

HARFORD COMMUNITY COLLEGE MATHEMATICS A.S. DEGREE
TOWSON UNIVERSITY PURE MATHEMATICS CONCENTRATION B.S. DEGREE

HARFORD COMMUNITY COLLEGE			TOWSON UNIVERSITY			
COURSE #	COURSE TITLE	Units	TU EQUIVALENCY	GenEd	COMMENTS	COURSE ID#
ENG 101	English Composition	3	ENGL 102	IA		2348
CIS 102	Intro. Information Sciences	3	COSC 111	IB		1328
MATH 203	Calculus I	4	MATH 273	IC		4407
				ID	Advanced Composition	
				IE	Creativity and Creative Development	
PHYS 203	General Physics: Mech., Part. Dynamics	3	PHYS 241	IIA		6805
PHYS 204	General Physics: Vib., Waves, Heat, Elec.	4	PHYS 242	IIA		6806
				IIA	Additional 3 credit science course is required.	
(GH)	Arts/Humanities Elective (GH)	3		IIB1	Equivalency depends on choice.	
GenEd	General Education Electives (not GH)	3		IIB3	Equivalency depends on choice.	
(GH)	Arts/Humanities Elective (GH)	3		IIC1	Equivalency depends on choice.	
(GB)	Behavioral/Social Science Elective (GB)	3		IIC2	Equivalency depends on choice.	
(GB)	Behavioral/Social Science Elective (GB)	3		IIC2	Equivalency depends on choice.	
				IIC3	Cultural Plurality & Diversity	
				IID	Global Awareness	
Total GenEd		32				
MATH 204	Calculus II	4	MATH 274			4408
MATH 210	Discrete Structures	3	MATH 263			4401
MATH 206	Calculus III	4	MATH 275			4409
MATH 217	Linear Algebra	4	Math 265			4403
MATH 208 or PHYS 205	Elementary Differential Equations or General Physics: Elect., Light, Relativity	3 or 4	MATH 374 or PHYS 243		Content equivalent -transfers as lower-level credit. If completed, will satisfy GenEd IIA requirements.	10493 or 6807
CIS 115	Fundamentals of Programming	3	COSC 175			1335
CIS 111	C Programming Language	4	COSC TLL			10186
CSI 131	Computer Science I	4	COSC 236		Equivalency exception for this program.	1344
PE	Physical Education Elective	1	PHEA TLL			10564
PE	Physical Education/Fitness Elective	1	PHEA TLL			10564
Program Requirements		31-32				
Total Harford Program Requirements		63-64				
Total Units in Transfer		64				

* 64 credit transfer maximum.

- 12-15 GenEd credits must be completed at Towson University: I.D - ENGL 317 Writing for Business & Industry is recommended, I.E, II.A, II.C.3 and II.D.
- HCC students must complete one 3 credit Diversity course. Is recommended students select a course from the approved list on Diversity Courses found in the HCC catalog.

Major Requirements to be completed at Towson (41 Credits)

MATH 267 Introduction to Abstract Mathematics	4
MATH 331 Probability	4
MATH 369 Introduction to Abstract Algebra	3
MATH 374 Differential Equations	3 <i>(Required if not completed at HCC)</i>
MATH 467 Algebraic Structures	3
MATH 473 Introduction to Real Analysis	3
MATH 475 Complex Analysis	3
MATH 490 Senior Seminar in Mathematics	3
MATH Upper Level Mathematics Electives	15

TOTAL CREDITS TO B.S. DEGREE (120)

Harford Mathematics A.S. Degree	63-64
Completion of GenEd at TU	12-15 <i>(If PHYS 205 (IIA) is completed at HCC, 12 GenEd credits are required.)</i>
Major Requirements at TU	41
Electives at TU	0-4