

# Advising Sheet for CS Majors

Last Update: October 2014

*Please fill out this form completely prior to your advising appointment. Taken and current courses should be in pen. Proposed courses should be in pencil.*

Name: \_\_\_\_\_

Current Year: FR SO JR SR

Sem. Of Grad: F/S \_\_\_\_\_

**CAS Requirements** Indicate all courses taken or current and circle (filling in when not explicitly listed) the courses you propose to take next semester.

WR 100: \_\_\_\_\_ WR 150: \_\_\_\_\_ (Check, circle, or leave blank)

Foreign Language (4<sup>th</sup> sem. level): \_\_\_\_\_ (or bilingual, SAT, or AP)

Divisional Studies (see undergraduate bulletin for exact requirements):

HU: \_\_\_\_\_ HU: \_\_\_\_\_ SS: \_\_\_\_\_ SS: \_\_\_\_\_

NS (lab): \_\_\_\_\_ NS: \_\_\_\_\_

**CS Concentration Requirements** Indicate all courses taken or current and circle (filling in when not explicitly listed) the courses you propose to take next semester. For completed courses, indicate your grade.

MA 123 or equiv. experience: \_\_\_\_\_

Group A: **Take all of the following courses.**

CS 111: \_\_\_\_\_ CS 112: \_\_\_\_\_ CS 131: \_\_\_\_\_

CS 210: \_\_\_\_\_ CS 330: \_\_\_\_\_

Group B: **Take at least two.**

CS 132 or MA 242: \_\_\_\_\_ CS 235 or MA 294: \_\_\_\_\_ CS 237: \_\_\_\_\_

Group C: **Take at least two.**

CS 320: \_\_\_\_\_ CS 332: \_\_\_\_\_ CS 350: \_\_\_\_\_

Group D: **Take at least four at the 400- and 500-levels, making sure to take at least 15 courses across Groups A, B, C, and D.**

CS \_\_\_\_\_: \_\_\_\_\_ CS \_\_\_\_\_: \_\_\_\_\_ CS \_\_\_\_\_: \_\_\_\_\_

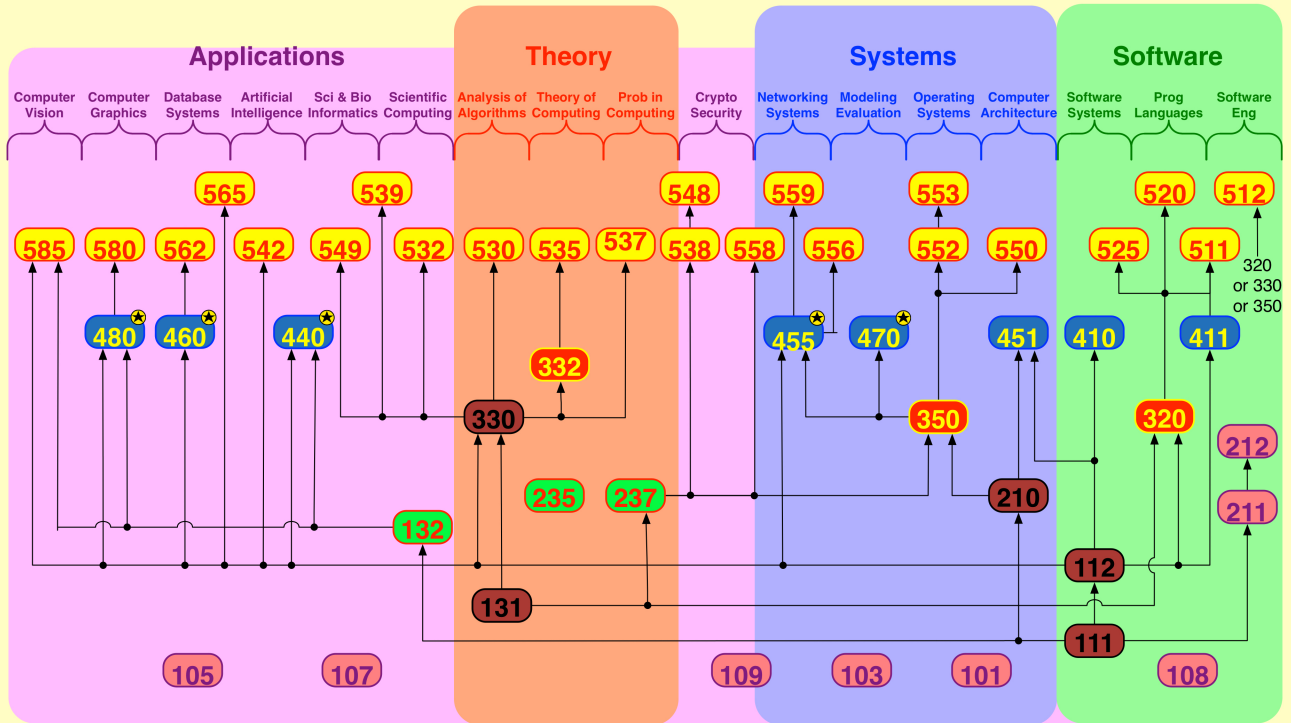
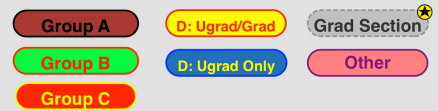
CS \_\_\_\_\_: \_\_\_\_\_ CS \_\_\_\_\_: \_\_\_\_\_ CS \_\_\_\_\_: \_\_\_\_\_

