changes to a new major some courses may not apply the same way towards the new major as they would for the original major. When students change majors the old MTM major guarantees may no longer apply and receiving institutions will evaluate applicability of transfer on a course-by-course basis.

4. AP (Advanced Placement) and IB (International Baccalaureate) credit:
   - General Education Courses in the MTM: AP and IB articulated credits used to meet the general education components of the Major Transfer Map will transfer, and are guaranteed to fulfill general education requirements at the receiving institution, as long as the articulated credits are listed on the Advanced Placement and International Baccalaureate Statewide Course Credit Policy found on the HECC website.
   - AP (Advanced Placement) and IB (International Baccalaureate) in the MTM: Using the current AP and IB Statewide Course Credit Policy as a reference, the Major Transfer Map workgroup will assess how AP/IB exam scores apply to the MTM (range of credits and course articulations). In particular, the MTM workgroup will identify whether the credit range and course articulation of AP/IB exam scores differ among the 17 community colleges and 7 public universities in ways that create transfer misalignment for students earning the MTM.

      The workgroup will refer all areas of misalignment to the AP/IB Statewide Policy Group, which will work with the higher education institutions’ appropriate representatives (including faculty and academic leadership) to resolve the areas of misalignment by establishing common range of credits and defined articulations across the 17/7 so that AP/IB exam credit awarded at any community college will transfer to all public universities and apply as intended in the MTM.

      If 17/7 alignment in range of credits and course articulation for AP/IB exam scores is not possible, the MTM workgroup will determine whether the differences constitute acceptable and warranted variance within the MTM. If so, the workgroup will recommend the variance to OTAC when it submits the MTM to OTAC for the approval process. If the MTM workgroup determines that uniformity is necessary, and a particular institution elects not to conform, that school is choosing not to be a participant in that particular MTM. Please note that each Oregon public university has differing policies on institutionally administered exams (sometimes called Challenge Exams) and students should contact the admissions counselor or intake advisor at the university students intend to transfer to for more information.

5. Students should consult with advisors at their community college and receiving university if they have additional questions.
Part 3: Institutional Obligations

1. Oregon public universities and community colleges, under advisement from OTAC and HECC, will build an alert mechanism into their curriculum review process for changes related to courses, programs, or admission that may impact the MTM.
   - The institution proposing a change in required or pre-requisite courses, with potential to impact lower-division course taking will alert their Registrar and Major Transfer Map group to review the change.
   - If the proposed change creates a need to modify lower-division course taking as defined in the existing MTM, the OTAC representative from the particular MTM group will bring the issue to OTAC for review to determine if updates need to be made to the agreement.
   - All public higher education institutions who are signatories of the agreement are expected to stay in alignment with the approved MTM. Changes to courses included in the MTM that will affect their transferability must be approved by the MTM group and OTAC before taking effect.
   - MTM groups are expected to meet annually or as needed to ensure continued alignment and the effective dates will be reflected in each MTM. Catalog rights follow the MTM.
   - If valid reasons exist that prevent sufficient alignment, a given institution may have to exit the agreement. In such cases, the Provost of the university must notify OTAC and work out an effective timeline for leaving the agreement such that the university honors the catalog year guarantees and provides a workable teach-out plan so students in the pipeline are held harmless.

2. Oregon public higher education institutions agree that where university-specific curricular variance exists within the MTM, it is identified and justified. Acceptable justifications should be related to student benefit, necessity for academic success in meeting future requirements at the junior/senior/graduate school/employment level, and immovable external requirements such as accreditation requirement differences.

3. Participating institutions agree to continue to work toward maximizing course alignment as much as possible with the goal of awarding direct equivalency for all MTM courses, even when a transferring student has not completed the entire MTM.
Part 4: Prescribed Curriculum

The Computer Science Major Transfer Map (MTM) outlines Oregon community college coursework to complete in order to transfer seamlessly to any Oregon four-year public university to earn a bachelor of science (B.S.) in computer science. The Computer Science MTM is intended for students who know they want to transfer and earn a B.S. in computer science, but who are unsure of their intended transfer destination when they begin their community college studies. Students should work with their community college advisor to ensure they properly fulfill the requirements of this Computer Science MTM.

