

**DELAWARE TECHNICAL AND COMMUNITY COLLEGE**

**and**

**UNIVERSITY OF DELAWARE**

**PROGRAM ARTICULATION AGREEMENT**

**Associate Degree  
A.A.S. Computing and Information Science**

**Bachelor of Arts Degree  
Computer Science**

**2021 through 2026**

# **Associate-Bachelor Program Articulation Agreement**

**between**

**Delaware Technical and Community College  
and  
University of Delaware**

**for**

**A.A.S. Computing and Information Science  
and  
B.A. Computer Science**

## **AGREEMENT**

**WHEREAS** Delaware Technical and Community College (DTCC) and University of Delaware (UD) are committed to expanding educational opportunities for the citizens of the State of Delaware, and

**WHEREAS** the two institutions are committed to providing a smooth transition for students wishing to earn an associate degree and a bachelor degree, and

**WHEREAS** the intent of the two institutions is to avoid duplication of curricula where appropriate within articulated programs of studies, and

**WHEREAS** the two institutions better serve the educational growth of students and the economic development of the community through cooperative educational planning and optimal utilization of community resources,

**BE IT HEREWITH RESOLVED** that this agreement commits the partners to full support of an articulation process between similar academic programs offered by the two institutions.

## PROVISIONS OF THE AGREEMENT

1. The institutions agree to follow the connected degree curricula delineated in this document for the transfer of DTCC's Associate in Applied Science degree program in Computing and Information Science and UD's Bachelor of Arts in Computer Science.
2. Both educational institutions will cooperate toward developing, disseminating, and presenting the articulated program information to students.
3. Graduates of the DTCC program who have completed the Associate degree with a cumulative grade point average of 3.2 or higher, a grade point average of 3.2 or higher in the CSC and CIS courses combined, and a B or better in all MAT courses will be automatically accepted into the Bachelor's degree program at UD. Those with a cumulative grade point average equal to or greater than 2.8 and less than 3.2 will be considered for admission on a space available basis. Students will be considered for admission based on the completed work at the time of review. DTCC will provide confirmation of degree completion upon student's final semester of coursework. Students who do not complete the degree program as outlined in the agreement may have admission based on the articulation agreement criteria rescinded; however, they still may be considered for regular transfer admission based on the totality of their academic record. UD reserves the right to recalculate the DTCC cumulative grade point average to account for DTCC's grade forgiveness policy when making admission decisions.
4. Students must complete the courses in the specified Associate degree program herein with a grade of C or better to receive the credits for transfer. Students are expected to complete all courses outlined in the DTCC portion of the agreement at DTCC. Students who have attended a college or university other than DTCC and transferred credits to DTCC in pursuit of the Associate degree may not be admissible via the provisions of this articulation agreement. In such cases, students will be considered based on their entire academic history but will not be guaranteed admission to the Bachelor degree program or the course equivalencies detailed within the provisions of this agreement. Coursework taken at an institution other than DTCC may not transfer to UD as noted in the agreement. It is expected that students will complete all coursework in the UD portion of the agreement at UD. Students who previously attended UD are not eligible for admission via an articulation agreement; instead, they should apply for readmission consideration if wishing to re-enroll at UD.
5. Students intending to transfer should complete the UD admissions application following the third semester of their Associate degree program. Students should note on their application that they are applying as part of an articulation agreement/connected degree.

6. Students are subject to all the policies and procedures of both institutions.
7. Students are subject to all specific policies pertaining to students admitted to the Bachelor of Arts in Computer Science degree program.
8. This articulation agreement is based on the present curricula contained in this document and it is effective for a period of five years from the date of signing by both parties.
9. At any time, both institutions may initiate changes to this articulation agreement. Both institutions reserve the right to modify the programs as deemed necessary and agree to inform the appropriate individuals of said changes. Departments will review agreements and notify the appropriate individuals at each institution of any changes by July 1 of each year the agreement is in effect. The University of Delaware will make a good faith effort to honor this articulation agreement for any DTCC student who enrolls in the Computing and Information Science Associate degree program during the five-year period specified for this agreement and graduates with the required Associate degree within eight (8) years of the signing of this agreement by both parties. A student who meets these conditions must apply to the University of Delaware and be accepted in order to receive the benefits of this agreement.

