

Degree Requirements Worksheet for the Degree of

BACHELOR OF SCIENCE IN COMPUTER SCIENCE

Name: _____

Expected Graduation Date: _____

Honors? _____

Freshman/Sophomore Requirements

A grade of C or better is required in *each* of these courses for graduation. (Courses in which the student has received *By Examination (BE)* credit or have transferred from another university are exempt from this rule.)

Course	Course Title _{Prerequisites}	Semester Offered	Semester	Grade
PHYS 116	Mechanics			
PHYS 117 CHEM 101/101L, 102/102L BIO 101/101L, 202/202L, or 205	Second Science Course			
MATH 231	Calculus of Functions of one Variable I			
MATH 232	Calculus of Functions of one Variable II			
MATH 233	Calculus of Functions of Several Variables			
MATH 381 OR 215	Discrete Mathematics _{MATH 232 (for MATH 381)}			
COMP 401	Foundation of Programming _{COMP 110 (often BE)}			
COMP 410	Data Structures _{COMP 401, MATH 381 (Co-requisite)}			
COMP 411	Computer Organization _{COMP 401}			

Honors Requirements

- Accumulate a 3.2 GPA overall and in Mathematics, Physics, and Computer Science courses (3.6 for consideration for Highest Honors).
- Enroll in 2 instances of COMP 396 Independent Study (6 hours) with a faculty member and complete and present an Honors Project. See the Director of Undergraduate Studies for details.

Junior/Senior Requirements

	Course	Course Title	Prerequisites	Semester Offered	Semester	Grade
	MATH 547	Linear Algebra	MATH 232, 233			
	STAT 435	Introduction to Probability	MATH 233			
	COMP 550	Algorithms and Analysis	COMP 410, 411 & MATH 381			
Theory Group At least one	MATH 566	Numerical Analysis	MATH 383 or 1547	Fall		
	COMP 455	Models of Languages & Computation	COMP 110 & MATH 381			
Systems Group At least one	COMP 431	Internet Protocols and Services	COMP 410, 411	Spring		
	COMP 530	Introduction to Operating Systems	COMP 410, 411	Fall		
	COMP 535	Introduction to Computer Security	COMP 410, 411	Spring		
	COMP 541	Digital Computer Design	COMP 410, 411	Spring		
Programming Languages Group At least one	COMP 520	Compilers	COMP 410, 411	Fall-Even		
	COMP 524	Programming Language Concepts	COMP 410	Spring		
	COMP 523	Software Engineering Laboratory	COMP 410, 411	Spring		
Applications Group At least one	COMP 426	Advanced WWW Programming	COMP 410	Fall		
	COMP 536	Enterprise Computing	COMP 426	Spring		
	COMP 521	Files and Databases	COMP 410, 411 & MATH 381	Spring		
	COMP 575	Introduction to Graphics	COMP 410, 411 & MATH 547	Fall		
	COMP 580	Enabling Technologies	COMP 410, 411	Spring		
	COMP 585	Serious Games	COMP 410, 411	Spring		
Interdisciplinary Group At most one	MATH 5xx	Any MATH course numbered greater than 520				
	OR xxx	One of Operations Research 415, 445, or 515				
	LING 540	Appropriate courses from Linguistics				
	INLS 509	Appropriate courses from Information Science				
	Other computing-related courses can be counted as an Interdisciplinary course with the (advance) approval of the Director of Undergraduate Studies.					

Notes:

- A minimum of six courses from the Theory, Systems, Programming Languages, Applications, and Interdisciplinary groups are required, subject to the constraints listed in the left-most column. Note that students are not required to take a course from the Interdisciplinary Group. However if they do take an Interdisciplinary Group course, at most one such course may be counted towards the Distribution requirement.
- A GPA of 2.0 or better in MATH 547, STAT 435, COMP 550 and the six Distribution courses, with no individual grade lower than a C-, is required for graduation. (An overall GPA of 2.0 or better is also required for graduation.)
- COMP 392, 393, 396, and 590 are electives and cannot normally be used to satisfy the Distribution Requirements.