MEMORANDUM OF UNDERSTANDING
HARFORD COMMUNITY COLLEGE & TOWSON UNIVERSITY
October 4, 2017

INFORMATION TECHNOLOGY B.S. Degree

Harford Community College, Bel Air, Maryland, and Towson University, agree to follow the articulation of courses outlined in the articulation (course equivalency) document, for completion of requirements for the Bachelor of Science degree in Information Technology (Attachment A), which is attached to, and incorporated by reference into, this Memorandum of Understanding (MOU). The following principles guide the operation of this MOU, with the requirements for transfer in specific curricula set forth in Attachment A.

1. Towson University will accept a maximum number of 64 credits from Harford Community College as outlined in the Attachment A. The number of transferable credits specific to this program is reflected in Attachment A.

2. Students who have completed the Associate of Applied Science Degree in the Information Assurance and Cybersecurity program at Harford Community College may transfer into Towson University's Information Technology program with junior standing provided that the student has completed all courses identified on Attachment A (which is attached to, and incorporated by reference into, this MOU) 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.

3. Only courses in which a grade of C (2.00) or better is earned will apply toward the major at Towson University.

4. In accordance with the MHEC transfer policy pertaining to general education requirements, Towson University will accept the completion of Harford Community College's general education requirements (GenEds) and students will be required to complete courses at Towson University to satisfy the remaining *University Core* 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 Harford Community College to Towson University to work cooperatively to insure the high quality of the programs at the respective

institutions. Transfer of students will be in accordance with policies and procedures of both institutions, as they may be amended from time to time.

8. This MOU will be in effect initially for ten years, beginning *fall 2017*, with a review every two years by both parties. Any revisions the parties deem necessary must be evidenced in writing and signed by the authorized officials of each institution. The MOU 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 establish procedures to provide information on the academic progress of Harford Community College students enrolled as part of this MOU.

10. This MOU, when signed, constitutes the entire agreement between the parties and supersedes all prior agreements and understandings between the parties respecting the matter hereof.
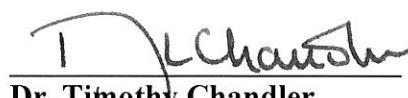
HARFORD COMMUNITY COLLEGE AND TOWSON UNIVERSITY

Dr. Steven Thomas
Vice President for
Academic Affairs

Date _10. 12, 2017_

Dr. Timothy Chandler
Provost and Vice-President for
Academic Affairs

Date _11/13/17_

HARFORD COMMUNITY COLLEGE/INFORMATION ASSURANCE AND CYBERSECURITY A.A.S. DEGREE
TOWSON UNIVERSITY/INFORMATION TECHNOLOGY B.S. DEGREE

HARFORD COMMUNITY COLLEGE				TOWSON UNIVERSITY		
COURSE #	COURSE TITLE	CRS.	TU EQUIVALENCY	CORE	COMMENTS	COURSE ID#
			TSEM Waived	1.	Towson Seminar	13192
ENG 101	English Composition (GE)	3	ENGL 102	2.	English Composition	2348
(GM)*	Mathematics (GM) *	3	Depends on choice.	3.	Mathematics	
CIS 102	Intro to Information Sciences (GI)	3	COSC 111	4.	Creativity & Creative Development	13369
CMST 210 **	Group Communication & Leadership (GH) **	3	COMM 131	5.	Arts & Humanities	1221
(GB)	Behavioral/Social Science (GB)	3	Depends on choice.	6.	Social & Behavioral Sciences	
(GL)	Biological/Physical Science w/Lab (GL)	4	Depends on choice.	7.	Biological & Physical Science w/Lab	
				8.	Biological & Physical Science	
				9.	Advanced Writing Seminar	
				10.	Metropolitan Perspectives	
ISS 105	Introduction to Cybersecurity (GI)	3	IDIS TLL	11.	The United States as a Nation	11091***
				12.	Global Perspectives	
				13.	Diversity & Difference	
				14.	Ethical Issues & Perspectives	
Total CORE in Transfer		**22**				
CIS 104	Computer Operating Systems	3	ITEC 274			13152
CIS 135	Introduction to Networks	3	ITEC 250			13140
CIS210	Fundamentals of Network Security	3	COSC TLL			10186
CIS217****	Introduction to Web Programming	3	ITEC 231			12826
CIS 119 *and*	Programming I: Java *and*	4,4	COSC 236		*Both courses in the sequence must be completed for TU equivalencies of COSC 236 & COSC 237. (If sequence is not completed, students will receive equivalencies of ITEC 236 and COSC TLL.)*	1344
CIS 214 OR *and*	Programming II: Java		COSC 237			1345
CIS 131 *and*	Computer Science I *and*					
CIS 132	Computer Science II					
Take in place of ISS 213 and ISS 214. See Note						
CIS 211	MS Window Server Operating System	3	COSC TLL			10186
ISS 220	Strategic Infrastructure Security	3	CIS 211*****		For this agreement only	13734
ISS 221	Network Defense and Countermeasures	3	ITEC TLL			13734
ISS 111	CISCO I	4	ITEC TLL			13734
ISS 112	CISCO II	4	ITEC TLL			13734
PE	Physical Education Elective	1	USEL TLL			10792
Program Requirements at Harford		**38**				
Total Program Requirements at Harford		**60**				
Maximum Credits in Transfer		**64**				

64 Credit transfer maximum. 18 Core Curriculum units must be completed at Towson University: Core 8 (Biological and Physical Science); Core 9 (Advanced Writing Seminar); Core 10 (Metropolitan Perspectives); Core 12 (Global Perspectives); Core 13 (Diversity and Difference) and Core 14 (Ethical Issues and Perspectives).

