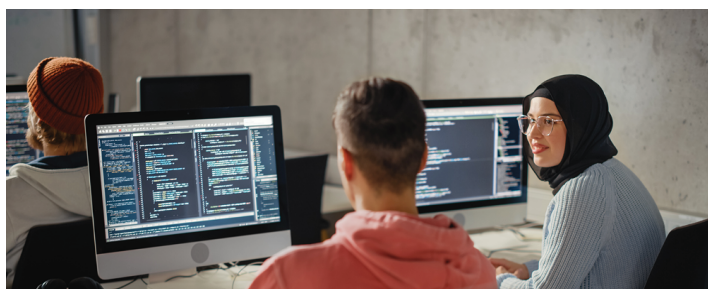# ASSOCIATE OF ARTS IN COMPUTER SCIENCE

The Associate of Arts in Computer Science is designed for students planning to start at Tri-C and transfer to a four-year institution to major in Computer Science. A four-year degree in Computer Science can prepare students for a variety of careers such as programmer, software developer, software engineer, data scientist, systems analyst, and IT project manager.

The Computer Science program at Cuyahoga Community College (Tri-C®) will provide students with foundations in programming logic, Java programming, data structures & algorithms, critical thinking, problem solving, and communication skills they need to succeed at their four year institution. In addition, coursework may qualify students for some entry-level positions in the computer science/information technology industry.

It is important to note the four-year program requirements vary in their requirements in areas like mathematics and natural sciences. Students should meet with a counselor and check with individual institutions when selecting general education coursework. In addition, some bachelor-degree granting institutions may require additional general education coursework outside of the Ohio Transfer 36 and students may be required to take these courses in their junior or senior year.

Tri-C currently has articulation agreements that guarantee transfer of IT coursework with Cleveland State University, Baldwin Wallace University, and Western Governors University.

This program is available to be completed 100% online.

- ENG-0995 Applied College Literacies or qualified placement to enroll in ENG-1010 College Composition I
- Qualified placement to enroll in MATH-1580 Precalculus or higher.

a. Build a foundation in secure software development to succeed in upper-level coursework.

b. Communicate effectively with team members in a professional environment.

c. Analyze, design, write, and test programs to address specific business problems using modern programming concepts.

d. Apply knowledge of mathematics and computer science concepts while developing solutions for software engineering initiatives.

e. Recognize legal and ethical issues that impact technology use, creation, and implementation.

f. Recognize the need to engage in continuing professional development in order to maintain skills and advance your career.

g. Be prepared to transfer to a four-year program in Computer Science and Software Engineering.

First Semester		Credit Hours
GEN-1070	First Year Success Seminar	1
IT-1025	Information Technology Concepts for Programmers	3
IT-1050	Programming Logic	3
Select one of the following:		3
ENG-1010	College Composition I	
ENG-101H	Honors College Composition I	
Select one of the following:		5
MATH-1610	Calculus I	
MATH-161H	Honors Calculus I	
	Credit Hours	**15**
Second Semester		
IT-2650	Java Programming	4
DEGR-XXXX	Ohio Transfer 36 Social and Behavioral Science Elective (must be from two different disciplines)	3
Select one of the following:		5
ENG-1020	College Composition II	
ENG-102H	Honors College Composition II	
Select one of the following:		3
MATH-1620	Calculus II	
MATH-162H	Honors Calculus II	
	Credit Hours	**15**
Third Semester		
IT-2660	Data Structures & Algorithms	4
DEGR-XXXX	Ohio Tranfer 36 Mathematics Elective [1]	4
DEGR-XXXX	Ohio Transfer 36 Arts and Humanities Elective (must be from two different disciplines)	3
Select one of the following		5
CHEM-1300 & CHEM-130L	General Chemistry I and General Chemistry Laboratory I	
CHEM-130H	Honors General Chemistry I	
PHYS-2310	General Physics I	
Select one of the following:		3
COMM-1010	Fundamentals of Speech Communication	
COMM-101H	Honors Speech Communication	
	Credit Hours	**19**
Fourth Semester		
IT-2351	Enterprise Database Systems	4
Select one of the following: [2]		3
IT-2310	Web Programming	
IT-2700	Systems Analysis and Design	
MATH-2410	Introduction to Linear Algebra	
DEGR-XXXX	Ohio Transfer 36 Natural Science Elective	3
DEGR-XXXX	Ohio Transfer 36 Social and Behavioral Science Elective (must be from two different disciplines)	3

DEGR-XXXX	Ohio Transfer 36 Arts and Humanities Elective (must be from two different disciplines)	3
	Credit Hours	**16**
	Total Credit Hours	**65**

[1] Students who place at the pre-calculus level can use MATH-1580 Precalculus to fulfill this requirement. Students who place at the Calculus I level should select Math elective based on requirements from desired transfer institution and program.

[2] Students should check with intended transfer institution to determine Math or IT elective course selection.