Computer Science
Artificial Intelligence Track
2011-2012 Program Sheet

Final version of program sheet due to the department no later than one month prior to the last quarter of senior year.

Follow all requirements as stated for the year of the program sheet used.

Name: _____   SU ID: _____

Phone: _____   Email: _____

Today's Date: _____   Month/Yr B.S. expected: _____

Mathematics and Science Requirement *(Delete courses and units not taken)*

Dept	Course	Title	✓ if Transfer	SoE Initials	Date	Unit	Grade
			Transfer/AP Approval by SoE				
Mathematics (26 units minimum)							
MATH	41	Calculus (see note 1)				5	
MATH	42	Calculus				5	
CS	103	Mathematical Foundations of Computing (see note 2)				5	
CS	109	Introduction to Probability for Computer Scientists (see note 3)				5	
Plus two electives (see note 4)							
				Mathematics Unit Total (26 units minimum)			
Science 11 units minimum)							
PHYS	41	Mechanics (or PHYS 21 or 61)				4	
PHYS	43	Electricity and Magnetism (or PHYS 23 or 63)				4	
		Elective (see note 5)				3 to 5	
				Science Unit Total (11 units minimum)			
				(37 units min. Math/Sci combined)			

Technology in Society Requirement *(1 course required; see UGHB Figure 3-3 for approved list; see note 14)*

Engineering Fundamentals *(13 units minimum)*

Dept	Course	Title	✓ if Transfer	SoE Initials	Date	Unit	Grade
CS	106	Programming Abstractions (B or X)				5	
ENGR	40	Introductory Electronics				5	
		Elective (see note 6; CS 106A, B or X not allowed)				3 to 5	
		Engineering Fundamentals Total (13 units minimum)					

NOTES

* All courses listed on this form must be taken for a letter grade (if offered) and can be included under only one category.

* This printed form must be signed by the departmental representative. Changes must be petitioned (see UGHB pg 27-29) and initialed in ink.

* Minimum Grade Point Average (GPA) for all courses in ENGR Fundamentals and CS Core, Depth, and Senior Project (combined) is 2.0.

* Transfer and AP credits in Math, Science, Fundamentals, & TIS must be approved by the SoE Dean's Office. Transfer credits in Computer Science Core, Depth and Senior Project must be approved by the Computer Science undergraduate program office.

(1) Math 19, 20, 21 may be taken instead of Math 41& 42 as long as at least 26 math units are taken. AP Calculus must be approved by SoE.

(2) Taking either CS 103X or CS 103A+B satisfies the CS 103 req't. Using CS 103X requires one add'l unit in depth (26 units min. electives).

(3) Students who complete STATS 116, MS&E 120, or CME 106 in Winter 2008-09 or earlier may count that course as satisfying the CS 109 requirement. These same courses taken in Spring 2008-09 or later cannot be used to satisfy the CS 109 requirement.

(4) Math electives: Math 51, 103, 104, 108, 109, 110, 113; CS 157, 205A; PHIL 151; CME 100, 102, 104. Completion of Math 52 & 53 will (together) count as one Math elective. Restrictions: Math 51+ Math 103, Math 103 + Math 113, or CS 157+ Phil 151 may not be used in combination to satisfy the Math electives req't. Students who have taken both Math 51& 52 may not count CME 100 as an elective.

(5) Any course of 3 or more units from the SoE Science List (Fig. 3-2 in the UGHB), PSYCH 30 or 55, or AP Chemistry may be used.

(6) One course required; may not be CS 106A, B or X. See Engineering Fundamentals Fig. 3-4 in the UGHB for approved list.

CS Artificial Intelligence Program Sheet (continued)

AI Track Core, Depth & Senior Project *(43 units min) No course may be listed twice; no double counting.*

Dept	Course	Title	✓ if Transfer	Dept Initials	Date	Unit	Grade
			Transfer/Deviation Approval by Dept				
Core (15 units minimum)							
CS	107	Computer Organization and Systems (see note 7)				5	
CS	110	Principles of Computer Systems (see note 8)				5	
CS	161	Design and Analysis of Algorithms (see note 9)				5	
Depth; Track and Electives (25 units and seven courses minimum)							
CS	221	AI: Principles and Techniques (Track Requirement A)				4	
CS		Track Requirement B (see note 10)				3 or 4	
CS		Track Requirement B (see note 10)				3 or 4	
		Track Requirement C (see note 11)				3 or 4	
		Elective (see note 12)				3 to 5	
		Elective (see note 12)				3 to 5	
		Elective (see note 12)				3 to 5	
		Optional Elective					
Senior Project (1 course required)							
CS		At least 3 units of 191, 191W, 194, 194W, 210B, 294 or 294W *(see note 14)*				3	
		Computer Science Core, Depth and Senior Project Total (43 units minimum)					

Program Approvals

Departmental

Printed Name: _____   Date: _____

Signature: _____

NOTES (continued from page 1)

(7) The name of CS 107 has changed. The previous CS 107 course titled *Programming Paradigms* also fulfills this requirement.

(8) Students who complete CS108 & either CS 140 or CS 143 by Wtr Qtr 08-09 or earlier may choose to count CS 108 as satisfying the CS 110 req't. In this case CS 108 may not count as an elective and one add'l unit of depth must be taken (26 units min for track + electives).

(9) Students who took CS161 for 4 units are required to complete one add'l unit in their depth (I.e., 26 units min. for track and elective courses).

(10) Track Requirement B: Any two of CS 223A, 224M, 224N, 226, 227, 228, 229, 231A

(11) Track Requirement C: One additional course from the Track Requirement B list, or from the following: CS 124, 205A, 222, 224S, 224U, 224W, 225A, 225B, 227B, 231B, 262, 276, 277, 279, 321, 326A, 327A, 329 (with advisor approval), 331, 374, 379 (with advisor approval); EE 263, 376A; ENGR 205, ENGR 209A; MS&E 251, 339, 351; STATS 315A, 315B

(12) Track Electives: At least three add'l courses selected from the Track Req't B list, C list, the General CS Electives list (see Note 13) or the following: CS 275, 278; EE 364A, 364B; ECON 286; MS&E 252, 352, 355; PHIL 152; PSYCH 202, 204A, 204B; STATS 200, 202, 205

(13) General CS Electives: CS 108, 124, 140, 142, 143, 144, 145, 147, 148, 149, 154, 155, 156, 157 (or PHIL 151), 164, 205A, 205B, 210A, 222, 223A, 224M, 224N, 224S, 224U, 224W, 225A, 225B, 226, 227, 227B, 228, 228T, 229, 231A, 240, 240H, 241, 242, 243, 244, 244B, 245, 246, 247, 248, 249A, 249B, 254, 255, 258, 261, 262, 263, 270, 271, 272, 273A, 274, 276, 277, 295; CME 108; EE 108B, 282

(14) The WIM requirement may be met by taking CS 181W as a Technology in Society course or through the Senior Project course (CS 191W, 194W, 210B, or 294W only).