* Students should take MATH 216 (Introduction to Statistics) to satisfy the General Education Mathematics (GM) requirement at HCC and a Major and Core requirement 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 Towson University's main campus.

** Students should take CMST210 (Group Communication and Leadership) in place of PHIL 221 (Business Ethics). CMST 210 will satisfy the program requirement of PHIL 221 at HCC for students under this agreement ONLY. It will also satisfy the General Education Arts and Humanities (GH) requirement at

HCC and a Major and Core requirement at TU. **CMST 210 will transfer as COMM 131 and be used to satisfy TU's IT major requirement of COMM 131 for students under this agreement ONLY.** Students who do not complete CMST 210 (or CMST 101) at HCC must complete COMM 131 at TU. TUNE students may need to take this course at Towson University's main campus.

***Requires Course Directive/Exception for Core Placement.

**** **Students should take CIS 217 (Introduction to Web Programming) in place of ISS 222 (Computer Forensics) at HCC to satisfy program requirement at HCC and a Major requirement at TU. CIS 217 will satisfy the program requirement of ISS 222 at HCC for students under this agreement ONLY.** Students who do not complete CIS 217 at HCC will be required to complete ITEC 231 at TU. TUNE students may need to take this course at Towson University's main campus.

*****ISS 220 (Strategic Infrastructure Security) will transfer to TU as CIS 211 (Fundamentals of Information Systems and Technology) and satisfy a required course for students who transfer to TU under this agreement only.

*Note: **Students under this agreement ONLY will be allowed to substitute CSI 119/214 (Programming I & II: JAVA) or CSI 131/132 (Computer Science I & II) for ISS 213/214 (CISCO 3&4) at HCC to satisfy the program requirement at HCC and a Major requirement and Program Elective at TU.** Students must take both courses in the sequence to receive equivalencies of COSC 236 & 237 at TU. Students who do not take both courses in the sequence will receive the equivalencies of ITEC 236 and COSC TLL. ITEC 236 and COSC TLL will satisfy the major requirement of COSC 236 at TU, but COSC TLL will **NOT** satisfy the major elective.*

CORE REQUIREMENTS TO BE COMPLETED AT TOWSON UNIVERSITY (18 UNITS)

CORE 8:	Biological and Physical Science	(3 Units)
CORE 9:	Advanced Writing Seminar (ENGL 317)	(3 Units)
CORE 10:	Metropolitan Perspectives	(3 Units)
CORE 12:	Global Perspectives	(3 Units)
CORE 13:	Diversity and Difference	(3 Units)
CORE 14:	Ethical Issues and Perspectives (COSC 418)	(3 Units)

PROGRAM REQUIREMENTS TO BE COMPLETED AT TOWSON UNIVERSITY (33-39 UNITS)

Required Courses*: (21 Units)

CIS 377	Information Systems Security	(3 Units)
CIS 435	Human Computer Interaction	(3 Units)
COSC 418	Ethics & Societal Concerns of Computer Scientists	(3 Units*) *(Core 14. Ethical Issues & Perspectives) *counted above in CORE*
ITEC 315	Data & Information Management	(3 Units)
ITEC 325	System Administration & Maintenance	(3 Units)
ITEC 345	Scripting Languages	(3 Units)
ITEC 411	System Architecture & Integration	(3 Units)
ITEC 485	Information Technology Capstone	(3 Units)

Other Requirements: (0-6 Units)

COMM 131	Fundamentals of Speech Communication	(3 Units)
(If CMST 210 was not taken at HCC)		
ENGL 317	Writing for Business and Industry	(3 Units*) *(Core 9. Advanced Writing Seminar) *counted above in CORE*
MATH 231	Basic Statistics OR	(3 Units)
ECON 205	Statistics for Business & Economics OR	
PSYC 212	Behavioral Statistics	
(If MATH 216 was not taken at HCC)		

Elective Courses (12 Units**)

Choose 4 courses from the following:

CIS 426	Gaming Interface Design
CIS 436	E-Government
CIS 440	Systems Development for E-Commerce
CIS 445	Universal Usability
CIS 468	Applied Data Mining and Visual Analytics
ITEC 336	Legal & Policy Issues in Information Technology
ITEC 397	Information Technology Internship

ITEC 423   Emerging Internet Technologies
ITEC 425   IT Enterprise Architecture
ITEC 427   Cloud Computing for Enterprises
ITEC 437   Disaster Recovery and Enterprise Continuity
ITEC 450   Advance Computer Networking
ITEC 451   Advanced Data Management & Analysis
ITEC 464   Web Development
ITEC 470   Special Topics in Information Technology
ITEC 495   Independent Study in Information Technology

**If both courses in the programming sequence (CSI 119/CSI 214 or CSI131/132) were not taken at HCC, students may need to complete an additional program elective at TU.*

	(120 credits)
Total Credits to B.S. Degree	
Harford Computer Information Systems A.A.S. Degree	60
Completion of TU Program Requirements	33-39
Completion of TU Core Requirements	18
Electives	3-9