

**HARFORD COMMUNITY COLLEGE - COMPUTER SCIENCE A.S. DEGREE**  
**TOWSON UNIVERSITY/ INFORMATION SYSTEMS B.S. DEGREE**

HARFORD COMMUNITY COLLEGE			TOWSON UNIVERSITY			
COURSE #	COURSE TITLE	CRS.	TU EQUIVALENCY	CORE	COMMENTS	COURSE ID#
				1.	Towson Seminar	
ENG 101	English Composition	3	ENGL 102	2.	English Composition	2348
MATH 203	Calculus I	4	MATH 273	3.	Mathematics	4407
				4.	Creativity & Creative Development	
**GH	Arts/Humanities Elective (GH)	3	Depends on choice.	5.	Arts & Humanities	
**GB	Behavioral/Social Science Elective (GB)	3	Depends on choice.	6.	Social & Behavioral Sciences	
*BIO/PHSC	Biological/Physical Science Elective	4	Depends on choice.	7.	Biological & Physical Science w/Lab	
*BIO/PHSC	Biological/Physical Science Elective	3-4	Depends on choice.	8.	Biological & Physical Science	
				9.	Advanced Writing Seminar	
				10.	Metropolitan Perspectives	
**GB	Behavioral/Social Science Elective (GB)	3	Depends on choice.	11.	The United States as a Nation	
				12.	Global Perspectives	
**GH	Arts/Humanities Elective (GH)	3	Depends on choice.	13.	Diversity & Difference	
				14.	Ethical Issues & Perspectives	
<b>Total CORE in Transfer</b>		<b>26-27</b>				
CIS 205	Intro Visual Basic.Net	4	CIS 265	May count as one of the three CIS/COSC electives.		1348
CIS 115	Fundamentals of Programming	3	COSC 175			1335
CIS 201	Assembly Programming Language	4	COSC TLL			1349
CIS 214	Java Programming Language	4	COSC TLL			10186
CIS 221	C++ Programming	4	COSC TLL			10186
CSI 131	Computer Science I	4	COSC 236			1344
CSI 132	Computer Science II	4	COSC 237			1345
MATH 204	Calculus II	4	MATH 274			4408
MATH 216	Introduction to Statistics	4	MATH 231			4393
MATH 210	Discrete Structures	3	MATH263			4401
	Physical Education Fitness Elective	1	PHEA TLL			10564
	Physical Education Elective	1	PHEA TLL			10564
<b>Program Requirements at Harford</b>		<b>40</b>				
<b>Total Program Requirements at Harford</b>		<b>66-67</b>				
<b>Total Credits in Transfer</b>		<b>64</b>				

64 credit transfer maximum. 18 Core Curriculum units must be completed at Towson University: 1, 4, 9, 10, 12 and 14.

\*BIO 120 and BIO 121 or CHEM 111 and CHEM 112 or PHYS 203 and PHYS 204.

\*\* HCC students must complete one 3-credit Diversity course. It is recommended students select a course from the approved list on Diversity courses found in the HCC catalog. GB and GH choices must be from different disciplines.

\*\*\*Requires Course Directive/Exception for Core placement.

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**Program Requirements at Towson University: (43-48 Units)**

CIS 211	Fund. Of Info Systems & Technology	(3)	
CIS 239	Computer Systems Architecture	(3)	
CIS 334	Data Organization	(3)	
CIS 379	Systems Analysis & Design	(3)	
CIS 458	Organizational Database Management	(3)	
CIS 350	Telecommunications	(3)	
CIS 479	Software Project Management	(3)	
<i>COSC 480</i>	<i>Senior Seminar</i>		
	<b>OR</b>	(1-3)	
<i>COSC 418</i>	<i>Ethical &amp; Societal Concerns of Computer Scientists</i>		<i>(COSC 418 meet Core requirement 13.)</i>
CIS/COSC	Additional CIS/COSC Upper-level electives	(6)	
	Additional Course Sequence Requirement	(12-15)	

**Required IS Project Course (Choose one of the following):**

CIS 435	Human-Computer Interaction	
CIS 440	Systems Development for Electronic Commerce	(3)
CIS 475	Analysis & Design for Web Sites	

**TOTAL CREDITS TO B.S. DEGREE: 122-128 Units**

Harford Computer Science A.S. Degree	64
GenEd to be completed at Towson	18
Completion of Program Requirements at Towson	40-45