DEPARTMENT OF COMPUTER SCIENCE
MSCS Program Sheet (2016-17)
Systems Specialization: Dual Depth

Name: ___________________________ Adviser: ___________________________ Date: __________
Student ID#: ___________________________ Email: ___________________________ Proposed date for degree conferral: ___________ HCP? _____ Coterm? _____

GENERAL INSTRUCTIONS
Before the end of your first quarter, complete this program sheet by filling in the number, name and units of each course you intend to take for your degree. Meet with your adviser to secure the necessary signature; submit original to the MS Program Administrator in Gates 182. Program sheets, as well as foundation course waiver forms, may be submitted electronically on the Gates Information Network at http://gin.stanford.edu/ (click on ‘Dashboard’). See http://cs.stanford.edu/degrees/mscs/programsheets/psguide1617.pdf for detailed instructions.

FOUNDATIONS 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 foundation course waiver 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.

Required: Equivalent elsewhere (course numbers/titles/institution) Approval Grade Units
Logic, Automata & Complexity (CS103) ___________________________ ___________________________ ___________________________ ___________________________
Probability (CS109, Stat116, CME106, or MS&E220) ___________________________ ___________________________ ___________________________ ___________________________
Algorithmic Analysis (CS161) ___________________________ ___________________________ ___________________________ ___________________________
Computer Organ & Sys (CS107 or 107E) ___________________________ ___________________________ ___________________________ ___________________________
Principles of Computer Systems (CS110) ___________________________ ___________________________ ___________________________ ___________________________

TOTAL UNITS USED TO SATISFY FOUNDATIONS REQUIREMENT (May not exceed 10 units.) __________

SIGNIFICANT IMPLEMENTATION REQUIREMENT
At least one course in your MS program should be designated as satisfying the "Significant Implementation Requirement". Note that this course will also be used to satisfy some other other some other requirement (i.e., Depth, or Elective). This requirement ensures that you have taken part in some form of substantial software development as part of the MSCS program. Letter grade only.

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<tr>
<th>Course Number:</th>
<th>Title:</th>
<th>Grade</th>
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Courses that may be used to satisfy the significant implementation requirement include: CS 140, 143, 144, 145, 148, 210B, 221, 227B, 243, 248, 341, and 346 (any deviations from this list must be approved by the Associate Chair for Education). Courses meeting the Significant Implementation Requirement must be taken at Stanford. Students who previously took at least two of these courses at Stanford as undergraduates may request a waiver of this requirement.

UNITS FOR THE SYSTEMS DUAL DEPTH SPECIALIZATION
The dual depth specialization in Systems requires that you fulfill the requirements for a Systems primary depth (21 units), and a secondary depth in an area other than Systems (5 courses). The courses you submit for your primary depth must meet the following requirements. Any deviations from the stated requirements must be noted and approved by your adviser in the Adviser Notes box provided (maximum of one adviser-approved deviation allowed). Courses taken for your Stanford undergraduate degree do not need to be repeated. Enter course selection in the table on the next page:

a) CS 140**, 144**, 240 (students with equivalent course work may waive ** flagged courses with adviser approval)
b) At least four of: CS 242, 243, 244, 245, 248, 348B; Elect. Engr. 271, 282
c) A total of at least 21 units from categories (a), (b) and the following: CS 240E, 240H, 241, 244B, 244E, 246, 249A, 251, 255, 262, 270, 272, 276, 294S*, 315B, 316, 340, 341, 343, any 344 (A/B/C… suffix), 345, 346, 347, 348A, 348C, 349, 374, any 448 (A/B/C… suffix), 393*, 395*, 399*, EE 267, 273, 382C, 384A, 384B, 384C, 384S (courses with * notation require approval of MS adviser)

Adviser Notes
<table>
<thead>
<tr>
<th>Course number</th>
<th>Title (Depth courses must be taken for at least 3 units.)</th>
<th>Grade</th>
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TOTAL PRIMARY DEPTH UNITS APPLIED TO MSCS (must total at least 21 units)  

Letter grades only.

SECONDARY DEPTH COURSES (5 COURSES MINIMUM)  
SELECT ONE OF THE FOLLOWING SECONDARY DEPTH AREAS (CIRCLE ONE):  
AI: ARTIFICIAL INTELLIGENCE  
BC: BIOCOMPUTATION  
CN: COMPUTER/NETWORK SECURITY  
HC: HUMAN-COMPUTER INTERACTION  
IT: INFO MANAGEMENT & ANALYTICS  
MC: MOBILE & INTERNET COMP  
RW: REAL-WORLD COMPUTING  
ST: SOFTWARE THEORY  
TC: THEORETICAL CS

Go to [http://cs.stanford.edu/degrees/mscs/programsheets/](http://cs.stanford.edu/degrees/mscs/programsheets/) and click on the ‘Secondary Depth Requirements’ link. Enter the numbers, titles and units for your Secondary Depth courses in the table below. **Five courses minimum**; no deviations or double-counting of units allowed:

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TOTAL SECONDARY DEPTH UNITS APPLIED TO MSCS (must total at least 15 units)  

Letter grades only.

ELECTIVES

List here any additional courses used to complete the 45-unit requirement for the MSCS degree. You may count up to a maximum of **three units** of 500-level CS seminars, CS300, EE380, EE385A, or other 1-2 unit seminars offered in the School of Engineering, as Electives toward the MS degree. Electives must be technical courses numbered above 100, related to the degree program, and approved by the adviser and MS program administrator. CS courses numbered above 110, excluding CS196 or CS198, are pre-approved as MS electives.

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TOTAL ELECTIVE UNITS APPLIED TO MSCS

ADDITIONAL REQUIREMENTS

• All courses submitted for the MSCS degree must be numbered 100 or greater.
• At most 10 units of Foundations requirement courses may be counted toward your 45 units.
• At most 3 units of CS/EE/Engineering seminars may be counted toward your 45 units.
• At least 36 units submitted for the MSCS degree, including all courses taken for primary and secondary depth, must be taken 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_____