DRAFT

Spring 2023; Effective Fall 2023

Statewide Associate in Computer Science DTA Major Related Program (MRP) Agreement

This document represents an agreement between the undersigned Washington participating institutions offering computer science bachelor's degrees and Washington community and technical colleges. This agreement meets all requirements of Washington's Direct Transfer Agreement. Participating institutions party to this agreement are identified on the signature pages of this document.

The Computer Science DTA/MRP is a transfer degree path for students considering a major in computer science, earning a degree in a computer science related major or gaining knowledge and skills in the computer science field to enhance majors in the social sciences. Students who are interested in pursuing the Computer Science DTA/MRP and a Bachelor of Science degree in computer science should work closely with an advisor. A Bachelor of Science in computer science may require additional courses in mathematics and/or science through chosen electives identified in this degree path. Students interested in pursuing a Bachelor of Science may also want to consider the Associate of Science-Transfer, Track 2 Computer Science Major Related Program (MRP) transfer degree path.

It is critical that students be in communication with advisors at their community or technical college and the intended transfer baccalaureate institution as early in the degree path as possible. The participating institutions to this agreement are committed to reaching out and welcoming students to ask questions and connect with advisors to ensure successful transfer and degree completion.

Effective Fall 2023 this agreement cancels and supersedes the existing statewide Computer Science DTA/MRP agreement dated 2016. Parties to the 2016 Computer Science DTA/MRP agree to continue to honor that agreement until Fall 2023 for students who enrolled in the 2016 Computer Science DTA/MRP prior to Fall 2023.

Community and technical colleges agree:

- When community and technical colleges list the DTA details in their publications, they will provide the expanded detail shown below regarding the major pathway in the field of computer science while retaining the current detail for other MRP's.
- The published associate degree listing will include advice to students about the need for early contact with their potential transfer institutions regarding the specific course choices in each area of the agreement where options are listed. In addition, the published associate degree will include advice to students regarding checking with their potential transfer institutions about the requirement for overall minimum GPA, a higher GPA in a selected subset of courses or a specific minimum grade in one or more courses such as math or English.
- To offer the Associate in Computer Science DTA/MRP each college must assure that the courses listed in their DTA/MRP as meeting the prerequisite requirements of this agreement are regarded as course equivalents to the similar required lower division course offered by each baccalaureate institution party to the agreement.
- Upon adopting the degree, a community and technical college will specify the **Associate in Computer Science DTA/MRP** in its catalog and specify the courses consistent with this agreement. In addition community colleges will emphasize the advising notes included as part of the agreement.
- When community colleges award the DTA degree for computer science students pursuant to this agreement, rather than using DTA on the transcript, colleges will designate completion as follows for clarity on the transcript and use by SBCTC for tracking reporting purposes:
    - **Associate in Computer Science DTA/MRP**
    - Intent Code: **B**

    - Exit Code: **X**
    - CIP code: **11.0701**
    - EPC: **CSA**
    - ctclink code:
- If any community college changes the content of any of this agreement's required courses or if a community college discontinues offering this agreement's required courses or if a college or colleges find that changes to this MRP are needed, they will immediately notify the Instruction Commission, which will, in turn, notify the Joint Transfer Council (JTC). JTC will review the changes as detailed in the section below (See https://www.sbctc.edu/resources/documents/colleges-staff/programs-services/transfer/joint-transfer-council/statewide-transfer-agreements-process.pdf).

The participating bachelor degree granting institutions agree:

- Once admitted all degree requirements must be met at the participating institution for the Computer Science major.
- The same 2.0 GPA minimum requirement that applies to DTA in general applies to this MRP. **Computer Science programs are competitive and may require a higher GPA overall or a higher GPA in specific courses.**
- Participating institutions will apply the 90 quarter credits required under this agreement to the credits required in the bachelor's degree, subject to institutional policy on the transfer of lower division credits.
- Participating institutions will each build an alert mechanism into their curriculum review process for changes related to this agreement
    - The alert will go to the institution or sector JTC member.
    - If the proposed change will affect lower division course taking, the JTC member will bring the issue to JTC attention for action to review or update this Major Related Program Agreement.
- Prior to making changes in the admission requirements, institutions agree to participate in the JTC-designed review process and to abide by the related implementation timelines (See https://www.sbctc.edu/resources/documents/colleges-staff/programs-services/transfer/joint-transfer-council/statewide-transfer-agreements-process.pdf).
- This statewide process applies only to changes[1] in the requirements for admission to the major. References to changes do not include changes in graduation requirements that are completed at the upper division level or the GPA an institution may establish for admission to a program.

The Joint Transfer Council (JTC) Agrees:

- JTC will revisit the agreement in AY 2026-27
- JTC will notify the Washington Student Achievement Council (WSAC) of the review and of subsequent changes made to the agreement.

[1] Changes identified that have an impact on students. This statewide process comes into play when potential students need to complete specific courses not previously identified or present test results or information not included in the agreement.