Students who complete courses that fit the listed Computer Science MTM categories and complete all science series coursework at one school can expect that all of their courses will transfer into general education, major requirements, or electives at any Oregon public university offering a bachelor of science (B.S.) in computer science. Students who complete all of the listed coursework and have a total of 90 credits can also complete an associate degree. Because completion of the listed coursework or an associate degree is not required, students can transfer to their intended university at any time. Completion of the CTM and the MTM required courses are sufficient to enable transfer at Junior standing within the major. The course substitutions and recommendations listed below should only be considered by students who are certain of both their intended major and transfer destination. There is a decision point at the end of the first year of community college studies, at which point a student must decide between transfer to the OSU/PSU/UO cluster or the EOU/SOU/WOU cluster of university degree programs.

Note that in order for a student to successfully transfer to an Oregon public university, students must: 1) earn a minimum letter grade in courses in the major (see Table 3 below); 2) take courses in the major for a letter grade—they will not be accepted as “pass/no pass”; and 3) earn a cumulative grade point average of 2.0 (unless otherwise indicated below in Table 3). Students must also regularly meet with an advisor. Students are strongly encouraged to: 1) seek advising before registering for their first term of community college; 2) seek advising after they have completed the 30-38 credits of the Core Transfer Requirements; and 3) seek advising and meet with a transfer coordinator before registration opens at the beginning of the students second year in college. Students should also be aware that if they want to complete this Major Transfer Map in two years, they should take an average of 45 credits per year (average of 15 credits per quarter). Finally, to earn an associate degree, students will need to successfully complete at least 90 credits.

Six of the seven public universities in Oregon offer a computer science B.S. degree:
Eastern Oregon University: (https://www.eou.edu/computer-science/)
Oregon State University: (https://eecs.oregonstate.edu/undergraduate-programs/computer-science)
Portland State University (https://www.pdx.edu/computer-science/)
Southern Oregon University: (https://sou.edu/academics/computer-science/)
University of Oregon: (https://cs.uoregon.edu/undergraduate-education)
Western Oregon University: (https://wou.edu/academics/computer-science/)
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<td>2nd course</td>
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<tr>
<td>Natural Sciences</td>
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<tr>
<td>2 courses</td>
<td>Select two lab science courses; this selection should occur after deciding between OSU/PSU/UO and EOU/SOU/WOU clusters</td>
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<td></td>
<td>• OSU/PSU/UO: Phys 211-212 OR Chem 221-222 OR Bio 211-212</td>
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<td>• EOU/SOU/WOU: any two lab science courses</td>
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At least 1 Core Transfer Requirement course must also be an AAOT-approved Cultural Literacy Course.

Core Transfer Requirement Total  31-38
Table 2

**ADDITIONAL MAJOR TRANSFER MAP COURSES**

*See an advisor for recommended courses*

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2 new course that integrates CS271 and CS201 contents.
**Minimum Letter Grade and/or GPA requirements**

If the cell is blank, you must achieve a minimum letter grade of C- in that course.

Table 3

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</table>
Appendix A. University-specific flexibility with respect to MTM required courses

Some of the universities have flexibility in the courses listed in the CTM and the MTM for their cluster. That flexibility is documented in the following table. The way to use this table is as follows: if a student has decided to transfer to a particular university, the student may take advantage of the listed flexibility in the remaining courses in the MTM degree. Note that taking advantage of that flexibility is likely to cause a student’s course of study to no longer qualify for junior standing at the other universities in that cluster.

Table A.1

<table>
<thead>
<tr>
<th>Course</th>
<th>EOU</th>
<th>SOU</th>
<th>WOU</th>
</tr>
</thead>
<tbody>
<tr>
<td>WR 122</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMM 111</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS 160</td>
<td>Not required</td>
<td>Not required if prerequisite to CS 161 otherwise met</td>
<td></td>
</tr>
<tr>
<td>CS 161</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS 162</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS 260</td>
<td></td>
<td></td>
<td>May substitute CS258 Fall term of Junior year</td>
</tr>
<tr>
<td>MTH 112</td>
<td></td>
<td></td>
<td>Not required if student does MTH 231-232</td>
</tr>
<tr>
<td>MTH 251</td>
<td></td>
<td></td>
<td>Accepts MTH 231</td>
</tr>
<tr>
<td>MTH 252</td>
<td></td>
<td></td>
<td>Accepts MTH 232</td>
</tr>
<tr>
<td>NatSci 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NatSci 2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table A.2

