ARTICULATION AGREEMENT

Montgomery College
Associate of Arts in Computer Science

900 Hungerford Drive
Rockville, MD 20850

and

Shepherd University
Bachelor of Science in Computer Information Science

301 N King Street
Shepherdstown, WV 25443

Montgomery College (hereafter referred to as MC), a community college in Montgomery County, Maryland and Shepherd University (hereafter referred to as SU) a state higher education institution in Shepherdstown, West Virginia agree to offer an articulated program leading to the award of an associate's degree in Computer Science and a bachelor's degree in Computer Information Science. MC course agreements outlined below ensure that the transfer student will matriculate with junior standing.

I. PURPOSE

The purpose of this Articulation Agreement (the "Agreement") is to establish collaboration between SU and MC to facilitate the transfer and degree completion of students earning the Associate of Arts in Computer Science at MC to the Bachelor of Science in Computer Information Science at Shepherd University. This Agreement provides a systematic plan for students to continue their higher education beyond their Associate's Degree from MC. The following general principles guide the operation of this Agreement:

II. ADMISSIONS

Applicants successfully completing the articulated program with a 2.8 or better grade point average who have not matriculated at any other institution of higher education will be guaranteed transfer admission to SU upon completion of the SU admissions application process.

III. ACCEPTANCE OF CREDITS

A maximum of 72 credit hours from MC will be allowed toward fulfillment of the 120 credit hours required for baccalaureate completion.

A. General Education Credits:
All courses meeting general education requirements at MC will transfer to SU to satisfy lower-level general education requirements. A completed general education program shall transfer as indicated in Appendix A.

B. Credits Accepted from Other Institutions:
If courses from other institutions or other sources of academic credit are evaluated by MC and applied toward the Associate's Degree, the student must submit the score report to be evaluated by SU. Credit will be applied as determined by an SU evaluation.

C. Non-Direct Classroom Credits:
There is currently no maximum number of credits that will be accepted by SU toward degree requirements from non-direct classroom instruction (including CLEP, Co-op Education, AP, and other nationally recognized standardized examination scores). The policy on the transferring in of non-direct classroom credit can be found in SU's online catalog under "Miscellaneous Admission Information". Tech Prep credits will not transfer to SU. Credit awarded for experiential learning ("life experience") is not recognized by, and is not transferable to SU.

IV. SCHOLARSHIPS AND FINANCIAL AID

MC students who have completed an Associate's Degree will be given every consideration for financial assistance and will be eligible to compete for need and non-need based academic scholarships at SU.

V. BENEFITS TO STUDENTS

SU offers the following benefits for MC students who transfer under this Agreement:
Application fee waiver
Transfer Advising Access
Transfer Orientation
Guaranteed Admission with completed A.A. in Computer Science and a 2.8 GPA
Eligibility for T.O.P.S. program which could result in either a 25% or 35% tuition discount

VI. PROMOTION/OUTREACH

MC and SU agree to publicize this Agreement via, but not limited to marketing materials and information sessions. SU's logo and transfer pathway will be featured on MC's transfer agreements website. MC and SU agree to collaborate to ensure successful transfer day visits, and advising sessions. Any and all marketing promotional, or publication material developed pursuant to this Agreement prepared or developed by one party must be reviewed and approved in writing by the other party prior to use. Neither party shall use the name or mark of the other party without prior consent.

VII. REVIEW OF AGREEMENT

A. MC and SU agree to monitor the performance of this Agreement and to review biennially.

B. SU will establish a mechanism to provide information on the academic progress of the MC student enrolled as a result of this Agreement, including but not limited to statistical data of aggregated student performance. Specific student outcomes may only be reported in the event of a student consenting to such in writing, and Shepherd will not have any obligation to solicit students to agree to such release of their information.

C. MC and SU agree to communicate program changes in a timely manner to avoid disruption of student progress toward degree completion.

