



STUDENT NAME \_\_\_\_\_ DATE \_\_\_\_\_

## Computer Information Systems A.A.S. at Harford Community College to B.S. IN COMPUTER AND INFORMATION SCIENCE AT UMUC

This worksheet is designed to help you plan and track your progress toward your degrees. For full course descriptions, please refer to the current undergraduate *Catalog*.

**Courses taken at Harford Community College**

*Changes in recommended courses may affect other elements of the degree plan. Lower level equivalents of UMUC upper level courses fulfill content requirements but not upper-level minimum credit requirements*

 UMUC  
Equivalent  
Course

<b>GENERAL EDUCATION REQUIREMENTS (GER) (22-23 credits)</b>		
WRTG 101 Writing GER	ENG 101 English Composition (3)	WRTG 101
Mathematics GER	MATH 101, 109, 111, 203, or 207 (3-4) <i>Recommended MATH GER</i>	
Biological and physical science with lab GER	Bio./Phys. Lab Science elective (4)	
English Writing GER	ENG 209 Technical Writing (3)	WRTG 293
First arts and humanities GER	Arts/Humanities elective (3)	
First social and behavioral sciences GER	PSY 101 or SOC 101 <i>any GB except HIST (3) Recommended Behavioral/Social Science elective. If not completed in elsewhere, Harford diversity requirement may be fulfilled here.</i>	
Second arts and humanities GER	ART 101, ART 102, HIST 101, HIST 102, HIST 103, HIST 104, HIST 202, HIST 207, HIST 208 (3) <i>Recommended General Education elective to meet UMUC historic requirement and meet Harford diversity requirement</i>	
<b>INTERDISCIPLINARY AND EMERGING ISSUES GERs (5 credits)</b>		
CIS 102 Introduction to Information Science (3) <i>First computing GER at UMUC</i>		IFSM 201
PE Fitness elective (1) and PE elective (1)		
<b>COMPUTER INFORMATION SYSTEMS RELATED COURSES (37-39 credits)</b>		
ACCT 101 Accounting Principles I (3)		ACCT 220
ACCT 102 Accounting Principles II (3)		ACCT 221
CIS 111 or CIS 205 (4) <i>Second computing GER at UMUC</i>		
CIS 115 Fundamentals of Programming (3)		
CIS 110 Introduction to UNIX or CIS 135 Intro to Networks (3-4) <i>Recommended software elective</i>		
CIS 104 or CIS 135 (3) <i>CIS 135 may be taken only once</i>		
CIS 203 Computer Systems and Procedures (3)		IFSM 202
CIS 207 or CIS 221 (4)		
CIS 273 Cooperative Education or CSI/CIS elective (3-4)		
◆ CIS 214 Java Programming Language (4) <i>Recommended CSI/CIS Programming Language elective. Required for major in lieu of CMIS 141 or 141A</i>		◆ CMSC 130
◆ CIS 215 Advanced JAVA Programming (4) <i>Recommended CSI/CIS elective. Required for major in lieu of CMIS 242</i>		◆ CMIS 340
<b>Credits transferred: 64-67 credits</b>		

**SEQUENCE at UMUC**

*Courses are listed in the order in which students should take them.  
Changes in courses and order may affect other elements of the degree plan.*

**NOTES**

<b>ADDITIONAL REQUIRED GENERAL EDUCATION COURSES FOR DEGREE (9 credits)</b>		
Biological and physical sciences GER	NSCI 100 or ASTR 100 (3) <i>Or other 3-credit biological/physical science GER course</i>	
Speech/writing GER	WRTG 390 (3) <i>Or other upper-level writing or speech GER course</i>	UL
Second social and behavioral sciences GER	ANTH 344 (3) <i>Or other upper-level social and behavioral science from a second</i>	UL
<b>EMERGING ISSUES (1 credit)</b> If requirement is completed in degree at community college, these credits may be used for electives		
LIBS 150 (1) <i>Required GER course</i>		
<b>ADDITIONAL REQUIRED COURSES FOR MAJOR AND DEGREE (27 credits)</b>		
◆ CMIS 170 (3) <i>Required for major</i>		
◆ CMIS 310 (3) <i>Required for major</i>		UL
WRTG 393 or WRTG 393X (3) <i>Or other upper-level intensive writing GER course</i>		UL
◆ CMIS 325 (3) <i>Or other supplemental major course (any upper-level CMIS)</i>		UL
◆ CMIS 330 (3) <i>Or other supplemental major course</i>		UL
◆ CMIS 320 or CMIS 370 (3) <i>Or other supplemental major course</i>		UL
◆ Any CMIS (3) <i>Supplemental major course</i>		UL
◆ CMIS 415 or CMIS 460 (3) <i>Or other 400-level supplemental major course</i>		UL
◆ CMIS 420 or CMIS 435 (3) <i>Or other 400-level supplemental major course</i>		UL
<b>MINOR OR ELECTIVES (15 credits, at least 9 credits upper level for minor)</b>		
See requirements of individual minor.		UL
Recommended minor: computing		UL
		UL
		UL
		UL
<b>ADDITIONAL ELECTIVES (1-4 credits)</b>		
Choose any courses to meet 120 credits for degree.		
<b>TOTAL: 120 CREDITS</b>		
<b>CHECKLIST FOR FULFILLMENT OF DEGREE REQUIREMENTS See catalog for overview of all requirements.</b>		
<input type="checkbox"/> 30 credits at UMUC, including at least half of the major and minor and 15 upper level credits. <input type="checkbox"/> 45 upper-level credits, including half the credit for the major and the minor. <input type="checkbox"/> All required courses <u>and</u> minimum number of credits for major and minor. <input type="checkbox"/> Prerequisites for major and minor courses, if needed.	<input type="checkbox"/> All General Education Requirements. <input type="checkbox"/> Grade of C or better in all courses for the major and minor. <input type="checkbox"/> Overall GPA of at least 2.0. <input type="checkbox"/> At least half the credit for the major earned through graded coursework. <input type="checkbox"/> Total 120 credits.	
<b>NOTES:</b>		