<table>
<thead>
<tr>
<th>Course</th>
<th>OSU</th>
<th>PSU</th>
<th>UO</th>
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</thead>
<tbody>
<tr>
<td>WR227</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMM 111</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS 160</td>
<td></td>
<td>Not required</td>
<td>VERY STRONGLY ENCOURAGED, but not required</td>
</tr>
<tr>
<td>CS 161</td>
<td></td>
<td>Not required</td>
<td></td>
</tr>
<tr>
<td>CS 162</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS 260</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTH 112</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTH 251</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTH 252</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS 205</td>
<td></td>
<td></td>
<td>VERY STRONGLY ENCOURAGED, but not required</td>
</tr>
<tr>
<td>MTH 231 or CS250</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTH 232 or CS251</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NatSci 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NatSci 2</td>
<td></td>
<td></td>
<td>GEOL 201, 202, 203 are also accepted</td>
</tr>
<tr>
<td>NatSci 3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Appendix B. University-specific recommended elective courses
Some of the universities have recommendations for elective courses that appear in the schedule for their cluster; following those recommendations will give the student more choice once they transfer. Those recommendations are documented in the following table. The way to use this table is as follows: if a student has decided to transfer to a particular university, the student should attempt to follow those recommendations for any remaining electives in their MTM-CS studies. Note that there is no guarantee that following the recommendations for one university in a cluster will also serve the same purpose in another university in that cluster.

### Table B.1

<table>
<thead>
<tr>
<th>Elective</th>
<th>EOU</th>
<th>SOU</th>
<th>WOU</th>
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</thead>
<tbody>
<tr>
<td>7 Electives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• C++ programming course</td>
<td>• 200-level database</td>
<td>• CS 205 (Comp Arch)</td>
<td></td>
</tr>
<tr>
<td>• A&amp;L 3 in a 2nd or 3rd disc</td>
<td>• 200-level computer org/architecture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• SS 3 in a 2nd or 3rd disc</td>
<td>• CS 250 OR MTH 231</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• A general elective that fulfills “Difference, Power &amp; Discrimination” Baccalaureate Core requirement</td>
<td>• 200-level web design</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 200-level networking</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>• 200-level OO programming course</td>
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<td></td>
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<tr>
<td></td>
<td>• 200-level C/C++ course if neither used in 161/162</td>
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### Table B.2

<table>
<thead>
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<th>Elective</th>
<th>OSU</th>
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<tr>
<td>3 electives</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>• WR 122 (min grade C)</td>
<td>• MTH 253</td>
<td>• At least 7 credits of ASOT-approved A&amp;L courses</td>
<td></td>
</tr>
<tr>
<td>• A general elective that fulfills “Difference, Power &amp; Discrimination” Baccalaureate Core requirement</td>
<td>• MTH 261 (linear alg)</td>
<td>• At least 7 credits of ASOT-approved SS courses</td>
<td></td>
</tr>
<tr>
<td>• a general elective that is equivalent to HHS 231, Physical Activity or PAC equivalent</td>
<td>• Additional science elective (4 credits) from Bio, Chem, Phys, Geol, or Env Sci</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• CS 290 (if offered at your college)</td>
<td>• Additional ASOT-approved A&amp;L or ASOT-approved SS elective</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Part 5: Signature of Participating Institutions**

**Computer Science Major Transfer Map: Statewide Articulation**  
**Agreement Participants to the Agreement**

The Oregon Transfer and Articulation Committee (OTAC) reviewed this agreement on November 27, 2018 and forwarded it for approval by the chief academic officers of Oregon’s public universities offering a Bachelor of Science in Computer Science degree and the chief academic officer of Oregon’s community colleges (*Note: Signatures are on file at the Higher Education Coordinating Commission*)

Signatures on file:

