STANFORD UNIVERSITY
SCHOOL OF ENGINEERING

2004-05
Computer Systems Engineering
Robotics and Mechatronics Specialization

Name: _____ Local Phone: _____

Local Address: _____ E-mail: _____

_____ Date B.S. expected: _____

ID #: _____

Dept	No	Title	Total Units	Grade	√ if Trans-fer	Transfer Credit: Course #/School	Approval: Date	Approval: Initial
Mathematics (23 units minimum required)								
MATH	41	Calculus	5					
MATH	42	Calculus	5					
MATH	51	Calculus	5					
MATH	52 *or* 53	Calculus	5					
STAT	116	Probability(or MS&E 120 or CME 106)	3 to 5					
		Mathematics Total		*(23 units minimum)*				
Science (12 units minimum required)								
PHYSICS	51	Light and Heat	4					
PHYSICS	53	Mechanics	4					
PHYSICS	55	Electricity and Magnetism	4					
		Science Total		*(12 units minimum)*				
Engineering Fundamentals (13 units minimum required)								
CS	106	Programming Abstract (A and B, or X)	5					
ENGR	40	Introductory Electronics	5					
		Elective *(see note 1)*						
		Fundamentals Total		*(13 units minimum)*				
Technology in Society (1 course required, 3-5 units, see list in the School of Engineering Undergraduate Handbook)								
Totals This Page								

NOTES:

1 One course required, 3 to 5 units. See Engineering Fundamentals list in the SoE Undergraduate Handbook.

2 Independent study projects (CS191 or 191W) require faculty sponsorship and must be approved, in advance, by the advisor, faculty sponsor, and the CSE program advisor (Bob Plummer or Patrick Young). A signed approval form, along with a brief description of the proposed project, should be filed with the department representative in Gates room 182 the quarter before work on the project is begun.

3 Students opting to take CS103X instead of CS103A and B must complete the higher number of courses.

Computer Systems Engineering

Dept	No	Title	Total Units	Grade	√ if Trans-fer?	Transfer Credit: Course #/School	Transfer Credit: Approval Date	Transfer Credit: Approval Initial

Computer Systems Engineering Depth (53 units minimum required)

Core(32 units minimum)

CS	103	Discrete Structures (X, or A and B)	4 or 6					
CS	107	Programming Paradigms	5					
CS	108	Object-Oriented Systems Design	4					
EE	102A	Signals and Systems I	4					
EE	102B	Signals and Systems II	4					
EE	108A	Digital Systems I	4					
EE	108B	Digital Systems II	3 or 4					
Senior Project		CS191, 191W, 194, 294, or 294W *(see note 2 on previous page)*	3					
		Computer Systems Engineering Core Total		*(32 units minimum)*				

Depth (19 units minimum)

CS	205	Mathematical Methods	3					
CS	223A	Introduction to Robotics	3					
ME	210	Intro to Mechatronics (or EE118)	4					
ENGR	105	Feedback Control Design	3					
Plus two to three of the following (see note 3 on previous page)								
CS	223B	Introduction to Computer Vision	3					
CS	225A	Experimental Robotics	3					
CS	225B	Robot Programming Laboratory	4					
CS	277	Experimental Haptics	3					
AA	278	Optimal Control and Hybrid Systems	3					
ENGR	205	Intro to Control Design Techniques	3					
ENGR	206	Control System Design and Simulation	4					
ENGR	210B	Advanced Computation for Control	3					
		Computer Systems Engineering Depth Total		*(19 units minimum)*				

Totals from this page	
Totals from previous page	
Program totals	

Departmental Approval

Printed Name: _____ Date: _____

Signature: _____

School of Engineering Approval

Printed Name: _____ Date: _____

Signature: _____

GENERAL NOTES

- CS191, 194, 201 or 294W will fulfill the "Writing in the Major" requirement for Freshmen and transfer 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 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 department 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.

REV: 8/04