

# DEPARTMENT OF COMPUTER SCIENCE

## MSCS Program Sheet (2000-01)

### 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):

- 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.
- Make copies of the completed program sheet and course schedule and return the originals to 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. 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 (Stat 116 or Man Sci & Eng 220) |  |          |       |       |
| Automata and Complexity (CS154)            |  |          |       |       |
| Algorithmic Analysis (CS161)               |  |          |       |       |

**Choose one of:**

|   |  |  |  |  |
|---|--|--|--|--|
| Numerical analysis (CS137 or CS237A)      |  |  |  |  |
| Logic (CS157, CS257, CS258, or Phil 160A) |  |  |  |  |

**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.

**TRANSFER CREDITS**

If you have taken courses as a graduate student, after the conferral of the bachelor's degree, you may ask to transfer up to nine units of coursework to the MSCS requirements. Adviser approval is required. Attach a transcript showing the courses and grades earned.

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

**TOTAL TRANSFER UNITS APPLIED TO MSCS**

**SEMINARS**

You must take at least one and no more than three units of 500-level seminar:

| 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            \_\_\_ EE382

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

\_\_\_ CS194            \_\_\_ CS341            \_\_\_ CS349            \_\_\_ EE384B  
 \_\_\_ CS241            \_\_\_ CS342            \_\_\_ CS448            \_\_\_ EE482A  
 \_\_\_ CS244B            \_\_\_ CS343            \_\_\_ EE183            \_\_\_ EE482B  
 \_\_\_ CS244C            \_\_\_ CS344            \_\_\_ EE272            \_\_\_ EE487  
 \_\_\_ CS248V            \_\_\_ CS345            \_\_\_ EE281            \_\_\_ EE488  
 \_\_\_ CS249            \_\_\_ CS346            \_\_\_ EE318            \_\_\_ EE489  
 \_\_\_ CS255            \_\_\_ CS347            \_\_\_ EE319            \_\_\_ Psych267  
 \_\_\_ CS315A            \_\_\_ CS348A            \_\_\_ EE374  
 \_\_\_ CS315B            \_\_\_ CS348C            \_\_\_ EE384A

|                      |
|----------------------|
| <b>Adviser Notes</b> |
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Any deviations from the stated requirements must be noted and approved by your adviser in the box provided. All specialization courses must be taken for a letter grade.

| Course number                                     | Title | Grade | Units |
|---|-------|-------|-------|
|   |       |       |       |
|   |       |       |       |
|   |       |       |       |
|   |       |       |       |
|   |       |       |       |
|   |       |       |       |
|   |       |       |       |
|   |       |       |       |
|   |       |       |       |
| <b>TOTAL SPECIALIZATION UNITS APPLIED TO MSCS</b> |       |       |       |

**ELECTIVES**

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

| Course number                               | Title | Grade | Units |
|---|-------|-------|-------|
|   |       |       |       |
|   |       |       |       |
|   |       |       |       |
| <b>TOTAL ELECTIVE UNITS APPLIED TO MSCS</b> |       |       |       |

**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 the equivalent of three full-tuition quarters at Stanford before receiving the MSCS degree.

Adviser's signature: \_\_\_\_\_ Date: \_\_\_\_\_

Department approval (Claire Stager): \_\_\_\_\_ Date: \_\_\_\_\_

FOR DEPARTMENT USE:            UNITS \_\_\_\_\_            CR/NC \_\_\_\_\_            GPA \_\_\_\_\_            RESIDENCY \_\_\_\_\_