<table>
<thead>
<tr>
<th>Institution</th>
<th>Date</th>
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</thead>
<tbody>
<tr>
<td>Eastern Oregon University</td>
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</tr>
<tr>
<td>Oregon State University</td>
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<tr>
<td>Portland State University</td>
<td></td>
</tr>
<tr>
<td>Southern Oregon University</td>
<td></td>
</tr>
<tr>
<td>Western Oregon University</td>
<td></td>
</tr>
<tr>
<td>University of Oregon</td>
<td></td>
</tr>
<tr>
<td>Blue Mountain Community College</td>
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<tr>
<td>Central Oregon Community College</td>
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<td>Chemeketa Community College</td>
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<tr>
<td>Clackamas Community College</td>
<td></td>
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<tr>
<td>Clatsop Community College</td>
<td></td>
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<tr>
<td>Columbia Gorge Community College</td>
<td></td>
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<tr>
<td>Klamath Community College</td>
<td></td>
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<tr>
<td>Lane Community College</td>
<td></td>
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<tr>
<td>Linn-Benton Community College</td>
<td></td>
</tr>
<tr>
<td>Mt. Hood Community College</td>
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</tr>
<tr>
<td>Oregon Coast Community College</td>
<td></td>
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<tr>
<td>Portland Community College</td>
<td></td>
</tr>
<tr>
<td>College</td>
<td>Date</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Rogue Community College</td>
<td></td>
</tr>
<tr>
<td>Tillamook Bay Community College</td>
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<tr>
<td>Umpqua Community College</td>
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<tr>
<td>Southwestern Community College</td>
<td></td>
</tr>
<tr>
<td>Treasure Valley Community College</td>
<td></td>
</tr>
</tbody>
</table>
Part 6: Computer Science Major Transfer Map Participants

Group Coordinators:
Joe Sventek University of Oregon

Public Universities:
Tim Harrison Eastern Oregon University
Phil Howard Oregon Institute of Technology
Calvin Hughes Oregon State University
Mark Jones Portland State University
Barbara Sabbath Portland State University
Fabrizzio Alphonsus Alves de Melo Nunes Soares Southern Oregon University
Kathleen Freeman University of Oregon
Becka Morgan Western Oregon University

Community Colleges:
Peter Hernberg Blue Mountain Community College
Ken Swartwout Central Oregon Community College
Andrew Scholer Chemeketa Community College
Jen Miller Clackamas Community College
Paul Wilkins Lane Community College
Joseph Jess Linn-Benton Community College
Pamela Wiese Mt. Hood Community College
Doug Jones Portland Community College
Jeremy Taylor Rogue Community College

Higher Education Coordinating Commission Staff:
Kia Sorensen Office of Academic Policy & Authorization
Brittany Miles Office of Community Colleges & Workforce Development
Part 7: Oregon Transfer Advisory Committee Members 2020-21

Chair: Edward Feser, Provost and Executive Vice President, Oregon State University
Incoming Chair: David Plotkin, Vice President of Instruction and Student Services, Clackamas Community College

Elizabeth Brand Cox, Executive Director, Student Success Center, Oregon Community College Association
Dana Richardson, Executive Director for the Council of Presidents, Oregon Public Universities Council of Presidents
Teresa Rivenes, Vice President of Instruction, Tillamook Bay Community College
Sal Castillo, Director-Institutional Research, Oregon State University
Erin Bird, Transfer Transitions Coordinator, Oregon State University
Frances White, Professor and Department Head, Anthropology, University of Oregon
Kevin Walker, Professor, College of Business, Eastern Oregon University
Seth Anthony, Associate Professor, Oregon Institution of Technology
Ann Cary, Interim Dean of Academic Affairs, Portland Community College
Blake Hausman, Instructor DE Reading, Writing & English, Portland Community College
John Copp, History, Political Science Instructor, Department Chair, Columbia Gorge Community College
Laurette Scott, Education Faculty, Department Chair, Clackamas Community College
Erin Baumgartner, Director of General Education; Interim Associate Provost for Academic Programs and Effectiveness, Western Oregon University
Thaddeus Shannon, Associate Professor, Computer Science, Western Oregon University
Kathy Smith, Associate Professor of Math, Central Oregon Community College
Rick DeBellis, Associate Director for Enrollment Management, Degree Partnership Programs and Transfer Student Services, Oregon State University
Melissa Frey, Dean & Registrar, Student Recruitment, Enrollment and Graduation Services Director, Chemeketa Community College
Mindy Williams, Oregon Writing English Advisory Committee Chair, Central Oregon Community College
Cindy Baccar, Associate Vice Provost & University Registrar, Academic Affairs, Portland State University
Linda Samek, Professor of Education in Residence, George Fox University
Patrick Crane, Director, Community Colleges and Workforce Development
Veronica Dujon, Director, Academic Policy and Authorization
February 9th, 2021

Higher Education Coordinating Commission
3225 25th St. SE
Salem, OR. 97302
Info.HECC@state.or.us

To whom it may concern,

In order to support the creation of the MTM degree in Computer Science, Oregon State University – Corvallis campus, in partnership with the School of Electrical Engineering and Computer Science, agrees to make the following exceptions to degree requirements for students entering the Computer Science – Applied Option, B.S. degree at the Corvallis campus after successful completion of the MTM:

