

Fredonia – Jamestown Community College
Articulation Agreement in Computer Science

By this agreement, students who complete an Associate in Science (AS) degree in Computer Science at Jamestown Community College (JCC) are guaranteed admission with full junior standing to the Bachelor of Science (BS) Computer Science degree program at SUNY Fredonia (Fredonia). By completing the AS Computer Science degree, a minimum of 54 credit hours of coursework listed in Table 1 and Table 2, and at least seven of the ten SUNY General Education (GER) requirements at JCC, such students should be able to complete the BS Computer Science degree at Fredonia within four additional full-time semesters, taking 15-18 credits per semester. Fredonia will accept up to 75 credits listed in Table 1 and Table 2 and courses transferred as additional electives toward fulfillment of the requirements for the BS Computer Science degree.

GPA Criterion: To be guaranteed admission, students must have a minimum cumulative GPA, from all colleges attended, of 2.5.

College Core Curriculum: To graduate with a baccalaureate degree from Fredonia, students must meet the requirements of Fredonia's College Core Curriculum (CCC). The CCC includes all ten SUNY General Education Requirements plus additional coursework stipulated in the Fredonia catalog. To assist JCC students in preparing for their baccalaureate degree at Fredonia, the additional CCC requirements are summarized below:

- 1) Students are required to complete 2 courses, with 2 different prefixes, in the social sciences.
- 2) Students are required to complete 2 courses, with two different prefixes, in the natural sciences. Students completing CSC 1510 Introduction to Computer Science at JCC will have fulfilled one of the natural science requirements at Fredonia. The second course may not be in Math or Computer Science.
- 3) The CCC includes an oral communication requirement. This is covered by meeting the SUNY General Education basic communication requirement, which is fulfilled by ENG 1530 at JCC.

Table 1. BS Computer Science Requirements

Jamestown Community College	Fredonia
	Computer Science (CS) Core (33 credit hours)
CSC 1590 Computer Programing (4 credit hours)	CSIT 121 Computer Science I (3 credit hours)
CSC 1600 Data Structures (4)	CSIT 221 Computer Science II (3)
CSC 2330 Applications/Troubleshooting Computer User Specialist (3)	CSIT 224 Problem Solving Using Objects (3)
	CSIT 231 Systems Programming (3)
MAT 1670 Discrete Math or MATH 2670 Linear Algebra (3)	CSIT 241 Discrete Math for Computer Science I or MATH 231 Liner Algebra (3)
CSC 2670 Computer Organization (4)	CSIT 311 Assembly Language and Computer Organizations (3)
	CSIT 321 Paradigms of Programming Languages (3)
	CSIT 341 Data Structures (3)
	CSIT 425 Software Engineering (3)
	CSIT 431 Intro to Operating Systems (3)
	CSIT 455 Relational and Object Databases (3)
	Track Requirements (56 Credit Hours)
	A. Advanced Computing (AC) Track – Requires the CS Core plus:
MAT 1710 Calculus & Analytic Geometry I (4)	MATH 122 University Calculus I (4)
MAT 1720 Calculus & Analytic Geometry II (4)	MATH 123 University Calculus II (4)
	CSIT 242 Discrete Math for Comp Sci II (3)
	CSIT 441 Analysis and Design of Algorithms (3)
Additional CSC courses (9)	Additional CSIT courses (9) Three additional comp sci courses must be taken. At least two courses must be at the 400 level. One course is from a specified list. The following will transfer from JCC:
CSC 2480 Advanced Networking/Computer Security (3)	CSIT 201 Computer Security and Ethics (3)
	Additional Requirements (30) Students must complete a min of 30 credit hours in Natural Sciences (BIOL, CHEM, GEO, PHYS) and Math/Statistics (in addition to CSIT 241 or MATH 231, CSIT 242, MATH 122, and MATH 123) and are included in the specified list. The following will transfer from JCC:
MAT 1670 Discrete Mathematics (3)	CSIT 241 Discrete Math for Comp Sci I (3)
MAT 2650 Calculus & Analytic Geometry III and/or (4)	MATH 223 University Calculus III and/or (3)
MAT 2670 Linear Algebra (3)	MATH 231 Linear Algebra (4)
MAT 1540 Elementary Statistics (3)	STAT 200 Statistical Methods (STAT 250) (3)
At least 7 credits must be in biology, chemistry, geosciences, or physics and at least one of these 7 credits must be a lab) (7)	At least 7 credits must be in biology, chemistry, geosciences, or physics and at least one of these 7 credits must be a lab) (7)