Associate in Computer Science DTA/MRP

Generic DTA Requirements	Computer Science Pathway
I. Be issued only to students who have earned a cumulative grade point average of at least 2.0, as calculated by the degree awarding institution	● Students must apply to graduate at the community or technical college to be awarded the Computer Science DTA/MRP. ● Admission deadlines for transfer institutions vary, and students are required to meet the transfer admission deadline. ● Computer science programs are competitive and may require a higher GPA than 2.0 overall. Minimum GPA requirements are established by each participating baccalaureate institution. Meeting the minimum GPA does not guarantee admission. Computer science programs are competitive and may require a higher GPA than 2.0 overall or a higher GPA in specific courses. ● Students are strongly encouraged to enroll in math and science sequence courses at a single institution and, if possible, not break up sequenced courses between institutions. ● Certain institutions may have additional "institution-specific" requirements for admission to the institution that are not prerequisites specifically identified in the Computer Science DTA/MRP requirements. ● **Students should contact potential transfer institutions early regarding the specific course choices in each area of the agreement where options are listed.** ● Within the Electives the required courses are common transfer preparation for all majors at all participating baccalaureate institutions. The degree becomes tailored for specific preparation to a single major at a single transfer institution through appropriate selection of the remaining elective credit courses. An Elective course that is appropriate to transfer to one baccalaureate institution may not be the appropriate choice for another baccalaureate institution. It is critical that students be in communication with advisors at their community or technical college and the intended transfer baccalaureate institution. ● Some baccalaureate institutions may require evaluation of courses. See Appendix A.

II. Be based on 90 quarter hours of transferable credit including:	**Total Credits: 90 -105 quarter credits**
Communication Skills (10 credits) Must include at least five (5) credits of English composition. Remaining credits may be used for an additional composition course or designated writing courses or courses in basic speaking skills (e.g., speech, rhetoric, or debate).	**Communication Skills (10 Credits)** 5 quarter credits English Composition I (ENGL& 101) 5 quarter credits English Composition II (ENGL& 102), or Technical Writing (ENGL& 235) planned with an advisor ● *Whitworth & Gonzaga- Oral Communication in place of English Composition II or Technical Writing – 5 credits*
Quantitative/Symbolic Reasoning Skills (5 credits) a. Five (5) credits of college level mathematics (a course with a Mathematics prefix numbered 100 or above) that furnishes the quantitative skills required in the commonly recognized educational transfer pathways toward a baccalaureate degree. Accepted courses in these pathways are: Pre-calculus or higher, Mathematics for Elementary Education, Business Pre-calculus/Finite Mathematics, Statistics, and Math in Society; **or** b. Five (5) credits of a symbolic logic course that focuses on (a) sentence logic with proofs and (b) predicate logic with quantifiers and proofs and/or Aristotelian logic with Venn Diagrams.	**Quantitative/Symbolic Reasoning Skills (5 credits)** 5 quarter credits mathematics – Calculus 1
Humanities (15 credits) Selected from at least two disciplines. No more than 10 credits allowed from any one discipline. No more than 5 credits in foreign language at the 100 level. No more than 5 credits allowed in performance/skills courses.	**Humanities (15 credits)** 15 quarter credits humanities ● *Gonzaga - Philosophy (Intro or Ethics), Literature, and Humanities (Art, Music, Theatre, etc.) – 15 credits*

Social Sciences (15 credits) Selected from at least two disciplines. No more than 10 credits allowed from any one discipline.	**Social Sciences (15 credits)** 15 quarter credits social sciences ● *All UW Campuses - Require completion of a diversity course(s) that explores how social systems create different life outcomes for different people, how to recognize and work with the differences, and ultimately how to improve on the systems. For courses that meet this institutional requirement please visit the UW Equivalency Guide https://admit.washington.edu/apply/transfer/equivalency-guide/ and speak with an advisor from the campus you wish to attend.* ● *Gonzaga - History (World or Western Civ, US History); and Psyc, Soc, Crim, or Anthro 101.*
Natural Sciences (15 credits) Selected from at least two disciplines. No more than 10 credits allowed from any one discipline. At least 10 credits in physical, biological and/or earth sciences. Shall include at least one laboratory course.	**Natural Science (15 credits)** 10 quarter credits from any lab science ● *WSU All Campuses - Physics 1 and 2 with labs (PHYS& 221 & PHYS& 222)* ● *Gonzaga - I year 'major-level' BIOL, CHEM or Calc-Based PHYS and labs; Calculus 2/3* 5 quarter credits Calculus 2 or a third science w/lab planned with an advisor
Electives No more than 15 credits may be from restricted subject areas. Remaining 0-20 quarter credits should be planned with the help of an advisor based on the student's interests, the intended major, and the preference of the most likely baccalaureate institution.	**Electives (30-45 credits)** **Required Courses (10 credits)** 5 quarter credits Computer Programming I 5 quarter credits Computer Programming II Note: See baccalaureate degree granting institution programming language information in Appendix B. **Remaining Courses (20-35 credits)** The remaining elective courses are common, suggested transfer preparation for all participating bachelor degree granting institutions. The degree becomes tailored for

