# STANFORD UNIVERSITY SCHOOL OF ENGINEERING

# 2000-01

## **Computer Science**

Name:	Local Phone:	
Local Address:	E-mail:	

ID #:

					if	Transfer C	redit
Dept	No	Title	Total	Grade	Trans-	Course #/School	Approval
			Units		fer		Date Initial

Mathematics (25 units minimum required)

Math	41	Calculus (see note 1)	5			
Math	42	Calculus	5			
Stat	116	Probability (or ManSci/Eng 120)	5			
CS	103	Discrete Structures (X, or A and B)	4 or 6			

Plus any two of the following courses:

	<u> </u>	<i>y</i> 0					
Math	51	Calculus	5				
Math	103/113	Linear Algebra	3				
Math	109	Applied Modern Algebra	3				
CS	157	Logic (or Phil 160A)	4				
CS	205	Mathematics for Robotics and Vision	3				
		Mathematics Total	33	(25 un	its mini	mum)	

#### Science (12 units minimum required)

Phys	41	Mechanics		3				
Phys	43	Electricity		3				
Phys	45	Magentism		3				
		Elective (see note 2)						
		Scien	ce Total	9	(12 un	its mini	mum)	

Engineering Fundamentals (13 units minimum required)

CS	106	Programming Abstractions (B or X)	5				
Engr	40	Introductory Electronics	5				
		Elective (see note 3)					
		Fundamentals Total	10	(13 un	its mini	mum)	

Technology in Society (1 course required, 3-5 units, see list earlier in Handbook)

·	-	Totals	This Page 52	7		

#### **NOTES:**

- (1)Math 19, 20 and 21 may be taken instead of Math 41 and 42 as long as at least 25 math units are taken.
- (2)The Science elective may be any course of 3 or more units from the School of Engineering list plus Psych 30 or 40; AP Biology or Chemistry also meets this requirement. Either of the physics sequences 61/63 or 21/23 may be substituted for 41/43/45 as long as at least 12 science units are taken.
- One course required, 3 to 5 units. See list earlier in Handbook. (3)
- (4) The two systems electives must be chosen from the following set: CS140, 143, 242 and 244A. The systems electives must include a course with a large software project, currently satisfied by either CS140 or 143.
- The applications elective must be chosen from the following set: CS145, 147, 148, 223A, 223B or 248. (5)
- Students who take CS103A/B must complete two electives; students who opt for CS103X must complete three. (6) The list of approved electives is reviewed annually by the Undergraduate Program Committee. The current list consists of CS 110, 137, 140, 143, 145, 147, 148 or 248, 157, 205, 206, 222, 223A, 223B, 224M, 224N, 225A, 225B, 226, 227, 228, 229, 240, 241, 242, 243, 244A, 245, 247A, 247B, 249, 255, 256, 257, 258, 261, 270A,. 270B, 271, 272, 274 and EE282

Date B.S. expected:

## **Computer Science**

					if	Transfer C	redit
Dept	No	Title	Total	Grade	Trans-	Course #/School	Approval
			Units		fer		Date Initial

Computer Science Depth (46 units minimum required)

#### Programming (2 courses)

CS	107	Programming Paradigms	5			
CS	108	Object-Oriented Systems Design	4			

Theory (2 courses)

	(					
CS	154	Automata and Complexity Theory	4			
CS	161	Design and Analysis of Algorithms	4			

#### Systems (3 courses-see note 4 on the previous page)

EE	182	Computer Organization	4			

#### Applications (2 courses-see note 5 on the previous page)

CS	Artificial Intelligence (CS 121 or 221)	3			

### Project (1 course)

CS At logst 2 units of 101 101W or 104		· · · · · · · · · · · · · · · · · · ·			
CS At least 5 units of 191, 191 w of 194	CS	At least 3 units of 191, 191W or 194			

### Restricted Electives (2-3 courses; see note 6 on the previous page)

Date:

Date:

Totals from this page24Totals from previous page52Program totals76

Departmental Approval

Printed Name:

Signature:

School of Engineering Approval

Printed Name: Signature:

GENERAL NOTES

- CS 191W, 194 or 201 will fulfill the "Writing in the Major" requirement for students entering Fall 1996 or later.
- This form is available as an Excel file at ughb.stanford.edu. The printed form must be signed by the advisor and, if required, by the department representative. Changes must be initialed in ink.
- Transfer credits in Math, Science, Fundamentals, and TIS must be approved by the Senior Associate Dean for Student Affairs in Terman 201. Transfer credits in Computer Science Depth must be approved by the departmental representative.
- Courses may be listed under only one category.
- All courses listed on this form must be taken for a letter grade if offered by the instructor.
- Minimum Grade Point Average (GPA) for all courses in Engineering Fundamentals and Computer Science Depth (combined) is 2.0.