



THE BOROUGH OF MANHATTAN COMMUNITY COLLEGE OF THE CITY UNIVERSITY OF NEW YORK
ARTICULATION AGREEMENT FORM

A. SENDING AND RECEIVING INSTITUTIONS

Sending College: Borough of Manhattan Community College

Department: Computer Information Systems

Program: Computer Network Technology

Degree: Associate in Applied Science (A.A.S.)

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Receiving College: Mercy College

Department: School of Liberal Arts

Program: Cybersecurity

Degree: Bachelor of Science (B.S.)

**B. ADMISSION REQUIREMENTS FOR SENIOR COLLEGE PROGRAM**

Students must have completed an associate degree with an overall GPA of 2.0.

Only courses with grades of C or better may be applied to the major or major prerequisite courses unless otherwise stated. Grades of C-, D+ and D may be used to fulfill General Education or elective requirements only if those courses were part of the student's earned associate degree program.

**Total transfer credits granted toward the Baccalaureate degree:**

A total of 90 credits are accepted in transfer. Only 75 may be from a two year institution.

CLEP, DANTES and ACE equivalent credits (military transcript) are accepted in transfer.

One half of the major requirements must be completed at Mercy College. Permission to transfer in any additional major courses after the student's final transcript(s) are evaluated must be approved by the Dean of the School for that student's major.

Total transfer credits granted toward the baccalaureate degree: 60

Total additional credits required at the senior college to complete baccalaureate degree: 69

### C. COURSE TO COURSE EQUIVALENCIES AND TRANSFER CREDIT AWARDED

Borough of Manhattan Community College graduates who complete the Associate in Applied Science (A.A.S.) degree in Computer Network Technology, will receive 60 credits toward the Bachelors of Science (B.S.) degree in Cybersecurity at Mercy College. Beginning fall 2013, students entering the College will follow the Pathways curriculum for Computer Network Technology.

#### Current Computer Network Technology Curriculum

| General Requirements                                                                                                                                                                             |              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| ENG 101 – English Composition I                                                                                                                                                                  | 3            |
| ENG 201 – English Composition II                                                                                                                                                                 | 3            |
| Elective – Choose 1 course from 3 or 4 areas:<br>SPE100, ART/MUS xxx, Social Science, 110-level Science, or HED 100                                                                              | 10           |
| MAT 150 – Introduction to Statistics or<br>MAT 200 – Intro to Discrete Mathematics or<br>MAT 206 – Precalculus or<br>MAT 301 – Analytic Geometry & Calculus I or<br>MAT 402 – Finite Mathematics | 4            |
| <b>Total General Requirements</b>                                                                                                                                                                | <b>20</b>    |
| Curriculum Requirements                                                                                                                                                                          |              |
| CIS 155 – Computer Hardware                                                                                                                                                                      | 4            |
| CIS 255 – Computer Software                                                                                                                                                                      | 4            |
| CIS 345 – Telecommunications Networks I                                                                                                                                                          | 4            |
| CIS 445 – Telecommunications Networks II                                                                                                                                                         | 4            |
| CIS 440 – UNIX                                                                                                                                                                                   | 3            |
| CIS 455 – Network Security                                                                                                                                                                       | 4            |
| ACC 122 – Accounting Principles I                                                                                                                                                                | 4            |
| ACC 222 – Accounting Principles II or<br>CSC 110 – Computer Programming I                                                                                                                        | 4            |
| BUS 104 – Introduction to Business or<br>BUS 200 – Business Org. & Mgmt.                                                                                                                         | 3            |
| Elective – Choose any ACC, BUS, CIS, CSC or MMP course.                                                                                                                                          | 3-4          |
| Elective – Choose any ACC, BUS, CIS, CSC, or MMP course.                                                                                                                                         | 3-4          |
| <b>Total Curriculum Requirements</b>                                                                                                                                                             | <b>40-42</b> |
| <b>Total Program Credits</b>                                                                                                                                                                     | <b>60</b>    |

#### Pathways Computer Network Technology Curriculum

| Common Core                                                                                                                                                               |           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| Required Common Core                                                                                                                                                      |           |
| <i>English Composition</i>                                                                                                                                                |           |
| ENG 101 – English Composition                                                                                                                                             | 6         |
| ENG 201 – Introduction to Literature                                                                                                                                      |           |
| <i>Mathematical &amp; Quantitative Reasoning</i>                                                                                                                          |           |
| MAT 150 – Introduction to Statistics or<br>MAT 200 – Intro to Discrete Mathematics or<br>MAT 206 – Precalculus or<br>MAT 301 – Analytic Geometry & Calculus I             | 4         |
| <i>Life &amp; Physical Sciences</i>                                                                                                                                       |           |
| Choose 1 from: AST 110 or PHY 110                                                                                                                                         | 4         |
| <b>Total Required Common Core</b>                                                                                                                                         | <b>14</b> |
| Flexible Core                                                                                                                                                             |           |
| Choose 6 credits from the 1 or 2 of the following areas:<br>Creative Expression<br>World Culture Global Issues<br>U.S. Experience & Its Diversity<br>Individual & Society | 6         |
| <i>Scientific World</i>                                                                                                                                                   |           |
| CSC 110 – Computer Programming I                                                                                                                                          | 4         |
| <b>Total Flexible Core</b>                                                                                                                                                | <b>10</b> |
| <b>Total Common Core</b>                                                                                                                                                  | <b>24</b> |
| Curriculum Requirements                                                                                                                                                   |           |
| CIS 155 – Computer Hardware                                                                                                                                               | 4         |
| CIS 255 – Computer Software                                                                                                                                               | 4         |
| CIS 345 – Telecommunications Networks I                                                                                                                                   | 4         |
| CIS 445 – Telecommunications Networks II                                                                                                                                  | 4         |
| CIS 440 – UNIX                                                                                                                                                            | 3         |
| CIS 455 – Network Security                                                                                                                                                | 4         |
| ACC 122 – Accounting Principles I                                                                                                                                         | 3         |
| BUS 104 – Introduction to Business or<br>BUS 200 – Business Org. & Mgmt.                                                                                                  | 3         |
| Electives – Choose courses from ACC, BUS, CIS, CSC or MMP course.                                                                                                         | 7         |
| <b>Total Curriculum Credits</b>                                                                                                                                           | <b>36</b> |
| <b>Total Program Credits</b>                                                                                                                                              | <b>60</b> |