VIII. TERMINATION

The Agreement may be terminated by either party for due cause and after adequate notice in writing to all parties. Termination of the Agreement will not affect any students currently enrolled at MC in the major at the time of termination if they remain continuously enrolled to graduation and enroll at SU within 6 months of their graduation from MC, and they shall be able to transfer credits pursuant to this Agreement.

IX. APPENDICES

As part of this agreement, the following have been included:

A. Course-by-course articulations, including satisfaction of general education requirements at both MC and SU

B. A Suggested Transfer Pathway, showing an example of how students can complete an Associate's Degree from MC and a Bachelor's Degree from SU.

C. An academic advising sheet showing requirements for a completed associate's degree in Computer Science at MC. MC Students will follow this curriculum chart to ensure completion of their degree and a smooth transition into SU.

In witness thereof, the parties hereto have executed or approved this Agreement on the date entered below.

Entered into this third day of September, 2014.

For Shepherd University:

Suzanne Shipley, Ph.D.
President

Christopher Ames, Ph.D.
Vice President for Academic Affairs

Colleen Nolan, Ph.D.
Dean of the School of Natural Sciences and Math

For Montgomery College:

DeRionne P. Pollard, Ph.D.
President

Sanjay Rai, Ph.D.
Senior Vice President for Academic Affairs

Muhammad Kehnemouyi, Ph.D.
Interim Dean for Science, Engineering, and Technology

Appendix A, Course by Course Articulation Guide

Courses equivalencies listed below are part of an articulated program leading to the award of an associate's degree in **Computer Science** and a bachelor's degree in **Computer and Information Science**

MC Course ID	*MC Course Title*	*MC Credit*	*Transfer Equivalent*	*Course Title at Transfer Institution*	*Credit*	*Notes (ex. Gen Ed, Major Req.)*
SP108 (COMM108) or SP112 (COMM112)	Introduction to Communication or Business and Professional Speech Communication	3	COMM202	Fundamentals of Speech or Elective	3	
MA181 (MATH181)	Calculus I	4	MATH207	Calculus I	4	
MA182 (MATH182)	Calculus II	4	MATH208	Calculus II	4	
CS140 (CMSC140) CS110 (CMSC110)	Intro to Programming Computer Concepts	3 3	CIS104 & CIS102	Intro to Computer and Info Sciences Microcomputer Applications	3 3	Both courses must be taken in order for them to transfer.
CS103 (CMSC203)	Computer Science I	4	CIS211	Computer Language Concepts	3	
CS204 (CMSC204)	Computer Science II	4	CS314	Advanced Computer Language Concepts	3	
CS256 (CMSC207)	Intro to Discrete Structures	4	MATH155	Discrete Structures	3	
CS226 (CMSC226)	Intro to Object-Oriented Programming with C++	3	CIS314	Advanced Computer Language Concepts	3	
EN101 (ENGL101)	Intro College Writing	3	ENGL101	Written English I	3	EN101 and EN102 required for SU
EN102 (ENGL102) or EN109 (ENGL103)	Critical Reading, Writing and Research Critical Reading, Writing and Research at work	3	ENGL102	Writing and Literature	3	EN101 and EN102 required for SU
HE (HLTH)	Health foundation	1		Elective	1	
AR (ARTT)	Arts Distribution	3	AR Core	Art Core	3	
Humanities	Humanities Distribution	3	HU Core	Humanities Core	3	
BSSD	Behavioral/Social Science Distribution	6	SS-Core	Social Science Core	6	
Art or Humanities	Arts or Humanities Distribution	3	AR or HU	Core	3	
NSLD	Natural Science Distribution w/ Lab	4	LS-Core	Life Science Core	4	SU requires two lab sciences
NSLD	Natural Science Distribution w/ Lab	4	LS-Core	Life Science Core	4	
Total Credits		62	Total Credits		59	

Appendix B, Suggested Transfer Pathway

Montgomery College A.A. in Computer Science to Shepherd University B.S. in Computer and Information Science