1. To apply WR 122 from PCC to fulfill the WR 214/222 major requirement in the degree (department level)
2. To apply MTH 232 or CS 251 & all-Natural Science courses (from the list of approved options) in sequence towards the Applied Option 32-credit block (4 courses in total). (department level)
3. To accept the new creation of CS 205 to articulate for CS 271 in the major. (department and Registrar’s level)
4. To accept the selected Natural Science sequence (from the list of approved options) to fulfill the three Biological and Physical Baccalaureate Core science requirements. (Registrar's level)

Sincerely,

Alix I Gitelman | she/her/hers | Vice Provost
Office of Undergraduate Education
Professor of Statistics | College of Science
Oregon State University
541-760-3418 (cell)
February 11, 2021

Re: Major Transfer Map in Computer Science

Dear HECC,

Portland State University commits to making the following changes in support of the proposed Major Transfer Map in Computer Science:

- Adjustments to procedures for admission to the PSU Major in Computer Science sufficient to ensure that any student who transfers to PSU at the start of the academic year after completion of the MTM in CS will have a path to completing the Bachelor’s degree within two years.

- Adjustments to articulation agreements to ensure that PSU will accept CS 205, from any student who completes the MTM in CS, as meeting our major requirement for CS 201.

Sincerely,

Susan Jeffords, PhD
Provost & Vice President for Academic Affairs
<table>
<thead>
<tr>
<th>Core Transfer Map</th>
<th>CC Credits</th>
<th>EOU</th>
<th>OSU</th>
<th>PSU</th>
<th>SOU</th>
<th>UO</th>
<th>WOU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing: WR 121</td>
<td>3-4</td>
<td>Transfers as WR 121 in Gateway group.</td>
<td>1 of 1 Writing I course</td>
<td>Meets general education requirement for WR 121</td>
<td>USEM 101 (Strand ABC writing course)</td>
<td>1 of 2 required Writing courses</td>
<td>1 of 2 Foundations: Writing courses</td>
</tr>
<tr>
<td>Arts &amp; Letters: 2 Courses</td>
<td>6-8</td>
<td>Transfers as 6-8 credits in Aesthetics and Humanities group or Artistic Process and Creation group</td>
<td>1 of 1 Literature/Arts course</td>
<td>6-8 Credits of Arts &amp; Letters or Social Science courses</td>
<td>2 courses toward strand E: Humanities</td>
<td>6-8 of 15 credits of Core Education Arts &amp; Letters group</td>
<td>2 of 2 Exploring Knowledge: Literary and Aesthetic Perspectives courses</td>
</tr>
<tr>
<td>Social Science: 2 Courses</td>
<td>6-8</td>
<td>Transfers as 6-8 credits in Social Sciences group</td>
<td>1 of 1 Social Processes &amp; Institutions course</td>
<td>6-8 Credits of Arts &amp; Letters or Social Science courses</td>
<td>2 courses toward Strand F: Social Science</td>
<td>6-8 of 15 credits of Core Education Social Science group</td>
<td>2 of 2 Exploring Knowledge: Social, Historic, and Civic Perspectives courses</td>
</tr>
<tr>
<td>Natural Sciences: 2 Courses</td>
<td>8-10</td>
<td>Transfers as 8-10 credits in Natural, Mathematical &amp; Informational Sciences group</td>
<td>2 of 3 Science courses</td>
<td>8-10 credits of 15 credit Lab Science requirement</td>
<td>2 courses w/ lab toward Strand G: Science</td>
<td>8-10 of 15 credits of Core Education Science group &amp; 2 of 3 courses required by major additional science sequence</td>
<td>2 of 2 Exploring Knowledge: Scientific Perspectives courses &amp; 2 of 3 required by major in BI 211-213 sequence</td>
</tr>
<tr>
<td>Math: 2 Courses (MTH 111 and MTH 112)</td>
<td>8</td>
<td>Transfers as MATH 111 and MATH 112</td>
<td>Transfers as MTH 111 and MTH 112.</td>
<td>One course satisfies Math requirements for Baccalaureate Core; the other as a general elective.</td>
<td>Elective credits</td>
<td>Transfer as MTH 111 and MTH 112: 2 of 3 BS Math/Computing classes</td>
<td>1 of 1 Foundations: Math course - Can also use MTH 231 or 251 to satisfy this reqt; MTH 112 transfers as MTH 112</td>
</tr>
</tbody>
</table>

