## Program Transfer Agreement

## Harford Community College \& Towson University

## Bachelor of Science (B.S.) Degree in Information Technology (2024-2029)

Harford Community College, a community college located in Bel Air, Maryland, and Towson University, a four-year public institution located in Towson, Maryland, agree to follow the articulation of courses outlined in the articulation (course equivalency) document, for completion of the requirements for Towson University's Bachelor of Science degree in Information Technology (Attachment A), which is attached to, and incorporated by reference into, this Program Transfer Agreement. The following principles guide the operation of this Program Transfer Agreement, with the requirements for transfer in specific curricula set forth in Attachment A.

1. Students who have completed the Associate of Applied Science degree in Computer Information Systems at Harford Community College may transfer into Towson University's Bachelor of Science in Information Technology program with junior standing provided that the student has completed all courses identified in Attachment A with a cumulative GPA of 2.00 or higher. Courses completed at Harford Community College with 300 or 400 -level Towson University course equivalencies will transfer as lower-level credit but will satisfy course content as indicated.
2. Only Harford Community College courses in which a grade of C (2.00 GPA) or better is earned will apply toward the major at Towson University.
3. The number of transferable Harford Community College credits specific to the Bachelor of Science in Information Technology program is reflected in Attachment A. The standard credit weighting for Harford Community College's Associate of Applied Science degree in Computer Information Systems is 60 credits. Towson University will accept a maximum of 64 transfer credits from Harford Community College toward fulfilling the 120 credit hours required for baccalaureate completion.
4. In accordance with the Maryland Figher Education Commission's credit transfer policy pertaining to general education requirements, Towson University will accept the completion of Harford Community College's general education requirements and students will be required to complete additional courses at Towson University to satisfy the remaining Core Curriculum requirements as shown in Attachment A.
5. Towson University recognizes college-level experiential learning gained through previous work, military and/or volunteer service or life experience. Credit for prior learning may also be established through course challenge or standardized credit by examination.
6. Harford Community College students transferring to Towson University will be given every consideration for financial aid and will be eligible to compete for academic scholarships upon entrance to Towson University subject to stated scholarship deadlines.
7. Both Harford Community College and Towson University agree to work together to facilitate the transfer of students from Farford Community College to Towson University to work cooperatively to ensure the high quality of the programs at the respective institutions. The transfer of students will be in accordance with the policies and procedures of both institutions, as they may be amended from time to time.
8. This Program Transfer Agreement will be in effect initially for five years, beginning with the commencement of the Spring 2024 semester and ending after the Spring 2029 semester, with a review every year by both parties. Any revisions the parties deem necessary must be evidenced in writing and signed by the authorized officials of each institution. The Program Transfer Agreement may be terminated by either party for due cause and after adequate notice of not less than six months is given to the other party.
9. Towson University will provide information on the academic progress of Harford Community College transfer students enrolled under the terms of this Program Transfer Agreement upon request by Harford Community College and in compliance with the provisions of the Family Educational Rights and Privacy Act (FERPA) and applicable Towson University policies and procedures.
10. This Program Transfer Agreement, when signed, constitutes the entire agreement between the parties and supersedes all prior agreements and understandings between the parties respecting the matter hereof.

## HARFORD COMMUNITY COLLEGE AND TOWSON UNIVERSITY




Date:


## 2+2 Articulation Agreement for Harford Community College and Towson University <br> Associate's Degree: A.A.S. in Computer Information Systems <br> Bachelor's Degree: B.S. in Information Technology <br> Effective Term: Spring 2024

## Section 1: Course Completion Plan for Harford Community College

This section outlines the courses to satisfy Harford Community College (HCC) general education and program requirements in order to complete both HCC and Towson University (TU) degrees within a total of four years and earn the minimum required 120 units/credits. ${ }^{1}$ The following tables do not include any nontransferable or prerequisite coursework outside of the curriculum.

Table 1: HCC General Education Courses Applied to TU Core Curriculum

| HCC Requirement | HCC Course to Take | Credits | TU Equivalent Course |
| :--- | :--- | :---: | :--- |
| English Composition | ENG 101 English Composition (GE) | 3 | ENGL 102 Writing for a Liberal Education |
| Mathematics | MATH 216 Introduction to Statistics <br> (GB) | 4 | MATH 231 Basic Statistics |
| Arts \& Humanities | CMST 210 Group Communication and <br> Leadership (GH) | 3 | COMM 131 Public Speaking |
| Behavioral \& Social Sciences | Behavioral \& Social Sciences Elective <br> (GB) | 3 | Equivalency will vary by course |
| Biological \& Physical Sciences | Biological/Physical Lab Science <br> Elective (GL) | 4 | Equivalency will vary by course |

