



# **ARTICULATION AGREEMENT**

Hagerstown Community College Associate of Science in Cybersecurity

Mount St. Mary's University Bachelor of Science in Cybersecurity

| Entered into this _ | 5th    | day ofJuly | , 2017. |
|---------------------|--------|------------|---------|
|                     | (date) | (month)    |         |

This agreement becomes effective Fall 2017.

# ARTICULATION AGREEMENT

Hagerstown Community College, Associate of Science in Cybersecurity and Mount St. Mary's University, Bachelor of Science in Cybersecurity

Hagerstown Community College (here after referred to as HCC), a community college in Washington County, Maryland, and Mount St. Mary's University agree to offer an articulated program leading to the award of an Associate of Science (A.S.) in Cybersecurity degree and a Bachelor of Science (B.S.) in Cybersecurity. They further agree that students from HCC, through this articulation policy, will be allowed to transfer credits earned for the A.S. at HCC to Mount St. Mary's University, leading to the award of the B.S. degree at Mount St. Mary's University.

# PURPOSE OF AGREEMENT

This agreement is entered into to serve the instructional needs of HCC students and graduates. The general purpose of this agreement is to make clear the terms of this articulation agreement.

There are three specific goals under this agreement. First, it is the intent that this articulation agreement will facilitate a smooth transition from HCC's Cybersecurity program to the B.S. in Cybersecurity program at Mount St. Mary's University as efficiently as possible. HCC graduates will understand how Mount St. Mary's University transfers the credits they earn at HCC, as well as the changes in requirements that may permit more flexible scheduling once the student has been admitted to and enrolled at Mount St. Mary's University. This agreement provides a systematic plan for students to continue their higher education beyond the A.S. degree from HCC.

Second, this agreement is a publication of a clear set of understandings and expectations for both institutions and programs. Making our expectations clear to students and between institutions not only contributes to the first goal, but also allows institutions to work collaboratively to meet the needs of our undergraduates. Like any policy agreement, this articulation agreement will need to be updated, revised and refined as instructional programs are revised.

Third, both HCC and Mount St. Mary's University encourages graduates to continue their educational pathway in Cybersecurity for both personal and professional development, as well as career advancement in the cybersecurity profession. This articulation agreement facilitates students' successful achievement of credentials in the field.

# TRANSFER OF CREDITS

The parties agree to the following:

- 1. The program is designed for graduates of the A.S. in Cybersecurity program at HCC. A maximum of 60 credit hours from HCC will be allowed toward fulfillment of the 120 credit hours required for baccalaureate completion. Mount St. Mary's University cannot guarantee that a transfer student will graduate in four semesters.
- 2. Credits from all courses from HCC will transfer to Mount St. Mary's University with the exception of: i) remedial or developmental courses, ii) courses for which a grade of C- or lower was earned, and iii) PE course credits beyond one credit. Typically, courses meeting general education requirements at HCC will transfer to Mount St. Mary's University as general education credits, although there may be occasional exceptions, in which case the credits will count as general elective credits.
- 3. Students must maintain a 2.5 cumulative grade point average or greater at HCC in order to transfer.
- 4. Non-direct classroom instruction (including CLEP, AP, and other nationally recognized standardized examination scores) credits may be accepted toward A.S. degree requirements and appropriate scores will be determined by HCC. Credit awarded for experiential learning ("life experience") is not recognized by, and is not transferable to, the Cybersecurity program at Mount St. Mary's University.
- 5. While HCC and Mount St. Mary's University do not presently have a dual enrollment program, should one be agreed to, this agreement will not preclude students from participation and students may apply for and receive the benefits of dual enrollment. Those students would then be subject to the policies of said program should they apply.
- 6. Students who complete the A.S. degree in Cybersecurity and meet the GPA requirement will be able to transfer up to 60 credits (the maximum allowable) to Mount St. Mary's University as shown in Appendix 1 below and will matriculate at junior standing. Further, this agreement allows the student who has obtained an A.S. degree in Cybersecurity from HCC and who has enrolled in the Cybersecurity program at Mount St. Mary's University to apply up to 27 transfer credits to required components of the major.
- 7. All HCC transfer students with an A.S. in Cybersecurity will be required to take a minimum of 60 credits of upper division coursework at Mount St. Mary's University. A total of 120 credits (earned plus transferred) is required to complete the B.S. degree.
- 8. In addition to the general education requirements indicated in Appendix 2 of this articulation agreement, the B.S. in Cybersecurity at Mount St. Mary's University requires students to successfully complete at least 27 hours in Cybersecurity major courses as outlined in Appendix 2.