1 course must also satisfy AAOT Cultural Literacy Requirement

Courses must total minimum of 30 credits, can be filled by an elective credit if needed

Include additional Arts & Letters or Social Science Electives as necessary to ensure (at least) 24 credits of general education (including Additional credits taken to reach 30 will be applied to the appropriate Gen Ed requirements. Additional credits taken to reach 30 will be applied to the appropriate Core Ed requirements. Additional credits taken to reach 30 will be applied to the appropriate Gen Ed requirements. Additional credits taken to reach 30 will be applied to the appropriate Gen Ed requirements.
## Computer Science Major Transfer Map Crosswalk

<table>
<thead>
<tr>
<th>Major and Elective Courses</th>
<th>CC Credits</th>
<th>EOU</th>
<th>OSU</th>
<th>PSU</th>
<th>SOU</th>
<th>UO</th>
<th>WOU</th>
</tr>
</thead>
<tbody>
<tr>
<td>WR 121 and COMM 111</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMM 111</td>
<td>3-4</td>
<td>Transfers as COM 111 in Gateway group.</td>
<td>Transfers as COMM 111</td>
<td>Meets general education requirement for COMM 220</td>
<td>USEM 103</td>
<td>Transfers as Core Education Arts &amp; Letters group</td>
<td>3-4 credits of Foundations: Communication and Language</td>
</tr>
<tr>
<td>CS 160</td>
<td>4</td>
<td>Transfers as CS Lower Division Elective.</td>
<td>Transfers as CS 160</td>
<td>Elective credits (transfers as CS LD)</td>
<td>Transfers as CS200</td>
<td>Transfers as CIS 1xxT</td>
<td>Transfers as CS 160</td>
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<tr>
<td>CS 161</td>
<td>4</td>
<td>Transfers as CS 161</td>
<td>Transfers as CS 161</td>
<td>Elective credits (transfers as CS 161)</td>
<td>Transfers as CS 256</td>
<td>Transfers as CIS 210</td>
<td>Transfers as CS 161</td>
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<tr>
<td>CS 162</td>
<td>4</td>
<td>Transfers as CS 162</td>
<td>Transfers as CS 162</td>
<td>Transfers as CS 162</td>
<td>Transfers as CS 257</td>
<td>Transfers as CIS 211</td>
<td>Transfers as CS 162</td>
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<tr>
<td>CS 260</td>
<td>4</td>
<td>Transfers as CS 260</td>
<td>Transfers as CS 261</td>
<td>Transfers as CS 163</td>
<td>Transfers as CS 258</td>
<td>Transfers as CIS 212</td>
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<td>MTH 251</td>
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<td>Transfers as Math 251</td>
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<tr>
<td>MTH 252</td>
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<td>Transfers as Math 252</td>
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<td>Transfers as MTH 252</td>
<td>Transfers as MATH 251</td>
<td>Transfers as MTH 252</td>
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<tr>
<td>EOU/SOU/WOU only</td>
<td>CC Credits</td>
<td>EOU</td>
<td>OSU</td>
<td>PSU</td>
<td>SOU</td>
<td>UO</td>
<td>WOU</td>
</tr>
<tr>
<td>Writing - WR 122</td>
<td>3-4</td>
<td>Transfers as WR 122 in Gateway GenEd.</td>
<td>Transfers as WR 327. Satisfies both major requirements and Writing requirements for Baccalaureate Core</td>
<td>Meets major requirement for WR 227</td>
<td>May substitute for WR 122 to meet USEM 102 (Strand ABC writing course)</td>
<td>2 of 2 required Writing courses AND substitutes for WR 320 major requirement</td>
<td>Transfers as WR 122</td>
</tr>
<tr>
<td>OSU/PSU/UO only</td>
<td>CC Credits</td>
<td>EOU</td>
<td>OSU</td>
<td>PSU</td>
<td>SOU</td>
<td>UO</td>
<td>WOU</td>
</tr>
<tr>
<td>Writing - WR 227</td>
<td>3-4</td>
<td>Transfers as WR 227</td>
<td>Transfers as CS 271</td>
<td>Meets major requirement for CS 201</td>
<td>Transfers as CS 314</td>
<td>Transfers as CIS 2xxT</td>
<td>Transfers as CS 271</td>
</tr>
<tr>
<td>CS 205</td>
<td>4</td>
<td>Transfers as CS 271</td>
<td>Transfers as MTH 231, 232</td>
<td>Meets major requirement for CS 250 and CS 251</td>
<td>CS 250 transfers as CS 250</td>
<td>Transfers as MATH 231-232; B.S. or Core Education Science group; CS 250-251 transfers as CIS 2xxT and substitutes for MATH 231-232 for major</td>
<td>Transfers as MTH 231-232 or satisfied by MTH 251-252</td>
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<tr>
<td>Discrete Math: MTH 231-232 or CS 250-251</td>
<td>8</td>
<td>Transfers as MTH 231, 232</td>
<td>Transfers as MTH 231, 232</td>
<td>Meets major requirement for CS 250 and CS 251</td>
<td>CS 250 transfers as CS 250</td>
<td>Transfers as MATH 231-232; B.S. or Core Education Science group; CS 250-251 transfers as CIS 2xxT and substitutes for MATH 231-232 for major</td>
<td>Transfers as MTH 231-232 or satisfied by MTH 251-252</td>
</tr>
<tr>
<td>Natural Science:</td>