# CONNECTED DEGREE ANALYSIS

## Matching Worksheet/Suggested Course Sequence/Bachelor's Completion

ASSOCIATE DEGREE PROGRAM		BACHELOR'S DEGREE COURSE MATCH OR POTENTIAL COURSE MATCH		BACHELOR'S DEGREE COMPLETION	
A.A.S. COMPUTING AND INFORMATION SCIENCE DELAWARE TECHNICAL & COMMUNITY COLLEGE				B.A. COMPUTER SCIENCE UNIVERSITY OF DELAWARE	
Course No./Name Term 1 (fall)	CR	Course No./Name	CR	Course No./Name Term 6 (fall)	CR
CSC 114 Computer Science I	4	CISC 108 Intro to Computer Science I CISC 166DE Department Elective	3 1	CISC 3XX Elective Course 1/5*	3
HIS 112 U.S. History Post-Civil War	3	HIST 106 U.S. History Since 1865 (History & Cultural Change Breadth Course)	3	CISC 3XX Elective Course 2/5*	3
ENG 101 Composition I	3	ENGL 166DE Department Elective (ENG 101 + ENG 102 = ENGL 110 Exemption)	3	XXXX XXX General Elective Course#	3
XXX XXX Social Science Elective Choose 1 from: POL 111 Political Science or ECO 111 Macroeconomics or PSY 121 General Psychology or SOC 111 Sociology I	3	Social & Behavioral Sciences Breadth Course POSC 150 Intro to American Politics or ECON 103 Intro to Macroeconomics or PSYC 100 General Psychology or SOCI 201 Intro to Sociology	3	XXXX XXX General Elective Course#	3
SSC 100 First Year Seminar	1	UNIV 166T Transfer Elective	1	XXXX XXX Creative Arts & Humanities Breadth Course#	3
MAT 180 College Algebra or MAT 183 Reasoning with Functions I	4 or 5	MATH 166DE Department Elective or MATH 166DE Department Elective	4 or 5		
	<b>18/19</b>		<b>18/19</b>		<b>15</b>
<b>Term 2 (spring)</b>				<b>Term 7 (spring)</b>	
CSC 164 Computer Science II	4	CISC 181 Intro to Computer Science II CISC 166DE Department Elective	3 1	CISC 3XX Elective Course 3/5*	3
CSC 210 Systems Programming	3	CISC 210 Introduction to Systems Programming	3	CISC 3XX Elective Course 4/5*	3
ENG 102 Composition II	3	ENGL 166DE Department Elective (ENG 101 + ENG 102 = ENGL 110 Exemption)	3	XXXX XXX Creative Arts & Humanities Breadth Course#	3
HIS 111 U.S. History Pre-Civil War	3	HIST 105 U.S. History to 1865 (History & Cultural Change Breadth Course)	3	SPAN 106 Elementary/Intermediate Spanish	4
MAT 190 Pre-Calculus	4	MATH 117 Pre-calculus for Engineers	4	XXXX XXX History & Cultural Change Breadth Course# (May not be a HIST course.)	3
	<b>17</b>		<b>17</b>		<b>16</b>
<b>Sub-Total</b>	<b>35/36</b>		<b>35/36</b>		<b>31</b>