# **OTHER CONSIDERATIONS**

- 1. HCC students who have completed the A.S. in Cybersecurity degree will be given every consideration for financial assistance and will be eligible to compete for academic scholarships at Mount St. Mary's University.
  - a. HCC students with a 2.5 cumulative GPA or higher are guaranteed merit scholarships when transferring into the programs offered at the main campus of Mount St. Mary's University.

For example, for the 2017-18 academic year, the transfer scholarships are as follows:

3.5-4.0 GPA = \$18,000 a year

3.0-3.49 GPA = \$15,000 a year

2.75-2.99 GPA = \$13,000 a year

2.50-2.74 GPA = \$9,000 a year

- b. The Mount is proud to offer a \$3,500 per year Phi Theta Kappa (PTK) scholarship for all current PTK members that have been accepted into the programs offered at the main campus of Mount St. Mary's University.
- c. A commuter grant is awarded to any student who commutes from home and demonstrates financial need beyond their academic scholarship. The Commuter Grant guarantees that Mount St. Mary's will meet the student's financial need through scholarships and grants up to 50% of tuition. Students are required to submit the Free Application for Federal Student Aid (FAFSA) which determines their financial need.
- d. The aforementioned scholarships and their amounts are presented merely as examples. The actual scholarship amounts may change from year to year. HCC should contact the Mount St. Mary's University transfer coordinator (see page 7) to find the current scholarship amounts.
- 2. This agreement becomes effective on the date set forth on the first page of this document. HCC and Mount St. Mary's University agree to publicize this program. They further agree to monitor the performance of this agreement and to revise it as necessary.
- 3. Mount St. Mary's University will establish a mechanism to provide information to HCC on the academic progress of the HCC students enrolled as a result of this agreement.
- 4. HCC agrees to provide MSMU with timely notification of impending changes within the A.S. in Cybersecurity program that may adversely impact the ability or willingness of HCC to meet the terms of this Agreement, including but not limited to: changes in current admissions prerequisites or requirements; changes in

leadership of the individual Programs; shifts in enrollment projections; notification of a change in accreditation status for the A.S. in Cybersecurity program; and a change in the affiliation and/or accreditation status of HCC with Middle States Commission on Higher Education (MSCHE). MSMU shall reserve the right to terminate this Agreement in the event that HCC receives notice that it has lost its status as an accredited institution.

#### TERM AND TERMINATION

HCC and MSMU agree that this Agreement shall be in effect from the date it is executed by all signatories, and shall continue in effect until terminated by one or both of the parties as provided herein.

- a. Either party may terminate this Agreement without cause and for any reason, or no reason, by giving the other party written notice of the termination 90 days prior to the announced date of termination.
- b. Either party may terminate this Agreement without the aforementioned advance notification for sufficient cause. Termination for cause may include but is not limited to:
  - 1. Withdrawal of institutional MSCHE accreditation from either institution.
  - 2. Cancellation of the A.S. in Cybersecurity program by HCC.

# MISCELLANEOUS PROVISIONS.

This Agreement constitutes the entire Agreement between the parties with respect to the subject matter hereof, and any prior agreements, promises, negotiations or representations relating the subject matter are of no force or effect. Except as otherwise provided by federal or state law, any paragraph or provision of this Agreement may be amended only by mutual written consent of the parties. This Agreement is made for the sole benefit of MSMU and HCC. Nothing in this Agreement shall create or be deemed to create a relationship between the parties, or either of them, and any third parties, including a relationship in the nature of a third party beneficiary.

This Agreement shall be governed by, and construed in accordance with, the laws of the State of Maryland, without regard to its conflict of laws provisions.

Any paragraph or provision of this Agreement may be waived only by the prior written consent of the parties and the failure of any party to insist on a strict performance of any term or condition of the Agreement shall not constitute a waiver of such terms and conditions in the future.

This Agreement shall not be assigned, subcontracted or transferred by either party without the written approval of the other party.

Any notice or other communication required by this Agreement shall be in writing and shall be deemed given if hand delivered, sent via overnight mail by a reputable overnight courier, such as Federal Express, or sent postage prepaid by a certified or registered mail, return receipt requested, addressed as follows:

**HCC** 

c/o Dr. C. David Warner Vice President 11400 Robinwood Drive Hagerstown, MD 21742 Mount St. Mary's University

c/o Dr. Jennie Hunter-Cevera Provost's Office 16300 Old Emmitsburg Rd. Emmitsburg, MD 21727

or to such other addresses or persons as may be furnished from time to time in writing by one party to the other party. The notice shall be effective on the date of delivery if delivered by hand, the date of delivery as indicated on the receipt if sent via overnight mail, or the date indicated on the return receipt whether or not such notice is accepted by the addressee.

If any provision of the Agreement is held to be illegal, invalid, or unenforceable under present or future laws effective during the term of this Agreement, the validity and enforceability of the remaining provisions of this Agreement shall not be affected thereby

IN WITNESS WHEREOF, the parties hereto have executed or caused this Agreement to be executed by their duly authorized representatives as of the date first written above.

