COLORADO
Department of
Higher Education

STATEWIDE TRANSFER ARTICULATION AGREEMENT

in

<u>COMPUTER SCIENCE</u>

For an Associate Degree with Designation (DwD)

FROM ONE OF THESE COLORADO PUBLIC COMMUNITY / JUNIOR / LOCAL DISTRICT COLLEGES

Aims Community College [*A.S. Computer Science*] *
Arapahoe Community College [*A.S. Computer Science*]
Colorado Mountain College [*A.S. Computer Science*]
Colorado Northwestern Community College [*A.S. Computer Science*]
Community College of Aurora [*A.S. Computer Science*]
Community College of Denver [*A.S. Computer Science*]
Front Range Community College [*A.S. Computer Science*]
Morgan Community College [*A.S. Computer Science*]
Northeastern Junior College [*A.S. Computer Science*]
Otero Junior College [*A.S. Computer Science*]
Pikes Peak Community College [*A.S. Computer Science*]
Pueblo Community College [*A.S. Computer Science*]
Red Rocks Community College [*A.S. Computer Science*]
Trinidad State Junior College [*A.S. Computer Science*]

and

For a Bachelor's Degree

FROM ONE OF THESE COLORADO PUBLIC FOUR-YEAR INSTITUTIONS

Adams State University [*B.S. Mathematical Sciences, Computer Science Emphasis*]
Colorado Mesa University [*B.S. Computer Science*]
Colorado School of Mines [*B.S. Computer Science*]
Colorado State University [*B.S. Computer Science*]
Metropolitan State University of Denver [*B.S. Computer Science*]
University of Colorado Boulder [*B.A. Computer Science*] **
University of Colorado Denver [*B.A. Computer Science*] **
University of Colorado Colorado Springs [*B.S. Computer Science*]
University of Northern Colorado [*B.S. Mathematics, Applied Math Emphasis*]
Western Colorado University [*B.S. Computer Science*]

INTRODUCTION

A statewide transfer articulation agreement identifies the community college or local district courses students need to take in order to graduate with a 60-credit Associate of Arts (AA) or Associate of Science (AS) degree with designation (DwD). Students are responsible for informing the admissions counselor or intake advisor at their receiving four-year institution that they are completing a DwD.

It is important for students to understand that completion of an AA or AS degree within two years requires them to complete an average of 15 credits per semester (or 30 credits per year). Also, research shows that students who take classes in their major area within their first 30 credit hours are more likely to persist and graduate.

The guarantees and limitations below describe the minimum requirements to which all participating institutions have agreed. Students who believe an institution is not meeting the guarantees described below can file a complaint on the CDHE Website.

PART ONE: GUARANTEES

Students who complete a DwD pursuant to the prescribed curriculum in this statewide transfer articulation agreement **and** pass all 60 credits with a C- or higher **and** are admitted to the receiving institution's corresponding degree program (see cover page) are guaranteed the following:

1. Junior standing with no more than 60 credits remaining (or up to 68 credits remaining for Computer Science, depending on the institution) to meet the graduation requirements for the baccalaureate degree program covered by this articulation agreement (see cover page).

2. Completion of the receiving institution's lower division general education requirements as defined by the GT Pathways curriculum.

3. The same graduation requirements as students who begin and complete this degree program at the four-year institution.

4. Admission to all Colorado public baccalaureate awarding institutions (*except* Colorado School of Mines) will be guaranteed to applicants who have completed any AA or AS degree from a Colorado public two-year institution after high school graduation, provided certain requirements are met. To see these requirements, please refer to the Colorado Commission on Higher Education's Admissions Standards Policy (effective for students seeking admission for fall 2019 and after), Section titled "Guaranteed Transfer Admissions" available on the CDHE Website. Please note: Students transferring to a University of Colorado institution (Boulder, Colorado Springs, Denver) must satisfy the CU System's MAPS (Minimum Academic Preparation Standards) requirement.

5. Per the Commission's Prior Learning Assessment policy, section 2.07 (see CDHE Website), and pursuant to Colorado Revised Statutes §23-1-108 (7)(b)(II)(A), "a state institution of higher education that admits as a junior a student who holds an associate of arts degree, associate of applied science degree, or associate of science degree that is the subject of a statewide degree transfer agreement shall not require the student to complete any additional courses to fulfill general education requirements", and that the receiving institution of higher education is responsible for the total cost of tuition "for any credit hours that exceed the total credit hours required for a native student or that extend the total time to receive the degree beyond that required for a native student".

