# DEPARTMENT OF COMPUTER SCIENCE
## MSCS Program Sheet (2004-05)
## Systems Specialization

Name: _____ Adviser: _____ Date: _____

Student ID#: _____ Email:_____ Proposed date for
degree conferral: _____HCP?_____Coterm?_____

## GENERAL INSTRUCTIONS

Before the end of your first quarter, you should complete the following steps. Detailed instructions are included in the **Guide to the MSCS Program Sheet** in your orientation packet (an online version is available at cs.stanford.edu/Degrees/mscs/programsheets/):

- Complete this program sheet by filling in the number, name and units of each course you intend to use for your degree.
- Attach a course schedule showing the year and quarter in which you intend to take each course in your program sheet.
- Meet with your adviser and secure the necessary signatures on the program sheet and any waiver documents checklist forms.
- Submit the originals to the MS Program Administrator, Claire Stager, in Gates 182.

## BREADTH REQUIREMENT

You must satisfy the requirements listed in each of the following areas; all courses taken elsewhere must be approved by your adviser on a waiver documents checklist form.
Do not enter anything in the "Units" column for courses taken elsewhere.
Note: If you are amending an old program sheet, enter "**on file**" in the approval column for courses that have already been approved.

### Area A: Mathematical and theoretical foundations

| Required: | Equivalent elsewhere (course number/title/institution) | Approval | Grade | Units |
|---|---|---|---|---|
| Statistics(Stat116 or MS&E220 or CME106) | | | | |
| Automata and Complexity (CS154) | | | | |
| Algorithmic Analysis (CS161) | | | | |
| **Choose one of:** | | | | |
| Numerical Analysis (CS137 or CS237A) | | | | |
| Logic (CS157, CS257, CS258, or Phil 251) | | | | |
| Mathematical Methods (CS205) | | | | |

### Area B: Computer systems

| Required: | Equivalent elsewhere (course number/title/institution) | Approval | Grade | Units |
|---|---|---|---|---|
| Computer Architecture (EE282) | | | | |
| **Choose two of:** | | | | |
| Operating Systems (CS140) | | | | |
| Compilers (CS143) | | | | |
| Computer Networks (CS244A or EE284) | | | | |

### Area C: AI and applications

| Choose two, including one at 200 level | Equivalent elsewhere (course number/title/institution) | Approval | Grade | Units |
|---|---|---|---|---|
| AI (CS121 or CS221) | | | | |
| Databases (CS145 or CS245) | | | | |
| Graphics (CS148 or CS248) | | | | |

**TOTAL UNITS USED TO SATISFY BREADTH REQUIREMENT (AREAS A, B, AND C)** [_____]

**Note: This total may not exceed 21 units.**

## SEMINARS

You must take at least one 500-level seminar. No more than three units of seminars or 1-2 unit courses may be counted towards the MS degree:

| Course number | Title | Grade | Units |
|---|---|---|---|
| | | | |
| | | | |
| | | | |

**TOTAL SEMINAR UNITS APPLIED TO MSCS** [_____]

## DEPTH UNITS FOR THE SYSTEMS SPECIALIZATION

The courses you submit for your specialization must meet the following requirements:

(a) Each of the following courses:

   ___ CS240       ___ CS242

(b) At least three of the following:

| | | | |
|---|---|---|---|
| ___ CS243 | ___ CS245 | ___ CS348B | ___ EE275 |
| ___ CS244A | ___ CS248 | ___ EE271 | |

(c) At least six more units from category (b) and the following courses:

| | | | |
|---|---|---|---|
| ___ CS194 | ___ CS270 | ___ CS345 | ___ EE384A |
| ___ CS222 | ___ CS271 | ___ CS346 | ___ EE384B |
| ___ CS241 | ___ CS272 | ___ CS347 | ___ EE384C |
| ___ CS244B | ___ CS276A | ___ CS348A | ___ EE384M |
| ___ CS244C | ___ CS276B | ___ CS349 | ___ EE384S |
| ___ CS246 | ___ CS295 | ___ CS374 | ___ EE384X |
| ___ CS249 | ___ CS315A | ___ CS448 | ___ EE384Y |
| ___ CS255 | ___ CS342 | ___ EE281 | ___ EE482A |
| ___ CS259 | ___ CS343 | ___ EE318 | ___ EE488 |
| ___ CS262 | ___ CS344 | ___ EE319 | |

**Adviser Notes**

Any deviations from the stated requirements must be noted and approved by your adviser in the Adviser Notes box provided. Enter course information for the courses you've selected in the table below.  All specialization courses must be taken for a letter grade.

| Course number | Title | Grade | Units |
|---|---|---|---|
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| | | | |
| | **TOTAL SPECIALIZATION UNITS APPLIED TO MSCS (must total at least 21 units)** | | |

### ELECTIVES

List here any additional courses used to complete the 45-unit requirement for the MSCS degree.

| Course number | Title | Grade | Units |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | **TOTAL ELECTIVE UNITS APPLIED TO MSCS** | | |

**TOTAL UNITS APPLIED TO MSCS** [ ]

### ADDITIONAL REQUIREMENTS

- All courses submitted for the MSCS degree must be numbered 100 or greater.
- At most 21 units of introductory courses (CS100-109) or breadth requirements courses may be counted toward your 45 units.
- At least 36 units submitted for the MSCS degree, including all courses taken for your specialization, must be taken for a letter grade.
- The average grade in the courses submitted for the MSCS must be at least a B (3.0 in Stanford's GPA scale).
- Units previously applied toward BS requirements may not also be counted toward the MSCS.
- You must complete at least 45 graduate units at Stanford before receiving the MSCS degree.

Adviser's signature: _____Date: _____

Department approval (Claire Stager): _____Date: _____

FOR DEPARTMENT USE:      UNITS _____      CR/NC_____      GPA _____