ASSOCIATE DEGREE PROGRAM		BACHELOR'S DEGREE COURSE MATCH OR POTENTIAL COURSE MATCH		BACHELOR'S DEGREE COMPLETION	
A.A.S. COMPUTING AND INFORMATION SCIENCE DELAWARE TECHNICAL & COMMUNITY COLLEGE		B.A. COMPUTER SCIENCE UNIVERSITY OF DELAWARE			
Course No./Name Term 3 (summer)	CR	Course No./Name	CR	Course No./Name Term 8 (fall)	CR
MAT 281 Calculus I	4	MATH 241 Analytic Geometry and Calculus A	4		
	4		4		
Course No./Name Term 4 (fall)	CR	Course No./Name	CR	Course No./Name Term 8 (fall)	CR
CIS 130 Computer Organization	3	CISC 260 Machine Organization & Assembly Language	3	XXXX XXX Discovery Learning Experience (DLE)/Capstone	3
SPA 136 Spanish Communication I (Choose as a Support Elective)	4	SPAN 105 Elementary Spanish I	4	CISC 3XX Elective Course 5/5*	3
ECO 122 Microeconomics	3	ECON 101 Intro to Microeconomics (Social & Behavioral Sciences Breadth Course)	3	XXXX XXX Social & Behavioral Science Breadth Course# (If 2 ECO courses are taken at DTCC, this course cannot be an ECON course.)	3
CIS 211 Data Structures	4	CISC 220 Data Structures CISC 266DE Department Elective	3 1	SPAN 107 Intermediate Spanish XXXX XXX General Elective Course#	4 3
	14		14		16
Term 5 (spring)				Term 9 (spring)	
ENG 122 Technical Writing and Communication	3	ENGL 410 Technical Writing (Second Writing Requirement)	3	XXXX XXX Creative Arts and Humanities Breadth Course#	3
CSC 214 Computer Science III	4	CISC 275 Introduction to Software Engineering CISC 266DE Department Elective	3 1	XXXX XXX General Elective Course#	3
PHY 281 Physics I with Calculus or PHY 205 General Physics I	4	PHYS 207 Fundamentals of Physics I or PHYS 201 Introductory Physics I	4	XXXX XXX General Elective Course#	3
MAT 263 Principles of Discrete Math	4	MATH 210 Discrete Math I MATH 266DE Department Elective	3 1	XXXX XXX General Elective Course#	4
	15		15		13
TOTAL	68/69		68/69		60
				# One of these courses must fulfill the Multicultural Requirement. * Advisor approved CISC course at the 301 and above level. Minimum grade of C- required. • Minimum grade of C- required for all University and College Breadth Requirements. • No more than 45 credits can be taken with the CISC departmental prefix.	



