# **ARTICULATION AGREEMENT**

# Garrett College Associate of Science – Computer Science

# Frostburg State University Bachelor of Science in Computer Science

Bachelor of Science in Computer Science			
Entered into this 23	day of Jonuary, 2018.		
Ronald H. Nowaczyk, Ph.D. President Frostburg State University  Manual Manual  Manual Manual Manual  Manual Manual Manual  Manual Manual Manual  Manual Manual Manual  Manual Manual Manual  Manual Manual Manual  Manual Manual Manual  Manual Manual Manua	Richard Midcap Richard Midcap, Ed.D. President Garrett College		
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Information Technologies			

Frostburg State University

#### ARTICULATION AGREEMENT

Garrett College, Associate of Science-Computer Science and Frostburg State University, Bachelor of Science in Computer Science.

#### RECITALS

Garrett College (hereafter referred to as "GC"), a community college in Garrett County, Maryland, and Frostburg State University ("FSU"), a comprehensive regional institution in Western Maryland and a constituent institution of the University System of Maryland, agree to offer an articulated program leading to the award of an Associate of Science (A.S.) Degree and a Bachelor of Science (B.S.) in Computer Science. The parties further agree that students from GC, through this articulation agreement, will be permitted to transfer credits earned for the A.S. at Garrett College to FSU, leading to the award of the B.S. degree in Computer Science at FSU.

#### I. Purpose

- a. It is the intent that this articulation agreement will facilitate a smooth transition from completion of Garrett College's Associate of Science (Computer Science) to the B.S. in Computer Science program at FSU. As a result of this articulation agreement, GC graduates will understand how FSU transfers the credits earned at GC. This agreement provides a systematic plan for students to receive both the A.S. degree from GC and the B.S. degree in Computer Science from FSU.
- b. This agreement sets forth a clear set of responsibilities and expectations for both institutions. The parties agree to work collaboratively to meet the needs of GC graduates in facilitating transfer to FSU.
- c. GC encourages graduates to continue their educational pathway in Computer Science for both personal and professional development, as well as career advancement in the Computer Science profession. This articulation agreement for completion of the B.S. in Computer Science facilitates students' successful achievement of credentials in the field.

## II. Requirements of the Program

- a. The program is designed for graduates of the A.S. in Computer Science at Garrett College. Students must complete the A.S. degree at GC in order to participate in the transfer program. A maximum of seventy (70) credit hours from GC will be allowed toward fulfillment of the one hundred twenty (120) credit hours required for completion of the B.S. degree. Students are limited to a maximum of ninety (90) credits when transferring courses from other four-year colleges and universities.
- b. Computer Science students from GC will have their coursework evaluated by FSU to determine which FSU general education requirements and discipline requirements have been met. GC courses shall be evaluated by FSU for transferability, and FSU shall accept courses for transfer at its sole discretion. By taking full advantage of the GC-FSU course agreements described below, the transfer student will matriculate at FSU with junior standing.
- c. In accordance with Code of Maryland Regulations (COMAR), all courses meeting general education requirements at GC will transfer to FSU as general education courses (up to a maximum of 36 credits).

- d. Students must maintain a minimum of a 2.0 cumulative grade point average in order to transfer to the FSU Computer Science Program.
- e. The maximum number of credits that will be accepted by FSU toward degree requirements from non-direct classroom instruction (including CLEP, AP, IB and FSU Special Departmental examination scores) is thirty (30) credits. Tech Prep credits will transfer where appropriate, as will credit awarded for experiential learning ("life experience") if recorded on GC's transcript.
- f. While GC and FSU do not presently have a dual admission program, if the parties later enter into such a program, this agreement will not preclude students from participation and students may apply for and receive the benefits of dual admission. Those students shall then be subject to the policies of said program should they apply.
- g. GC students who have completed the A.S. in Computer Science degree will be given every consideration for financial assistance and will be eligible to compete for academic scholarships at FSU.
- h. This agreement becomes effective on the date set forth on the first page of this document. GC and FSU agree to publicize this program. The parties further agree to monitor the performance of the program and to make revisions as may be mutually agreed upon as necessary. Curricula for Computer Science programs undergo frequent change and this agreement will be amended to reflect such changes as they occur. Amendments will be made in writing and appended to this agreement. Amendments need only be approved by the deans and chairs from both institutions.
- i. This agreement may be terminated by either party with ninety (90) days written notice to the other. The parties agree that termination shall include an agreement that students currently enrolled in the program at the time of termination shall be permitted to complete the program as described herein.