**Proposed Schedule** List your proposed schedule for next semester, with potential alternates. Consider taking CS courses in addition to the CS concentration requirements, but fulfill the requirements first.

(1) \_\_\_\_\_ (2) \_\_\_\_\_ (3) \_\_\_\_\_ (4) \_\_\_\_\_

Alternates: (5) \_\_\_\_\_ (6) \_\_\_\_\_

# BU Computer Science Course Map and Structure



### Degree Requirements:

Major Concentration in CS = 15 Total: all 5 in Group A, at least 2 in Group B, at least 2 in Group C, rest from Group D.  
 Minor in CS = 2 (or less) Background + 3 (or more) Required or Elective + 1 (or less) Other = 6 Total  
 Masters in CS = 1 (or more) Grad Electives in each of Theory, Systems, Software, and Applied Areas = 8 Total

### Notes:

- (1) Please consult CAS/GRS Bulletins for detailed, authoritative degree requirements
- (2) Co-requisite and recommended prerequisite courses are not shown
- (3) Please consult your advisor for non-CS background courses and non-CS prerequisites

111 Introduction to CS I  
 112 Introduction to CS II  
 131 Combinatoric Structures  
 132 Geometric Algorithms  
 210 Computer Systems  
 211 Algebraic Algorithms  
 212 Physical Computing  
 235 Algebraic Algorithms  
 237 Probability in Computing  
 320 Concepts of Programming Languages  
 330 Introduction to Analysis of Algorithms  
 332 Elements of Theory of Computation  
 350 Fundamentals of Computing Systems  
 410 Advanced Software Systems  
 411 Software Engineering  
 440 Introduction to Artificial Intelligence  
 450 Computer Architecture  
 460 Introduction to Database Systems  
 480 Introduction to Computer Graphics  
 511 Object-Oriented Software Principles  
 512 Formal Methods for High-Assurance Computer System Design and Analysis

520 Programming Languages  
 525 Compiler Design Theory  
 530 Analysis of Algorithms  
 535 Complexity Theory  
 537 Probability in Computing  
 538 Fundamentals of Cryptology  
 539 Methods of Scientific Computing  
 542 Machine Learning  
 548 Advanced Cryptography  
 549 Pattern Matching and Detection with Applications in Biological Sequence Analysis  
 552 Introduction to Operating Systems  
 553 Operating Systems II  
 556 Advanced Computer Networks  
 558 Computer Network Security  
 559 Algorithmic Aspects of Computer Networks  
 562 Advanced Database Applications  
 565 Data Mining  
 580 Advanced Computer Graphics  
 585 Image and Video Computing