<td>4-5</td>
<td>Transfers as PH 213,</td>
<td>Completes 15 credit</td>
<td>Complete science</td>
<td></td>
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<tr>
<td>Major and Elective Courses</td>
<td>CC Credits</td>
<td>EOU</td>
<td>OSU</td>
<td>PSU</td>
<td>SOU</td>
<td>UO</td>
<td>WOU</td>
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<td>18-24</td>
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<tr>
<td>0-14 credits in Aesthetics and Humanities (AEH) in two different disciplines</td>
<td>Difference, Power &amp; Discrimination (3-4)</td>
<td>1 course in Strand E: Humanities (for a total of 3 courses or at least 9 credits)</td>
<td>3-6 credits of Core Ed A&amp;L courses, possibly including one multicultural course</td>
<td>3-4 credits of Foundations: Critical Thinking</td>
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<tr>
<td>0-14 credits in Artistic Process and Creation (APC) in two different disciplines</td>
<td>Fitness (3)</td>
<td>Additional Arts &amp; Letters or Social Science Elective (3 credits)</td>
<td>1 course in Strand F: Social Sciences (for a total of 3 courses or at least 9 credits)</td>
<td>7-9 credits of Core Ed Social Science courses, possibly including one multicultural course</td>
<td>4 credits of Foundations: Health Promotion</td>
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<tr>
<td>0-14 credits in Social Sciences (SSC) in two different disciplines</td>
<td>Contemporary Global Issues (3-4)</td>
<td>1 course in Strand G: Sciences (for a total of 3 courses or at least 11 credits; one course may be a non-lab science)</td>
<td>3-4 credits of Integrating Knowledge: Science, Technology, Society (upper-division)</td>
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<tr>
<td>0-14 credits in Natural, Mathematical &amp; Informational Sciences (SMI) in two different disciplines, including at least one physical/biological science.</td>
<td>Upper-division course in Strand I: Science, Technology &amp; Society (3-4 credits)</td>
<td>Upper-division course in Strand H: Citizenship and Social Responsibility (3-4 credits)</td>
<td>3-4 credits of Integrating Knowledge: Science, Technology, Society (upper-division)</td>
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<tr>
<td>0-14 credits in Natural, Mathematical &amp; Informational Sciences (SMI) in two different disciplines, including at least one physical/biological science.</td>
<td>Upper-division course in Strand J: Diversity, Equity, and Inclusion (3-4 credits)</td>
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<td>*** First Year seminars requirements waived</td>
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<tr>
<th>General Education Credits</th>
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<th>9-11</th>
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<th>18-24</th>
<th>10-15</th>
<th>13-16</th>
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<tbody>
<tr>
<td>Major Requirements</td>
<td>CS 221 (4 credits)</td>
<td>CS 361 (4 credits)</td>
<td>CS 202 (4 credits)</td>
<td>CS 314 (4 credits)</td>
<td>CIS 313 (4 credits)</td>
<td>IS 278 (4 credits)</td>
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<td>CS 311 (3 credits)</td>
<td>CS 290 (4 credits)</td>
<td>CS 300 (4 credits)</td>
<td>CS 336 (4 credits)</td>
<td>CS 314 (4 credits)</td>
<td>CS 361 (4 credits)</td>
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<td></td>
<td>CS 318 (4 credits)</td>
<td>CS 362 (4 credits)</td>
<td>CS 305 (2 credits)</td>
<td>CS 366 (4 credits)</td>
<td>CS 315 (4 credits)</td>
<td>CS 361 (4 credits)</td>
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<td>CS 330 (4 credits)</td>
<td>CS 325 (4 credits)</td>
<td>CS 320 (4 credits)</td>
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<td>CS 331 (3 credits)</td>
<td>CS 372(4 credits)</td>
<td>CS 333 (4 credits)</td>
<td>CS 411 (4 credits)</td>
<td>CS 415 (4 credits)</td>
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<td>CS 360 (4 credits)</td>
<td>CS 344 (4 credits)</td>
<td>CS 350 (4 credits)</td>
<td>CS 418 (4 credits)</td>
<td>CS 422 (4 credits)</td>
<td>CS 366 (4 credits)</td>
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<td>CS 361 (4 credits)</td>
<td>CS 444 (4 credits)</td>
<td>CS 469 (3 credits)</td>
<td>CS 452 (4 credits)</td>
<td>CS 425 (4 credits)</td>
<td>CS 367 (4 credits)</td>
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<td>CS 362 (3 credits)</td>
<td>CS 381 (4 credits)</td>
<td>CS 470 (3 credits)</td>
<td>CS 459 (4 credits)</td>
<td>MATH choice group (8)</td>
<td>CS 460 (4 credits)</td>
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## Computer Science Major Transfer Map Crosswalk