Dr. Jennie Hunter-Cevera, Provost Mount St. Mary's University

July 5, 2017

Date

Dr. C. David Warner, Vice President Hagerstown Community College

Table 1. List of HCC course credits transferred to MSMU

|   |                                    | Credits transferred to MSMU     |                    |                |
|---|------------------------------------|---------------------------------|--------------------|----------------|
| HCC Courses   | Required or<br>Elective for<br>HCC | for Cyber-<br>security<br>Major | General<br>Credits |                |
| Gen Ed Arts/Humanities electives  | Electives                          |                                 | 6                  |                |
| Gen Ed Behavioral/Social Sciences electives   | Electives                          |                                 | 6                  |                |
| Gen Ed Biological/Physical Science elective   | Electives                          |                                 | 7-8                |                |
| Gen Ed Diversity elective   | Elective                           |                                 | 3                  |                |
| ENG 101 – English Composition   | Required                           |                                 | 3                  |                |
| Gen Ed English elective   | Elective                           |                                 | 3                  |                |
| Gen Ed Mathematics elective   | Elective                           |                                 | 3                  |                |
| CSC 132 – Intro. to C and C++ Programming   | Required                           | 3                               |                    |                |
| CYB 101 – Intro. To Cybersecurity   | Required                           | 3                               |                    |                |
| CYB 210 – Ethics in the Information Age   | Required                           | 3                               |                    |                |
| CYB 225 – Tactical Perimeter Defense  | Required                           | 3                               |                    | d twi          |
| IST 154 – Networking Basics   | Required                           | 3                               |                    | 2              |
| IST 160 – Intro. To Security Fundamentals   | Required                           | 3                               |                    |                |
| IST 166 – Computer Forensics I – Principles and Practices   | Required                           | 3                               |                    |                |
| Two of the following courses:  ADJ 101 - Introduction to Criminal Justice (3 Credits); CSC 232 - Advanced C++ Programming (3 Credits); CYB 131 - Scripting Fundamentals (3 Credits); CYB 223 - Cybersecurity Select Topics (3 Credits); CYB 240 - Ethical Hacking Fundamentals (3 Credits); CYB 246 - Introduction to Cloud Computing (3 Credits); IST 107 - Database Management (3 Credits); IST 173 - Database Fundamentals (3 Credits); IST 266 - Computer Forensics II — Investigations Practices (3 Credits) | Electives                          | 6                               |                    |                |
| Free electives  | Electives                          |                                 | 1-2                | Tota<br>Credit |
|   | Total                              | 27                              | 33                 | 60             |

<sup>\*</sup> No more than 60 credits may be transferred into MSMU.

Table 2. List of courses to be taken at MSMU to fulfill the requirements for the B.S. in Cybersecurity

after transferring from HCC with an A.S. in Cybersecurity

| Courses Taken at MSMU  | Required or<br>Elective for<br>MSMU | Major<br>Credits | General Studies and Elective Credits |                  |
|--|-------------------------------------|------------------|--------------------------------------|------------------|
| GENERAL STUDIES  | (Core Curriculum)                   | )                |                                      |                  |
| PHIL 103 Foundations of Philosophy   | Required                            |                  | 3                                    |                  |
| THEO 220 Belief in Today's World   | Required                            |                  | 3                                    |                  |
| XXMO 300 Modernity in Lit, Mus, Art, or Theat.                                     | Required                            |                  | 3                                    |                  |
| THEO 320 Encountering Christ   | Required                            |                  | 3                                    |                  |
| AMER 202 America in the World  | Required                            |                  | 3                                    |                  |
| THEOL/PHIL 300 Ethics  | Required                            |                  | 3                                    |                  |
| XXGE 3XX Global Encounters   | Required                            |                  | 3                                    |                  |
| MAJOR REQU   | IREMENTS                            |                  |                                      |                  |
| CMSCI 125 Intro to Computer Science II*  | Required                            | 3                |                                      |                  |
| CMSCI 277 Computer Architecture  | Required                            | 3                |                                      |                  |
| CMSCI 356 Operating Systems  | Required                            | 3                |                                      |                  |
| CMSCI 358 Computer Security I  | Required                            | 3                |                                      |                  |
| CMSCI 228 Discrete Mathematics <b>OR</b> DATA 200 Data Science in a Big Data World | Electives                           | 3                |                                      |                  |
| CYBER 160 Networking Administration  | Required                            | 3                |                                      |                  |
| CYBER 161 UNIX and Windows Operating Systems                                       | Required                            | 3                |                                      |                  |
| CYBER 210 Systems Operation Management   | Required                            | 3                |                                      |                  |
| CYBER 400 Cybersecurity Capstone   | Required                            | 3                |                                      |                  |
| FREE ELEC  | CTIVES                              |                  |                                      |                  |
| Free electives   | Electives                           |                  | 12                                   | Total<br>Credits |
|  | Total                               | 27               | 33                                   | 60               |

<sup>\*</sup>If student takes CSC 232 at HCC as an elective, that course will fulfill the requirement for CMSCI 125 at MSMU.