#### III. A.S. in Computer Science -B.S. in Computer Science Transfer Courses

The following indicates the transfer of course agreement between Garrett College and FSU:

#### a. General Education Requirements to be Completed at Garrett College (35 credits)

	Garrett College Equivalent	Explanation/Notes
ENGLISH COMPOSITION (3 credits)	ENG 101	
FINE AND PERFORMING ARTS (3 credits)	One approved general education course the from Fine Arts category	
HUMANITIES (6 credits)	One approved general education course from the Humanities category and ENG 102	
SOCIAL SCIENCE (6 credits)	Two approved general education courses (in two different disciplines) from the Social and Behavioral Science category.	
MATHEMATICS (3 credits)	MAT 105	
NATURAL SCIENCE (8 cr; one course must have a lab component)	Two approved general education lab courses (in two different disciplines) from the Science category.	
MODES OF INQUIRY ELECTIVE (3 cr)	SPC 101	
FSU COLLOQUIA (3 cr)	CIS 106	One additional course under FSU Colloquia will need to be completed by the student after transferring to FSU. A total of 6 credits are required under this category.

#### b. Degree Program Requirements to be Completed at Garrett College (25 credits)

The B.S. degree with a major in Computer Science at FSU requires students to successfully complete the following course work. Some of these courses also may meet general education requirements, as indicated above.

Frostburg State University		GC Program Equivalent	
Course Number	Course Title	Credit Hours	-
COSC 101	The Discipline of Computer Science	3.0	CIS 130
COSC 102	Foundations of Computer Science	4.0	CIS 145
COSC 240	Computer Science I	4.0	CIS 170
COSC 241	Computer Science II	4.0	CIS 210
COSC 365	Digital Logic	4.0	CIS 240 and 241
COSC 305	Computer Ethics	3.0	CIS 234 – counts as elective in major
COSC 440	Database Management Systems	3.0	CIS 245 – counts as elective in major

CMST 102	Intro. to Human Communication	SPC 101 (credits counted in GEP above)
	TOTAL Program Credits=25	

### c. Additional A.S. Degree Requirements to be Completed at GC (3 credits)

Frostburg State University		GC Program Equivalent	
Course Number	Course Title	Credit Hours	
MATH 109	Elements of Applied Probability and Statistics	3.0	MAT 210
TOTAL Program Credits=3			

# d. Degree Program Requirements to be Completed at FSU (57 credits) All FSU bachelor's degree candidates must complete a minimum of 39 upper-division (300-400) credit hours.

	Frostburg State University		Notes
Course Number	Course Title	Credit	
		Hours	
COSC 325	Software Engineering	3.0	
COSC 460	Operating Systems Concepts	3.0	
COSC 489	Computer Science Capstone	1.0	
COSC 310	Data Structures and Algorithm	3.0	
	Analysis		
COSC 331	Fundamentals of Computer	3.0	
	Networks		
COSC 350	Low-Level Programming	3.0	
	Concepts		
COSC 444	Introduction to Parallel Computing	3.0	
COSC 450	Programming Language	3.0	1
	Principles and Paradigms		
COSC 485	Introduction to Theory of	3.0	
	Computation		
MATH 236	Calculus I	4.0	
MATH 237	Calculus II	4.0	
MATH 380	Intro. to Probability and Statistics	3.0	40
Additional	MATH 350, MATH 432, MATH	3.0	
Math course	435, MATH 437, or MATH 470		
ENGL 338	Technical Writing	3.0	
Additional	BIOL 160 General Zoology, BIOL	4.0	
Science course	161 General Botany, CHEM 202		
	General Chemistry II, or PHYS		
	262 Principles of Physics II		
	FSU Colloquia	3.0	GEP requirement
	Identity and Difference course	3.0	Select from approved list
			to satisfy GEP
			requirement

Electives (any)	5.0	Credits needed to reach 120 for graduation
 Tota	l = 57	

#### e. Course Sequencing

Computer Science students transferring to the B.S. in Computer Science Program at FSU shall be notified by GC and FSU that the Computer Science curriculum is built upon a series of established course sequences. For students to progress through the program, they must have the appropriate pre-requisites, co-requisites, and must maintain a minimum 2.0 GPA.

Students wishing to participate in the program should develop an education plan at GC by contacting:

Richard Lewis
Assistant Professor, Computer Science
Garrett College
301-387-3052
richard.lewis@garrettcollege.edu

GC will direct students interested in participating in the B.S. in Computer Science program to apply for admission to FSU, indicating Computer Science as the intended major. Applications can be submitted online at: <a href="https://www.frostburg.edu">www.frostburg.edu</a>.

Contact person at FSU for the program is:

Michael Flinn
Associate Professor, Department of Computer Science and Information Technologies
Frostburg State University
301-687-4835
mflinn@frostburg.edu