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>CS 401 (1-6 credits)</td>
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<td>CS 407 (2 credits)</td>
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<td>MATH 231 (4 credits)</td>
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<tr>
<td>MATH 341 (4 credits)</td>
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<tr>
<td>CS 340 (4 credits)</td>
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<tr>
<td>CS 461 (3 credits)</td>
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</tr>
<tr>
<td>CS 462 (3 credits)</td>
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</tr>
<tr>
<td>CS 463 (2 credits)</td>
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</tr>
<tr>
<td>CS 352 (4 credits)</td>
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<tr>
<td>&quot;CS 391 (3 credits) – Also fulfills Synthesis Bacca laureate Requirement&quot;</td>
<td></td>
</tr>
<tr>
<td>ST 314 (3 credits)</td>
<td></td>
</tr>
<tr>
<td>WR 214/222 (3 credits)</td>
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</tr>
<tr>
<td>CS 340 (4 credits)</td>
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</tr>
<tr>
<td>CS 461 (3 credits)</td>
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<tr>
<td>CS 462 (3 credits)</td>
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<tr>
<td>CS 463 (2 credits)</td>
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<tr>
<td>CS 352 (4 credits)</td>
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<tr>
<td>&quot;CS 391 (3 credits) – Also fulfills Synthesis Bacca laureate Requirement&quot;</td>
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<tr>
<td>ST 314 (3 credits)</td>
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<tr>
<td>WR 214/222 (3 credits)</td>
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<td>CS 486 (4 credits)</td>
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<td>ECE 341 (4 credits)</td>
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<td>CS 469 (4 credits)</td>
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<td>CS 470 (8 credits)</td>
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<td>CS 486 (4 credits)</td>
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<td>CS 470 (8 credits)</td>
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<td>CS 461 (4 credits)</td>
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<tr>
<td>CS 462 (4 credits)</td>
<td></td>
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<tr>
<td>CS 365 (4 credits)</td>
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<tr>
<td>COM 252 and CS Upper Division electives (16)</td>
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<tr>
<td>Approved Applied Plan Electives – approved by CS Head Advisor (16)</td>
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<tr>
<td>2 courses of CS Restricted Electives (6-8)</td>
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<tr>
<td>Approved CS Upper Division Electives, including at least one &quot;Programming Intensive&quot; course: (6 courses/24 credits)</td>
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<tr>
<td>Additional Math Elective: MTH 253 or MTH 261 (4 credits)</td>
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<tr>
<td>Approved Science Elective (4 credits)</td>
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<td>Approved Math Electives (7 credits)</td>
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<table>
<thead>
<tr>
<th>Major Requirements Credits</th>
<th>40-45</th>
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<tbody>
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<td>Major Electives Credits</td>
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<td>Additional Electives</td>
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<tr>
<td>Additional Electives</td>
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<td>2-8</td>
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<td>Remaining Degree Requirements Credits</td>
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