## HCC general education credits: 17

Table 2: HCC Program Requirements and Electives Applied to TU Degree

| HCC Requirement | HCC Course to Take | Credits | TU Equivalent Course |
| :---: | :---: | :---: | :---: |
| Program Requirement | BA 101 Introduction to Business (GI) | 3 | IDIS TLL Interdisciplinary Lower-Level <br> Elective |

[^0]| HCC Requirement | HCC Course to Take | Credits | TU Equivalent Course |
| :---: | :---: | :---: | :---: |
| Program Requirement | CIS 102 Introduction to Information Sciences (GI) | 3 | COSC 111 Information and Technology for Business |
| Program Requirement | CIS 104 Computer Operating Systems | 3 | ITEC 274 Fundamentals of System Management |
| Program Requirement | Choose one of the following options: <br> - CIS 119 Programming I: Java and CIS 214 Programming II: Java <br> - CSI 131 Computer Science I and CSI 132 Computer Science II | 8 | - COSC 236 Introduction to Computer Science I <br> - COSC 237 Introduction to Computer Science II <br> If sequence is incomplete, students will receive equivalencies of ITEC 236 Introduction to Computer Science I and COSC TLL Computer Science LowerLevel Elective. |
| Program Requirement | CIS 115 Fundamentals of Programming | 3 | COSC 175 General Computer Science |
| Program Requirement | CIS 135 Introduction to Networks | 3 | ITEC 250 Fundamentals of Computer Networks |
| Program Requirement | ENG 209 Technical Writing | 3 | ENGL TLL English Lower-Level Elective |
| Program Requirement | CIS 203 Computer Systems and Procedures | 3 | CIS 211 Fundamentals of Information Systems \& Technology |
| Program Requirement | Choose one of the following: <br> - CIS 273 Cooperative Education: Computer Information Systems <br> - CSI/CIS/ISS Elective | 3 | - CIS TLL Computer Information Systems Lower-Level Elective <br> - Equivalency will vary by course |
| Program Elective | CIS 217 Introduction to Web Programming | 3 | ITEC 231 Fundamentals of Web Technologies |
| Program Elective | CSI/CIS/ISS/DSCI Electives | 7 | Equivalency will vary by course |
| Physical Education Electives | Physical Education Electives | 2 | PHEA TLL Physical Education LowerLevel Elective |

- HCC program requirements and elective credits applied to the TU degree: 44 credits
- Total HCC credits applied to the TU Core Curriculum to fulfill TU general education requirements: 23 credits (includes courses taken at HCC to meet general education requirements [see Table 1] and program requirements [see table 2] for the A.A.S. degree)
- Total HCC credits transferred to TU: 60-64

While HCC's A.A.S. degree in Computer Information Systems is 60 credits, TU recommends that HCC students take MATH 216 Introduction to Statistics at HCC, as this will fulfill the Information Technology major requirement of MATH 231 Basic Statistics at TU. HCC students who take MATH 216 will transfer 61 credits into TU's degree program. HCC students may transfer a maximum of 64 credits toward TU's B.S. degree in Information Technology. The application of these additional credits beyond the 60credit standard, excluding HCC students who take MATH 216 and transfer in 61 credits (as noted above), will be determined by TU on an individual case-by-case basis. If students do not adhere to the courses outlined above in Tables 1 and 2, they are not guaranteed completion of the bachelor's degree in two years. Refer to section 2 for specific course details and transfer planning information.

## Section 2: Harford CC Course Selection \& Transfer Details

This section explains any specific course selections made in section 1 and provides transfer planning guidance specific to this degree plan. Students must follow the course selections outlined in this document. If students do not complete any or all of the courses outlined in this agreement, they will be required to complete outstanding requirements at TU.

## GENERAL EDUCATION

Students must take the following courses for their general education requirements. Students must earn a minimum grade of $C$ in the following courses to satisfy TU major requirements.