# CONNECTED DEGREE CURRICULUM

## Suggested Course Sequence

ASSOCIATE DEGREE A.A.S. COMPUTING AND INFORMATION SCIENCE DELAWARE TECHNICAL AND COMMUNITY COLLEGE				BACHELOR'S DEGREE B.A. COMPUTER SCIENCE UNIVERSITY OF DELAWARE			
Term 1 (Fall)			CR	Term 6 (Fall)			CR
CSC	114	Computer Science I	4	CISC	3XX	Elective Course 1/5*	3
HIS	112	U.S. History Post Civil War	3	CISC	3XX	Elective Course 2/5*	3
ENG	101	Composition I	3	XXXX	XXX	General Elective Course#	3
XXX	XXX	Social Science Elective (Choose 1: POL 111, ECO 111, PSY 121, SOC 111)	3	XXXX	XXX	General Elective Course#	3
SSC	100	First Year Seminar	1	XXXX	XXX	Creative Arts & Humanities Breadth Course#	3
MAT	180 or MAT 183	College Algebra or Reasoning with Functions I	4 or 5				
			<b>18/19</b>				<b>15</b>
Term 2 (Spring)				Term 7 (Spring)			
CSC	164	Computer Science II	4	CISC	3XX	Elective Course 3/5*	3
CSC	210	Systems Programming	3	CISC	3XX	Elective Course 4/5*	3
ENG	102	Composition II	3	XXXX	XXX	Creative Arts & Humanities Breadth Course#	3
HIS	111	U.S. History Pre-Civil War	3	SPAN	106	Elementary/Intermediate Spanish	4
MAT	190	Pre-Calculus	4	XXXX	XXX	History & Cultural Change Breadth Course# (May not be a HIST course.)	3
			<b>17</b>				<b>16</b>
Term 3 (Summer)							
MAT	281	Calculus I	4				
Term 4 (Fall)				Term 8 (Fall)			
CIS	130	Computer Organization	3	XXXX	XXX	Discovery Learning Experience (DLE)/Capstone	3
SPA	136	Spanish Communication I	4	CISC	3XX	Elective Course 5/5*	3
ECO	122	Microeconomics	3	XXXX	XXX	Social & Behavioral Science Breadth Course# (If 2 ECO courses are taken at DTCC, this course cannot be an ECON course.)	3
CIS	211	Data Structures	4	SPAN	107	Intermediate Spanish	4
				XXXX	XXX	General Elective Course#	3
			<b>14</b>				<b>16</b>
Term 5 (Spring)				Term 9 (Spring)			
ENG	122	Technical Writing and Communication	3	XXXX	XXX	Creative Arts & Humanities Breadth Course#	3
CSC	214	Computer Science III	4	XXXX	XXX	General Elective Course#	3
PHY	281 or 205	Physics I with Calculus or General Physics I	4	XXXX	XXX	General Elective Course#	3
MAT	263	Principles of Discrete Math	4	XXXX	XXX	General Elective Course#	4
			<b>15</b>				<b>13</b>
<b>Total Credits</b>			<b>68/69</b>				<b>60</b>
			<p># One of these courses must fulfill the Multicultural Requirement.            * Advisor approved CISC course at the 301 and above level. Minimum grade of C- required.            • Minimum grade of C- required for all University and College Breadth Requirements.  <b>No more than 45 credits can be taken with the CISC departmental prefix.</b></p>				
<ul style="list-style-type: none"> <li>The Bachelor of Arts degree program in Computer Science requires a minimum of 124 credits. Additional free elective credit may be needed to reach this minimum.</li> <li>Course sequencing may vary by semester. See your advisor.</li> </ul>							

**For more information, contact:**

**Delaware Technical Community College**  
Dover, DE: (302) 857-1767  
Georgetown, DE: (302) 259-6489  
Stanton/Wilmington, DE: (302) 434-5564

**University of Delaware**  
F. Charles Shermeyer: (302) 831-8659  
Dr. Adarsh Sethi: (302) 831-1945



# APPROVAL

This program articulation agreement is between Delaware Technical and Community College's Associate of Applied Science Degree in Computing and Information Science and the University of Delaware's Bachelor of Arts in Computer Science.

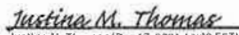
Approval is granted for a period of five years effective on the date both parties have fully executed this agreement.


This agreement may be executed electronically through the use of any program that meets the requirements of the Delaware Uniform Electronic Transactions Act, or other applicable law, or in any number of counterparts and all of such counterparts shall together constitute one and the same instrument. Delivery of an executed counterpart of a signature page of this Agreement in Portable Document Format (PDF) or by facsimile transmission shall be effective as delivery of a manually executed original counterpart of this Agreement.

## DELAWARE TECHNICAL AND COMMUNITY COLLEGE

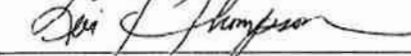
## UNIVERSITY OF DELAWARE

  
Dr. Mark T. Brainard, President  
Date 1/4/2022

  
Justina M. Thomas, Vice President for Academic Affairs  
Date Dec 17, 2021

  
Frank Sciallo, Department Chair, Information Technologies  
Date Dec 16, 2021

  
Dr. Robin Morgan, Provost  
Date 3/7/2022

  
Dr. Levi T. Thompson, Dean, College of Engineering, and Elizabeth Inez Kelley Professor, Chemical & Biomolecular Engineering  
Date 1/28/2022

  
Dr. Rudolph Eigenmann, Chair Computer and Information Sciences  
Date 1/27/2022

