BS: Computer Science (120 S.H. required to complete the degree)

Name:_____ Adviser:_____

General Education Requirements (44 S.H.)

COMMUNICATION SKILLS (3 S.H.)
Choose one of the following: COM 160 Public Speaking, COM 161 Decision Making in Groups, COM 162 Interpersonal Communication **or** COM 163 Introduction to Communication Skills

COM:	3	

WRITING INTENSIVE (W)
All students must complete at least one writing intensive course. W courses can be found in several disciplines. The credits will be counted in the discipline associated with the course. *NOTE: WRT101 does not satisfy the writing intensive requirement.*

Course:	Y/N	

FOREIGN LANGUAGE
All computer Science majors must complete a foreign language requirement. This may be done by completing a language at an elementary II level or above. Students who have completed three years of language in high school with at least a C average have satisfied this requirement. (For more info, click the link above.)

Foreign Language Requirement Met?	Y / N	

HUMANITIES (15 S.H.)
Including 3 of 6 categories: Fine and Applied Arts (*NOTE: only one studio course accepted toward minimum*), Literature, History, Humanistic Studies, Philosophy and Foreign Language. **NOTE:** *For foreign language courses you must complete Elementary II or higher before counting Elementary I as Humanities credit.*

Elective:	3	
Elective:	3	
Elective:	3	
Elective:	3	
Elective:	3	

SOCIAL AND BEHAVIORAL SCIENCES (12 S.H.)
Courses that satisfy this requirement can be found in Social Sciences (Anthropology, Economics, Political Science, Social Sciences, and Sociology), Non-Western Cultures, and Psychology. *You must select courses from at least 2 of the 3 main areas: Social Sciences, Psychology and Non-Western Cultures.*

Elective:	3	
Elective:	3	
Elective:	3	
Elective:	3	

NATURAL SCIENCES, MATHEMATICS & COMPUTER SCIENCE (12 S.H.)
Students must complete the courses specified for this category.

MAT 171 **or** MAT 181	4	
PHYS 110 **or** PHYS 120/CHEM 110/BIO 103 I	4	
PHYS 111 **or** PHYS 121/CHEM 111/BIO 104 II	4	

HEALTH PROMOTION AND EXERCISE SCIENCES (2 S.H.)

HPX 177 Fitness for Life — Lecture	1	
HPX 177 Fitness for Life — Activity	1	

*NOTE: To graduate, a student must have an overall 2.50 or better average in all major courses.

Major Requirements (57 S.H.)*

CS 170 Language C++ (spring semester)	4	
CS 221 Object Oriented Programming and Data Structures (fall semester)	4	
CS 205 Data Modeling & Database Design (fall)	4	
CS 215 Computer Architecture (fall semester)	4	
CS 240 Computer Organization & Software (spring)	4	
CS 305 Database Applications Engineering **or** CS 350 Object Oriented Software Engineering **or** CS 360 Distributed Applications Engineering	4	
CS 315 Design and Analysis of Algorithms (CS171 or CS 221 and either MAT 171 or MAT 181) (spring semester)	3	
CS 355 Programming Languages	4	
CS 450 Operating Systems	4	

MAT REQUIRED COURSES (10 S.H.)

MAT 120 Elementary Statistics	3	
CS/MAT 165 Introductory Discrete Mathematics	4	
CS/MAT 359 Intro to Theory of Computation	3	

COMPUTER SCIENCE ELECTIVES (12 S.H.): CS 235, CS 245, CS 250, CS 270, CS 297, CS 298, CS 299, CS 285, CS 305, CS 330, CS 340, CS 350, CS 351, CS 360, CS 399, CS 410, CS 444, CS 484, MA T182, MAT 272, MAT 356

CS Elective:		
CS Elective:		
CS Elective:		
CS Elective:		

FREE ELECTIVES (19 S.H.)

Elective: (CS 140 or CS 143)		
Elective:		
Elective:		
Elective:		
Elective:		
Elective:		
Elective:		

Free electives offer an opportunity to complete a minor, study a second language, study abroad, or participate in an internship. Make a plan.

NOTES

BS: Computer Science (120 S.H. required to complete the degree)

Four-Year Plan This is a sample sequence of courses. Other combinations are possible.

Pre-requisites are in parentheses; see catalog for details.
Class standing by credit: Freshman: 0-29 credits; Sophomore: 30-59 credits; Junior: 60-89 credits; Senior: 90+ credits

FIRST YEAR (29 S.H.)

SEMESTER 1 (14 S.H.)			SEMESTER 2 (14 S.H.)		
CS 140 (MAT100 or appropriate placement)	4		CS 170 Language C++ (CS 140 or CS 143)	4	
CS/MAT 165 Introductory Discrete Mathematics (MAT 133 or equivalent)	4		Mat 171 or Mat 181: Calculus I (MAT 133 or equivalent)	4	
Gen Ed Social & Behavioral Sciences Elective	3		Gen Ed: Social & Behavioral Sciences	3	
Gen Ed: Communication Skills	3		Gen Ed: Humanities (PHI 211 recommended)	3	

SECOND YEAR (29-31 S.H.)

SEMESTER 3 (15 S.H.)			SEMESTER 4 (14 S.H.)		
CS 221 Object Oriented Programming and Data Structures (CS170 & CS/MAT165)	4		CS 315 Algorithms (CS 221 and MAT 181 **or** MAT 171)	4	
CS 205 Data Modeling & Database Design (CS140 or 143 or 170)	4		CS 240 Computer Organization & Software (CS 221 and either MAT 181 or MAT 171)	4	
CS 215 Architecture (CS140 or 143 or 170)	4		Gen Ed: Humanities (Foreign Language if required)	3	
Gen Ed: Writing Intensive	3		MAT 120 Elementary Statistics	3	

THIRD YEAR (30-32 S.H.)

SEMESTER 5 (15 S.H.)			SEMESTER 6 (16 S.H.)		
Gen Ed: Humanities (PHI 227 recommended)	3		CS/MAT 359 Intro to Theory of Computation (MAT 165 and either MAT 171 or MAT 181)	3	
CS Elective	4		CS Elective	4	
CS Elective	4		Gen Ed: Social & Behavioral Sciences	3	
Gen Ed: Lab Science	4		Gen Ed: Lab Science	4	
			HPX 177 Fitness for Life (Lecture and Activity)	2	

FOURTH YEAR (34 S.H.)

SEMESTER 7 (17 S.H.)			SEMESTER 8 (16 S.H.)		
CS 450 Operating Systems (CS215, CS240, Senior Standing)	4		Gen Ed: Social and Behavioral Sciences	3	
CS 355 Programming Languages (CS 171 or 220, CS 240, CS/MAT 165. Recommended CS/MAT 359)	4		CS 350 Object Oriented Software Engineering (CS 205 and either 171 or CS 221) or CS 305 Database Applications. Engineering (CS 205 and either 171 or CS 221) or CS 360 Distributed Applications. Engineering	4	
Gen Ed: Social and Behavioral Sciences	3		Free Elective	3	
Free Elective	3		Free Elective	3	
Free Elective	3		Free Elective	3	

Initial math and writing placements will determine the number of free electives and the actual rotation of general education courses.
MAT 100 and WRT 101 are free electives but may be required as prerequisites for a general education math and writing intensive courses.