- Mathematics Elective: It is recommended to take MATH 216 Introduction to Statistics (GM) to satisfy the major requirement of MATH 231 Basic Statistics at TU. Students who do not complete MATH 216 at HCC must complete MATH 231 or ECON 205 at TU. TUNE students may need to take this course at the main TU campus. Students taking MATH 216 at HCC will transfer with a total of 61 credits.
- Arts and Humanities: CMST 210 Group Communication and Leadership (GH) to satisfy the major requirement of COMM 131 Public Speaking. Students who do not complete CMST 210 at HCC must complete COMM 131 at TU. TUNE students may need to take this course at the main TU campus.
The following information explains the transfer of students' general education courses:
- Students entering into this agreement will need to complete six Core Curriculum requirements at TU: Biological \& Physical Sciences (Lab \& Non-Lab) (Core 8), Advanced Writing Seminar (Core 9), Metropolitan Perspectives (Core 10), Global Perspectives (Core 12), Diversity \& Difference (Core 13), and Ethical Issues \& Perspectives (Core 14). Students not completing the courses listed in Tables 1 and 2 above will be required to complete additional Core Curriculum requirements at TU.


## PROGRAM ELECTIVES

Students must take the following course in order to also satisfy a required course in the major at TU. Students must earn a minimum grade of $C$ in the following course.

- CIS 217 Introduction to Web Programming will satisfy the major requirement of ITEC 231 Fundamentals of Web Technologies. This should be taken as the required CSI/CIS elective within the HCC program.


## Section 3: Degree Requirements to Be Completed at TU

This section outlines the degree requirements for students transferring into the B.S. in Information Technology. Refer to section 4 for additional major requirements, recommendations, and university-wide degree requirements.

## CORE CURRICULUM REQUIREMENTS: 18-19 UNITS

Core 8 Biological \& Physical Sciences (Lab \& Non-Lab) (3-4 units)
Core 9 Advanced Writing Seminar ( 3 units) (this will be satisfied by ENGL 317 Writing for Business and Industry in the major)
Core 10 Metropolitan Perspectives ( 3 units)
Core 12 Global Perspectives ( 3 units)
Core 13 Diversity \& Difference (3 units)
Core 14 Ethical Issues \& Perspectives ( 3 units) (this will be satisfied by COSC 418 Ethical and Societal Concerns of Computer Scientists in the major)

## MAJOR REQUIRED COURSES: 21 UNITS

CIS 377 Introduction to Cybersecurity ( 3 units)
CIS 435 Human-Computer Interaction ( 3 units)
ITEC 315 Data and Information Management (3 units)
ITEC 325 System Administration and Maintenance (3 units)
ITEC 345 Scripting Languages (3 units)
ITEC 411 System Architecture and Integration (3 units)
MATH 263 Discrete Mathematics (3 units)

## MAJOR ELECTIVE OR TRACK COURSEWORK: 15-19 UNITS

Select one of the following major elective or track coursework options. Note some courses may require additional prerequisites that can potentially cause students to complete over 120 credits for the degree. Refer to TU's catalog for specific track coursework.

- Elective Coursework: 15-19 units. Students who complete the equivalent of COSC 237 Introduction to Computer Science II at HCC should choose five courses (all must be upper-level courses numbered 300 or higher) from the list provided in the TU catalog.
- Network Security Track: 18 units
- Data Management and Analytics Track: 18 units


## GENERAL ELECTIVES: 0-5 UNITS

The total number of elective units required will be determined by the major elective or track coursework option selected. Electives can be additional major electives or courses for personal interests.

## Section 4: Additional Requirements \& Recommendations for TU Degree Completion

## ADDITIONAL REQUIREMENTS FOR INFORMATION TECHNOLOGY

- Students enrolling in ITEC 397 Information Technology Internship must have a minimum GPA of 2.75 .


## BACHELOR'S DEGREE REQUIREMENTS FOR ALL STUDENTS

- A grade of C (2.0 GPA) or higher is required in all major courses and prerequisites.
- A cumulative GPA of 2.0 is required.
- 32 units of the bachelor's degree must be completed at the upper level (courses numbered 300 or above).
- Certain majors may have additional requirements for graduation. Students should follow the specific requirements outlined in the catalog for the major.

Degree Completion Summary

| Total Units Required for TU B.S. in Information Technology Degree | 120 UNITS |
| :--- | :--- |
| HCC A.A.S. Degree in Computer Information Systems | $61^{*}$ |
| Completion of Core Curriculum at TU | $18-19$ |
| Information Technology Major Required Coursework at TU | 21 |
| Information Technology Major Elective/Track Coursework at TU | $\mathbf{1 5 - 1 9}$ |
| General Electives Taken at TU | $0-5$ |

*The HCC unit count is based on students taking MATH 216 Introduction to Statistics at HCC.


[^0]:    ${ }^{1}$ Note that Harford Community College awards academic "credit" for its courses, whereas Towson University uses the term "unit" in reference to the credit hour weighting assigned to its undergraduate courses. For the purposes of this articulation agreement, the terms "credit" and "unit" are interchangeable.