6. The Commission's Prior Learning Assessment policy also states "every Colorado public institution of higher education shall accept in transfer from within the institution and from other state institutions of higher education prior learning assessment credit awarded for GT Pathways requirements" (section 3.01), and "Colorado public institutions of higher education shall not prohibit students from meeting general education/GT Pathways requirements with prior learning assessment credit" (section 3.02).

PART TWO: LIMITATIONS

1. Students must meet all admission and application requirements at the receiving institution including the submission of all required documentation by stated deadlines. Students are advised to consult with the Office of Admissions at the institution to which they intend to transfer.

2. Only courses with grades of C- or higher are guaranteed to transfer.

3. Admission to a receiving institution does not guarantee enrollment in a specific degree program. Some programs at receiving institutions have controlled entry due either to space limitations or academic requirements.

4. The credit and course transfer guarantees described in this agreement apply to the specific degree programs covered by this agreement (see cover page). If the student changes majors, receiving institutions will evaluate application of the courses designated in this agreement to other degree programs on a course-by-course basis.

5. Students are allowed to use credits awarded by exam, such as AP (Advanced Placement) and IB (International Baccalaureate), as long as those exams are listed on the exam tables here: CDHE Website, or may use challenge exams to fulfill GT Pathways requirements (not necessarily major requirements) and those credits are guaranteed to transfer and apply to GT Pathways requirements at the receiving institution per the Colorado Commission on Higher Education's Policy I, X: Prior Learning Assessment. See the entire policy for more information: CDHE Website.

6. The receiving institution shall accept all applicable credits earned within ten years of transfer to the receiving institution. Credits earned more than ten years prior to transfer will be evaluated on a course-by-course basis.

7. All the courses a student needs to take in the associate degree program covered by this statewide transfer articulation agreement are listed in the prescribed curriculum. Course substitutions are allowed as long as the student and both the sending and receiving institutions agree to the substitution; such agreement should be documented in writing and the student should keep a copy until the baccalaureate degree is conferred. Note that if students substitute a course, then this is no longer a statewide agreement and some of the guarantees are only for the receiving institution that agreed to the substitution. **<u>Any additional courses taken in the discipline covered by this agreement might not count toward the requirements of the major at the receiving institution</u>**. Students can avoid this problem by taking no more courses in the discipline than what are identified in the prescribed curriculum. STUDENTS SHOULD CONSULT THE PROGRAM ADVISOR AT THE RECEIVING INSTITUTION FOR GUIDANCE. Any advisement from an academic advisor should be obtained IN WRITING.

8. Students seeking K-12 teacher licensure may not use this agreement because teacher preparation programs have different requirements for educator licensure.

* Aims Community College does not currently offer CSC 165 or CSC 225. Aims students should talk to their academic advisor about cooperative registration agreement options with CSU and UNC.

** For both the University of Colorado Boulder and the University of Colorado Denver, this agreement applies only to the Bachelor of Arts degree in Computer Science. Students who are interested in the Bachelor of Science degree in Computer Science should contact a program advisor at CU Boulder or CU Denver as early as possible.

PART III: PRESCRIBED CURRICULUM

Courses that Fulfill General Education Requirements = 33

Content Area	Credit Hours	Community College Course No.	Course Title or Category
Written Communication	6		Any (GT-CO1) course plus any (GT-CO2) course **OR** Any (GT-CO2) course plus any (GT-CO3) course ***ENG 122 or ENG 131 required for Mines*
Mathematics	5	MAT 201	Calculus I (GT-MA1) (Additional coursework might be required to meet pre-requisite requirements for calculus. Pre-requisite courses may apply toward elective credit hours.)
Arts & Humanities	6		Any two GT Pathways Arts & Humanities courses (GT-AH1, GT-AH2, GT-AH3, GT-AH4) ***For transfer to Mines, take PHI 218 AND one additional course GT-AH course from the CSM CCCS H&SS Undergraduate Pre-Approved List*
History	3		Any one GT Pathways History course (GT-HI1) ***For transfer to Mines, take HIS 247 OR another GT-HI1 course from the CSM CCCS H&SS Undergraduate Pre-Approved List*
Social & Behavioral Sciences	6		Any two GT Pathways Social & Behavioral Sciences courses (GT-SS1, GT-SS2, GT-SS3) ***For transfer to Mines, take ECO 201 and ECO 202*
Natural & Physical Sciences	7		Select from GT-SC1/GT-SC2 courses with at least one GT-SC1 course. GT-SC1/GT-SC2 courses in sequence (same discipline) are recommended (and may be required depending on the receiving institution—consult the advising office). Courses must be selected in consultation with the advising office from the community college and from the intended transfer institution, if known. Seven credit minimum; additional credits in this area will be applied toward electives. ***For transfer to Mines, select two courses from PHY 211, PHY 212, and CHE 111*

Additional Required Courses = 12

Please note: if these credits are *not* required for the *major* at a receiving 4-year institution, they will be applied to the bachelor's degree as *elective credit* towards *graduation*. Please check with the receiving institution to determine in which way these courses will be applied.