**D. SENIOR COLLEGE UPPER DIVISION COURSES REMAINING FOR BACCALAUREATE DEGREE**

| <b>Course and Title</b>                                                                | <b>Credits</b> |
|----------------------------------------------------------------------------------------|----------------|
| <b>General Education (Liberal arts, Core, Distribution) and other Required Courses</b> |                |
| JRSM 301 Junior Seminar                                                                | 3              |
| MATH 116 College Algebra <sup>1</sup>                                                  | 3              |
| Liberal Arts Electives (Chosen under advisement) <sup>3</sup>                          | 21             |
| <b>Subtotal</b>                                                                        | <b>27</b>      |
| <b>Cybersecurity Major Courses</b>                                                     |                |
| CISC 220 Database Application <sup>2</sup>                                             | 3              |
| MATH 244 Discrete Structures                                                           | 3              |
| IASP 230 Introduction to Cybersecurity                                                 | 3              |
| IASP 321 Linux Administration                                                          | 3              |
| IASP 330 Disaster Recovery/Business Continuity                                         | 3              |
| CISC 337 Database Management System <sup>2</sup>                                       | 3              |
| CISC385 Cryptography and Computer Security                                             | 3              |
| IASP 420 Network Security                                                              | 3              |
| IASP 430 Introduction to Computer Forensics                                            | 3              |
| IASP 470 System Security (capstone)                                                    | 3              |
| <i>Four Courses from the following CSEC electives:</i>                                 | 12             |
| IASP 310 Information Assurance & Control Systems: Protection                           |                |
| IASP 320 Information Assurance & Control Systems: Recovery                             |                |
| CISC 359 Website Administration                                                        |                |
| IASP 440 Security Policy and Procedures                                                |                |
| IASP 460 Introduction to Wireless Network Security                                     |                |
| CISC 311 Objects, Structures and Algorithms                                            |                |
| CISC 339 Artificial Intelligence                                                       |                |
| CISC 370 Systems Analysis and Design                                                   |                |
| CISC 341 Computer Architecture                                                         |                |
| CISC 421 Operating Systems                                                             |                |
| IASP 395 Special Topics in Cybersecurity                                               |                |
| IASP 475 Special topics in Information Security                                        |                |
| IASP 397 Independent Study in Cybersecurity                                            |                |
| <b>Subtotal</b>                                                                        | <b>42</b>      |
| Total Number of upper division credits                                                 | <b>69</b>      |
| Total number of credits transferred from BMCC                                          | <b>60</b>      |
| Total credits required for the B.S in Cybersecurity                                    | <b>129</b>     |

1. Students who complete MAT 200, MAT 206, or MAT 301 at BMCC can substitute an advised Liberal Arts elective.
2. Students who complete CIS 395 and/or CIS 495 at BMCC can substitute 3-6 credits of electives.
3. Students may elect to take an additional 15 credits of Liberal Arts electives at BMCC, CLEP exams or Foreign Language proficiency exams in order to bring the number of credits required at Mercy College down to 54.

## **E. ARTICULATION AGREEMENT FOLLOW-UP PROCEDURES**

### **1. Procedures for reviewing, updating, modifying or terminating agreement:**

When either of the degree programs involved in this agreement undergoes a change, the agreement will be reviewed and revised accordingly by faculty from each institution's respective departments, selected by their Chairpersons.

### **2. Procedures for evaluating agreement, i.e., tracking the number of students who transfer under the articulation agreement and their success:**

Each semester Mercy College will provide the Borough of Manhattan Community College the following information: a) the number of BMCC students who applied to the program; b) the number of BMCC students who were accepted into the program; c) and the number of BMCC students who enrolled; d) the aggregate GPA of these enrolled students.

### **3. Sending and receiving college procedures for publicizing agreement, e.g., college catalogs, transfer advisers, Websites, etc.:**

This articulation agreement will be publicizing on the Borough of Manhattan Community College's website, and the Mercy College website. Transfer advisers at BMCC will promote this agreement with eligible students.

## **F. Additional Information (e.g., financial aid, transfer scholarships)**

Transfer students are eligible to apply for financial aid that is normally available to other junior class students.

Scholarships from \$2000 to \$5000 per year are awarded to transfer students with associate degrees on the basis of previous academic performance of at least a 3.0 cumulative GPA.

A scholarship for members of Phi Theta Kappa is also available.