MS CS Secondary Depth Requirements

1. Artificial Intelligence
   Students with a secondary concentration in AI take five courses satisfying the area (a) and (b) requirements below. Students waiving out of CS221 may take an additional course in either area (b) or (c):
   a) CS 221**
   b) At least four of: 223A, 224M, 224N, 224S, 224U, 224W, 228, 229, 231A

2. Biocomputation
   Students with a secondary concentration in Biocomputation need to take five courses. Three of those courses must come from area (a) and the remaining two courses may come from either area (a) or (b):
   a) At least three of: CS 262, 270, 272, 173 or 273A, 274, 278, 279
   b) Sufficient depth units from category (a) and the following: CS 228, 229, 229A, 245, 246, 261, 264, 265, 268, 275, 277, 341, 345, 346, 362, 374, 393*, 395*, 399*; AppPhys 293; BIOC 218; BIOE 332; Genetics 203, 211; SBIO 228

3. Computer and Network Security
   Students with a secondary concentration in Computer and Network Security need to take five courses. Those courses must satisfy the area (a) requirement and additional courses from area (b) should be taken if any area (a) requirements are waived:
   a) All of: CS 140**, 144**, 155, 244, 255
   b) Sufficient depth units from category (a) and the following: CS 142, 240, 244B, 244C, 259, 261, 265, 340, 344, 355

4. Human-Computer Interaction
   Students with a secondary concentration in Human-Computer Interaction need to take five courses as follows: one course each from areas (a), (d), (e), and (f), and then one course from either area (b) or (c). Students waiving out of the area (a) requirement should take one additional course from areas (b) through (g):
   a) CS 147**
   b) One of: CS 247, 294H
   c) One of: CS 376, 448B
   d) One of: CS 124, 142, 148
   e) One of: Comm 206, 268; Psych 110, 252, 254; Soc 257
   f) One of: ArtStudio 160; ME 203, 216A, 277, 277; any d.school course
   g) One or more courses from areas (b) through (f), or the following: Art Studio 260; CS 224N, 224W, 229, 229A, 242, 246, 248, 295, 341, 393*, 395*, 399*, 402, 476A, or any d.school class listed at http://dschool.stanford.edu, or any HCI class listed at http://hci.stanford.edu/courses/. Such courses must be numbered 100 or above and be taken for at least 3 units to count for this requirement.

5. Information Management and Analytics
   Students with a secondary concentration in Information Management and Analytics need to take five courses satisfying the area (a) and (b) requirements below. Students waiving out of the area (a) requirement should take an additional course from either area (b) or (c) in its place:
   a) CS 145**
   b) At least four of: CS 224N, 224W, 229, 245, 246, 276, 345, 346, 347
   c) Sufficient additional units selected from category (b) and the following: CS 144, 224S, 224U, 228, 228T, 229A, 229T, 231A, 240, 242, 243, 244, 244B, 244C, 249A, 249B, 255, 256, 270, 271, 272, 173 or 273A, 274, 275, 279, 315A or 316, 341, 344, 346, 362, 364B, 374, 393*, 395*, 399*; Stat. 315A, 315B
6. Mobile and Internet Computing

Students with a secondary concentration in Mobile and Internet Computing need to take five courses satisfying the area (a) through (d) requirements below. Students waiving out of an area (a) requirement should take an additional course from areas (a) through (c):

a) Two of: CS 140**, 144, 244
b) One of: CS 142, 147, 247

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