HCC students transferring to the Cybersecurity program at Mount St. Mary's University should be aware that the Cybersecurity 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 also achieve sufficient GPA levels. Transfer students must maintain a 2.0 cumulative GPA each semester in order to remain in good academic standing. In order to graduate, a student must have at least a 2.0 cumulative GPA and at least a 2.0 GPA in their major.

# **Useful Contacts**

For students following this agreement, the staff at Hagerstown Community College and Mount St. Mary's University. Emmitsburg campus, are ready to assist.

Admission and advising information for the A.S. in Cybersecurity at HCC can be obtained by contacting the following personnel:

Kevin Crawford
Director of Admissions and Enrollment Management
Email: klcrawford@hagerstowncc.edu

Phone: 240-500-2412

Mike Martin,

Director of Academic Advising and Registration

Email: memartin@hagerstowncc.edu

Phone: 240-500-2242

For information about admission to Mount St. Mary's University contact the following personnel:

Mary Catherine James Senior Associate Director of Admissions/Transfer Coordinator

Email: mjames@msmary.edu

Phone: 800-448-4347

Appendix A
Sample Course Schedule

| Fall Year 1 at HCC                    | Credit | Spring Year 1 at HCC                          | Credit |
|---------------------------------------|--------|---|--------|
| ENG 101 English Composition           | 3      | Gen Ed English                                | 3      |
| Gen Ed Mathematics                    | 3      | Gen Ed Diversity                              | 3      |
| Gen Ed Behavioral/Social Science      | 3      | Gen Ed Arts/Humanities                        | 3      |
| Gen Ed Arts/Humanities                | 3      | IST 154 Networking Basics                     | 3      |
| CYB 101 Introduction to Cybersecurity | 3      | IST 160 Introduction to Security Fundamentals | 3      |
| TOTAL                                 | 15     | TOTAL   | 15     |

| Fall Year 2 at HCC                                     | Credit | Spring Year 2 at HCC               |    |  |
|--|--------|------------------------------------|----|--|
| Gen Ed Biological/Physical Science                     | 3      | Gen Ed Biological/Physical Science | 4  |  |
| CSC 132 Introduction to C and C++ Programming          | 3      | Gen Ed Behavioral/Social Science   | 3  |  |
| CYB 210 Ethics in the Information Age                  | 3      | CYB 225 Tactical Perimeter Defense |    |  |
| IST 166 Computer Forensics I: Principles and Practices | 3      | Restricted Elective                | 3  |  |
| Restricted Elective                                    | 3      | Elective                           | 3  |  |
| TOTAL  | 15     | TOTAL                              | 15 |  |

| Fall Year 3 at MSMU                          | Credit | Spring Year 3 at MSMU                        | Credit |
|--|--------|--|--------|
| XXMO 300 Modernity in Lit, Mus, Art, or Thea | 3      | CMSCI 228 or DATA 200                        | 3      |
| CMSCI 277 Computer Architecture              | 3      | CMSCI 125 Intro to Computer Sci. 2           | 3      |
| CYBER 160 Networking Administration          | 3      | CYBER 161 UNIX and Windows Operating Systems | 3      |
| Free elective                                | 3      | THEO 220 Belief in Today's World             | 3      |
| Free elective                                | 3      | PHIL 103 Foundations of Philosophy           | 3      |
| TOTAL  | 15     | TOTAL  | 15     |

| Fall Year 4 at MSMU                    | Credit | Spring Year 4 at MSMU                  | Credit |
|--|--------|--|--------|
| CMSCI 358 Computer Security I          | 3      | CYBER 400 Capstone                     | 3      |
| CYBER 210 Systems Operation Management | 3      | CMSCI 356 Operating Systems and Design | 3      |
| THEO 320 Encountering Christ           | 3      | AMER 202 America in the World          | 3      |
| Free elective                          | 3      | THEOL/PHIL 300 Ethics                  | 3      |
| Free elective                          | 3      | XXGE 3XX Global Encounters             | 3      |
| TOTAL                                  | 15     | TOTAL                                  | 15     |

Notes: It should be noted that no more than 60 credits will be brought in as transfer credits, and that of those credits, MSMU will not bring in any remedial courses or algebra, and MSMU will not bring in more than 3 credit hours of PE/Health. MSMU also cannot guarantee that a student will finish in 2 years.