	preparation to a transfer institution through appropriate selection of elective courses. An elective course that is appropriate for one baccalaureate institution may not be the appropriate choice for another baccalaureate institution. **It is critical that students be in communication with advisors at their community or technical college and the intended transfer baccalaureate institution(s). Remaining elective credits should be planned with the help of an advisor based on the requirements of the intended transfer baccalaureate institution(s). The participating institutions to this agreement are committed to reaching out and welcoming students to ask questions and connect with advisors to ensure successful transfer and degree completion.** Advanced Data Structures Calculus 3 Calculus 4 Computer Architecture Data Structures Differential Equations Digital Logic Discrete Math Discrete Structures General Biology I + lab Linear Algebra Programming Tools Statistics Calculus based

Appendix A

Baccalaureate Degree Granting Institution - Evaluation of Credit

- Heritage – Discrete Math and Statistics will be evaluated for comparability to Heritage's SPSC 231 and Math 221 courses. Other lower level courses taken by Computer Science majors, which may need to be taken prior to graduation. Similar courses taken at other institutions will be evaluated at time of transfer and credit may be applied towards major, general education or electives as appropriate.

- Pacific Lutheran – Intro to CS, Data Structures, Statistics, and Discrete Structures will be evaluated for comparability to PLU's, CSCE 144, 270, and Math 242, 245 courses. Other lower level courses taken by Computer Science majors, which may need to be taken prior to graduation. Similar courses taken at other institutions will be evaluated at time of transfer and credit may be applied towards major, general education or electives as appropriate.

- Seattle Pacific – Prefers C++ but accepts Java or C# with SPU bridge course. Math& 163 will be evaluated for comparability to SPU's Math 1236 Calculus 3. Other lower level courses taken by Computer Science majors, which may need to be taken prior to graduation. Similar courses taken at other institutions will be evaluated at time of transfer and credit may be applied towards major, general education or electives as appropriate.

- Seattle University - Programming and Problem Solving 1 and 2 will be evaluated for comparability to CPSC 1420 and 1430 courses. Other lower level courses taken by Computer Science majors, which may need to be taken prior to graduation. Similar courses taken at other institutions will be evaluated at time of transfer and credit may be applied towards major, general education or electives as appropriate.

- Gonzaga University - all transfer coursework to be applied to the major will be evaluated for equivalency to ensure students are prepared for upper division coursework. With completed AA or AS-T, most of our University Core is completed with the exception of Philosophies, Core Seminars, and Christian/Catholic Religion. See ICRC Provisos for more information.

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Appendix B

Baccalaureate Degree Granting Institution - Computer Programming I and II Language Information

To best prepare for transfer, students should review the programming languages listed below for each participating institution. Unless indicated in the *Notes* section students are strongly encouraged to take the same programming language for both required computer programming courses. If a student takes a programming language that is different from the language identified by a particular institution, the student is encouraged to directly reach out to their advisor and the intended transfer institution to learn about how best to move forward.**The participating institutions to this agreement are committed to reaching out and welcoming students to ask questions and connect with advisors to ensure successful transfer and degree completion.**

Institution	C	C#	C++	Java	Python	Notes
Central Washington University				X		
Eastern Washington University		X	X	X		
The Evergreen State College	X	X	X	X	X	
Gonzaga University			X	X		
Heritage University				X		
Pacific Lutheran University		X	X	X		
Saint Martin's University			X		X	
Seattle Pacific University		X	X	X		One course must include data structures
Seattle University			X	X		
University of Puget Sound			X	X		
University of Washington, Bothell		X	X	X		
University of Washington, Seattle				X		
University of Washington, Tacoma				X		
Walla Walla University			X		X	At least one course in C++ preferred.
Washington State University, Tri-Cities	X		X			
Washington State University, Pullman	X		X	X		
Washington State University, Vancouver	X		X	X		One course in python is allowable.
Western Washington University				X	X	At least one course in Java.
Whitworth University			X	X		

Statewide Associate in Computer Science DTA Major Related Program (MRP) Agreement

Participants to the Agreement

The Joint Transfer Council (JTC) reviewed this agreement and forwarded it for approval by the chief academic officers of the public and independent baccalaureate institutions offering computer sciences bachelor's degrees and by the Deputy Executive Director of Education for the State Board for Community and Technical Colleges representing the public community and technical colleges.

On behalf of the Washington State Community and Technical Colleges
X, Deputy Executive Director, Date, Signature

Community and Technical College Computer Science Bachelor of Science Participants to the Agreement

Name, Title, Date, Signature

Public and Private Baccalaureate Institution Participants to the Agreement
Name, Title, Date, Signature

ASSOCIATE IN COMPUTER SCIENCE DTA/MRP
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