

HARFORD COMMUNITY COLLEGE - CHEMISTRY A.S. DEGREE (Non-Calculus Based Physics)
TOWSON UNIVERSITY 2 + 2 CHEMISTRY (GENERAL TRACK)

HARFORD COMMUNITY COLLEGE			TOWSON UNIVERSITY			
COURSE #	COURSE TITLE	CRS.	TU EQUIVALENCY	GenEd	COMMENTS	COURSE ID#
ENG 101	College Composition	3	ENGL 102	IA		2348
CIS 102	Intro. Information Sciences	3	CIS 115	IB		11642
MATH 109	Precalculus Mathematics	4	MATH 119	IC		4381
				ID	Advanced Composition (Upper level)	
	GenEd Elective	3	Depends on choice.	IE		
CHEM 111	General Chemistry I	4	CHEM 110	IIA		1041
CHEM 112	General Chemistry II A	4	CHEM 111	IIA		1042
GH	**Arts & Humanities	3	Depends on choice.	IIB1		
PHIL 205	Ethics (GH)	3	PHIL 253	IIB3	Transfers as IIB3-10T Or Transfers as IIB3-10T	6548
Or	Or					
PHIL 221	Business Ethics (GH)		PHIL TLL			10434
Or	Or		PHIL TLL			
PHIL 220	Bioethics (GH)					
ENG 109	Research Writing	3	ENGL 152	IIC1	Requires course directive.	2352
GB	**GenEd - Behavioral/Social Science	3	Depends on choice.	IIC2		
GB	**GenEd - Behavioral/Social Science	3	Depends on choice.	IIC2		
				IIC3	Cultural Plurality & Diversity	
				IID	Global Awareness	
	TOTAL GenEds	36				
MATH 203	Calculus I (must be completed at HCC)	4	MATH 273			4407
MATH 204	Calculus II	3-4	MATH 274		GenEd placement and/or equivalency depend on choice.	4408
Or	Or		Or			
GenEd	General Education Elective (GB), (GH), (GI)		GenEd Elective			
PHYS 101	Introductory Physics I	4	PHYS 211			6800
PHYS 102	Introductory Physics II	4	PHYS 212			6801
CHEM 207	Organic Chemistry I	4	CHEM 331		Transfers as lower level credit.	10134
CHEM 208	Organic Chemistry II	4	CHEM 332		Transfers as lower level credit.	10135
BIO 120	General Biology	4	BIOL 201			666
	Physical Education Elective	1	PHEA TLL			10564
	Physical Education Fitness Elective	1	PHEA TLL			10564
	PROGRAM REQUIREMENTS	29-30				
	Total Harford Program Requirements	65-66				
	TOTAL CREDITS IN TRANSFER	64				

** Harford Community College students must complete one 3 credit diversity course which appears on the "Approved List" in the HCC catalog.

- **64** credit transfer maximum.
- If PHYS 203/204 is substituted for PHYS 101/102 at Harford Community College, MATH 203 and 204 must also be completed at HCC.

- **9 GenEds credits to be completed at Towson: I.D, II.C.3, and II.D.**

- **Major Requirements to be completed at Towson (22-23 Units)**

CHEM 210 Introduction to Analytical Chemistry (5)

3 - Approved 300/400 FCSM electives (9)

CHEM 323 Inorganic Chemistry (4)

Or (3-4)

CHEM 351 Biochemistry I (3)

CHEM 345 Principles of Physical Chemistry (3)

CHEM 372 Intermediate Laboratory I (2)

- **Total Credits to B.S. Degree (120)**

Harford Chemistry A.S. Degree **64**

Completion of GenEd at TU 9

Completion of Major Requirements 22-23

General Electives 24-25 (11-12 units must be upper level)