Year One – Montgomery College

Fall Semester	Cr
CMSC140 Intro to Programming	3
ENGL101 Intro to College Writing *	3
Behavioral and Social Science Distribution †	3
MATH181 Calculus I	4
Arts Distribution **	3
Total Credits	**16**

Spring Semester	Cr
CMSC203 Computer Science I	4
ENGL102 or ENGL103, English Foundation	3
MATH182 Calculus II	4
Natural Science Distribution w/ Lab ††	4
Total Credits	**15**

Year Two – Montgomery College

Fall Semester	Cr
CMSC204 Computer Science II	4
Humanities Distribution **	3
CMSC110 Computer Concepts	3
HLTH Foundation	1
Natural Science Distribution w/ Lab ††	4
Total Credits	**15**

Spring Semester	Cr
CMSC207 Intro to Discrete Structures	4
CMSC226 Intro to Object Oriented Prog w/ C++	3
Arts or Humanities Distribution **	3
Behavioral and Social Science Distribution †	3
COMM108 or COMM112, Speech Foundation	3
Total Credits	**16**

Apply to graduate from Montgomery College with an Associate of Arts in Computer Science

* ENGL101 and ENGL102/ENGL103 required for Shepherd University

† The two behavioral and social science courses must be from different disciplines

†† Shepherd University requires two lab science courses.

** Choose one art, humanities or behavioral and social science that also meets the MC global and cultural requirement

Year Three –Shepherd University

Fall Semester	Cr
CIS 100 Freshman Seminar (FYEX)	1
Core Curriculum - Life Sciences (LS)	1
CIS 234 Introduction to Networking	3
MATH 254 Discrete Mathematics	3
CIS 302 Windows Programming	3
GSPE 210 Fitness for Life (WE)	3
Total Credits	**14**

Spring Semester	Cr
CIS 321 Data and File Structures	4
Core Curriculum - History	3
CIS 386 Computer Organization	4
Core Curriculum - Choose SO-GL or MD with advisor	3
MATH 314 Statistics	3
Total Credits	**17**

Year Four –Shepherd University

Fall Semester	Cr
CIS 388 Database Management Systems	4
CIS 390 Operating Systems	3
CIS 431 Algorithms	3
Electives	6
Total Credits	**16**

Spring Semester	Cr
CIS 485 Directed Research in Computer and Information Sciences (WM and CP)	3
CIS 487 Software Engineering	3
Electives	9
Total Credits	**15**

Contact:
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Shepherd University
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Appendix C, Montgomery College Academic Advising Sheet

A.A. in Computer Science to B.S. in Computer and Information Science

Name:	Date:	ID#	
Foundation Courses	**COURSE**	**HRS**	**GRADE**
Introduction to College Writing	ENGL101*	3	
English Foundation, ENGL102 or ENGL103	ENGL	3	
Math Foundation, Calculus I	MATH181	4	
Health Foundation	HLTH	1	
Speech Foundation, COMM108 or COMM112	COMM	3	
Distribution Courses	**COURSE**	**HRS**	**GRADE**
Arts Distribution **		3	
Humanities Distribution **		3	
Arts or Humanities Distribution **		3	
Behavioral and Social Science Distribution †		3	
Behavioral and Social Science Distribution †		3	
Natural Science Distribution with Lab		4	
Natural Science Distribution with Lab ††		4	
Program Requirements	**COURSE**	**HRS**	**GRADE**
Introduction to Programming	CMSC140	3	
Computer Science I	CMSC203	4	
Computer Science II	CMSC204	4	
Introduction to Discrete Structures	CMSC207	4	
Calculus II	MATH182	4	
Introduction to College Writing *	ENGL101	3	
CS Elective: Computer Concepts	CMSC110	3	
CS Elective: Introduction to Objected-Oriented Programming w/ C++	CMSC226	3	

Global & Cultural Perspectives Requirement**:

* ENGL101 and ENGL102 required for Shepherd University
† The two behavioral and social science courses must be from different disciplines
†† Shepherd University requires two lab science courses.
** Choose one art, humanities or behavioral and social science that also meets the MC global and cultural requirement

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