

DEPARTMENT OF COMPUTER SCIENCE

MSCS Program Sheet (2000-2001)

Theoretical Computer Science 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 (EE182 or 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 THEORETICAL COMPUTER SCIENCE SPECIALIZATION

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

(a) Each of the following courses:

- ___ CS256 ___ CS258 ___ CS261 (CS361A, CS361B or CS365
may be used as substitutes for CS261)

(b) At least twelve more units selected from the following. Courses with * notation require permission of Prof. John Mitchell:

- ___ CS228 ___ CS353 ___ CS359* ___ CS367B
 ___ CS255 ___ CS355 ___ CS361A ___ CS368
 ___ CS345 ___ CS356 ___ CS361B ___ CS369*
 ___ CS351 ___ CS357 ___ CS365 ___ Man Sci 310
 ___ CS352 ___ CS358 ___ CS367A

Adviser Notes

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
TOTAL SPECIALIZATION UNITS APPLIED TO MSCS			

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 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 _____