	Credit Hours	Community College Course No.	Course Title
Computer Science	8	CSC 160 & CSC 161	Computer Science I & II (Courses must be selected in consultation with the advising offices to ensure that the courses taken are in the preferred programming language. Additional coursework might be required to meet pre-requisite requirements for Computer

	Credit Hours	Community College Course No.	Course Title
			Science I. Pre-requisite courses may apply toward elective credit hours.)
Computer Science	4	CSC 225	Computer Architecture/Assembly Language Programming **Not required at Mines; would transfer as free elective*

Electives = 15
Please note: A total of 15 additional/elective credits are required to complete the Associate Degree with Designation. Some four-year institutions require specific courses on top of the required courses listed above. The total number of credits for these required courses plus free electives must equal at least 15.

	Credit Hours	Community College Course No.	Course Title
Required for most CS programs at most four-year institutions – consult an academic advisor at the intended transfer institution	5	MAT 202	Calculus II
Required for CSU, CU Boulder, CU Denver, & UNC	4	CSC 165	Discrete Structures (CSU will also accept MAT 215 as an alternative to CSC 165)
Required for CU Boulder	3	MAT 255	Linear Algebra
Required for Mines	4/5	MAT 203 or MAT 204	Calculus III OR Calculus with Engineering Applications
Required for CSU	4	CSC 234 ***	C++ Programming

*** CSC 234 is available only at certain CCCS institutions. Students planning to transfer to CSU should consult an academic advisor about options for taking this course at Front Range or Arapahoe Community College and transferring the credits back to your home institution. Both CSC 165 and CSC 234 are available through Colorado State University Online as CS220 and CS 253, respectively. Consult your academic advisor about registration and reverse transfer options.

For Colorado School of Mines, students are advised to use any remaining free elective credits to take MAT261, CHE111, or PHY212 (CSC165 will be accepted in transfer but the other courses are preferred).

Total credits required for completion = 60

Addendum to Agreement

Students who do not complete an AA/AS degree can use the prescribed curriculum in a statewide transfer articulation agreement as a common advising guide for transfer to all public institutions that offer the designated bachelor's degree program.

Please note the following:

1. Students are guaranteed application of general education courses completed with a C- or higher in the prescribed curriculum in this agreement up to the established maximum in each GT Pathways content area.

2. Except in special cases (e.g., the partial completion of a required sequence of courses or variation in the number of credit hours institutions award for course equivalents), students can expect that courses specified within the prescribed curriculum in this agreement, successfully completed with a C- or higher, will fulfill the relevant course requirements in the designated major.

3. Receiving institutions will evaluate all courses other than those specified in this agreement on a course-by-course basis.

Students transferring without a completed AA/AS degree must consult with the Office of Admissions at the institution to which they are transferring to review the issues identified above, and to make sure they meet all admission and application requirements at the receiving institution, including the submission of all required documentation by stated deadlines.

This agreement will be reviewed by disciplinary faculty no less frequently than every five years. *The agreement will remain in force until such time as it is formally modified or terminated.*

The Department of Higher Education – in consultation with the General Education Council – may make minor technical changes to this agreement on behalf of participating institutions. The most current version of the agreement can be found at CDHE Website

Institutions that wish to join or withdraw from this agreement should consult the Division of Academic Affairs at the Colorado Department of Higher Education. Terms and processes are outlined in the Commission's policy on Statewide Transfer and GT Pathways, available at CDHE Website.

A paper or hard copy of this document may not be the most current version of the agreement—check the website of the Colorado Department of Higher Education for the most current version.

Signatures from institutional/system Chief Academic Officers for all participating institutions, as listed on the cover page, have signed this agreement. Signatures of Chief Academic Officers, who possess or have been delegated authority to enter into this agreement on behalf of their institution or institutions (in some cases by the institutional or system governing board), are on file in the Division of Academic Affairs at the Colorado Department of Higher Education.

HISTORY OF REVISIONS TO AGREEMENT:

- 2020-05 – Approved by CCHE.
- 2020-09 – Technical correction to Prescribed Curriculum: Natural & Physical Sciences. PHY 111 and PHY 112 were listed instead of PHY 211 and 212.