<p>Or B. Software Development (SD) Track Requires the CS Core plus:</p> <p>MAT 1630 Calculus for Business and Social Science I or MAT 1710 Calculus & Analytic Geometry I (3-4)</p> <p>MAT 1640 Calculus for Business and Social Science II or MAT 1720 Calculus & Analytic Geometry II (3-4)</p> <p>CSC 2480 Advanced Networking/Computer Security (3)</p> <p>CSC 2510 Introduction to Networks (3)</p>	<p>Or B. Software Development (SD) Track 54-56 credit hours: Requires the CS Core plus:</p> <p>MATH 120 Survey of Calculus I or MATH 122 University Calculus I (3-4)</p> <p>MATH 121 Survey of Calculus II or MATH 123 University Calculus II (3-4)</p> <p>CSIT 201 Computer Security and Ethics (3) CSIT 242 Discrete Math for Comp Sci II (3)</p> <p>Three Additional CSIT courses 9 At least two must be at the 400 level. The following will transfer from JCC:</p> <p>CSIT 335 Data Comm and Networks I (3)</p>
<p>Or C. General Track (GT) Requires the CS Core plus:</p> <p>MAT 1630 Calculus for Business and Social Science I or MAT 1710 Calculus & Analytic Geometry I (3-4)</p> <p>MAT 1640 Calculus for Business and Social Science II or MAT 1720 Calculus & Analytic Geometry II (3-4)</p> <p>CSIT 2510 Introduction to Networks (3)</p>	<p>Or C. General Track (GT) – 54-56 credit hours Requires the CS Core plus:</p> <p>MATH 120 Survey of Calculus I or MATH 122 University Calculus I (3-4)</p> <p>MATH 121 Survey of Calculus II or MATH 123 University Calculus II (3-4)</p> <p>Five additional electives must be taken from a specified list. At least three must be at the 400 level. The following will transfer from JCC: (15) CSIT 335 Data Comm and Networks I (3)</p>

Table 2. CCC Requirements

Jamestown Community College	Fredonia
SUNY GER Math (Fredonia BS computer science degree requirements will fulfill this requirement)	SUNY GER Math (Fredonia BS computer science degree requirements will fulfill this requirement)
SUNY GER Natural Sciences (CSC 1510 (3) Introduction to Computer Science at JCC is one option to fulfill this requirement)	SUNY GER Natural Sciences (3)
SUNY GER Social Sciences (3)	SUNY GER Social Sciences (3)
SUNY GER American History (3)	SUNY GER American History (3)
SUNY GER Western Civilization (3)	SUNY GER Western Civilization (3)
SUNY GER Other World Civilizations (3)	SUNY GER Other World Civilizations (3)
SUNY GER Humanities (fulfilled by ENG 1540 AS Computer Science requirement) (3)	SUNY GER Humanities (3)
SUNY GER Arts (3)	SUNY GER Arts (3)
SUNY GER Foreign Language (3)	SUNY GER Foreign Language (3)
SUNY GER Basic Communication (fulfilled by ENG 1530 AS Computer Science Requirement) (3)	SUNY GER Basic Communication (3)
Fredonia Social Sciences second prefix requirement (3)	Fredonia Social Sciences second prefix requirement (3)
Fredonia Natural Sciences second prefix requirement (3)	Fredonia Natural Sciences second prefix requirement (3)

Students may double major in Computer Science and Computer Information Systems by completing all requirements for both majors. At least 15 additional credit hours are required in the second major (credit hours from courses within the list of courses of the second major not used to satisfy requirements in the first major).

All students must complete a minimum of 45 credit hours at Fredonia and 120 overall. To earn a BS degree students must complete at least 66 credit hours of non- CSIT courses, fulfill all CCC requirements, obtain a minimum 2.0 cumulative gpa, and obtain a minimum 2.0 in the major gpa.