Curriculum Flow Chart for Math and Computer Science

Semester 1

CS 124   CS 100   MATH 220 or 221   LAS 101

Semester 2

CS 128   CS 173   MATH 231

Semester 3

CS 225 ⟷ CS 222   MATH 241

Semester 4

CS 233   CS 240   MATH 347

OR

Semester 5

CS 241   CS tech*   MATH 257, 415, or 416   Group II

Semester 6

CS 374   CS tech*   Group I   CS 357

Semesters 7 and 8

CS 421   Group V   Group III   Group IV   CS 450   Add'l Group
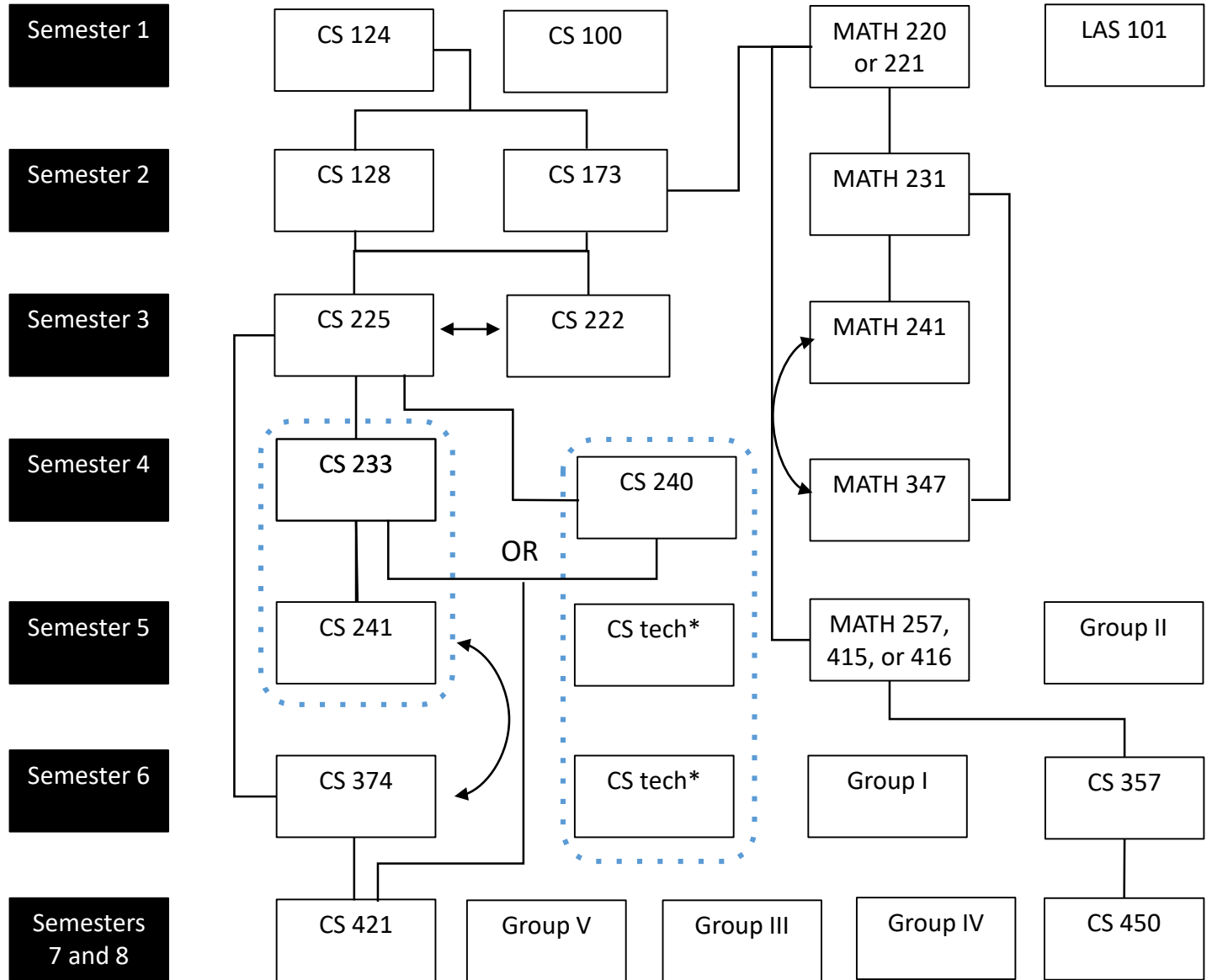
Follow the College of LAS General Education & Language requirements

*A **line** from one course to another indicates that the first course is a prerequisite for the second, concurrent enrollment acceptable where there are **straight arrows, curved arrows** indicate courses can be taken in either order but should not be taken together.*

Group I: CS 361, MATH 461, OR STAT 400/MATH 463

Group II: MATH 412, MATH/CS 413, MATH 417, or MATH 427

Group III: MATH 441, MATH 446, or MATH 484

Group IV: MATH 444, or MATH 447, or MATH 424

Group V: MATH 414, CS/MATH 473, CS/MATH 475, CS 476, CS 477

See course explorer for Group course prerequisites: https://courses.illinois.edu/

*CS tech must be 400-level CS above CS 403, excluding CS 421 and CS 491.

Curriculum Plan: Math and Computer Science Beginning Fall 2021

_____ LAS 101/LAS 102 (int. students)

General Education Requirements

_____ Composition I

_____ Advanced Composition

_____ 4th Level Language (LOTE)

_____ 3hrs Humanities and the Arts

_____ 3hrs Humanities and the Arts

_____ 3hrs Social Behavioral Science

_____ 3hrs Social Behavioral Science

_____ 3hrs Natural Sciences & Technology

_____ 3hrs Natural Sciences & Technology

Cultural Studies

_____ Western Culture

_____ Non-Western Culture

_____ US Minority Culture

Math Courses

_____ MATH 220 5hrs, Calc or

     MATH 221 4hrs, Calc I

_____ MATH 231 3hrs, Calc II

_____ MATH 241 4hrs, Calc III

_____ MATH 347 3hrs, Fund. Math or

     MATH 348 3hrs, Fund Math (ACP)

_____ MATH 257 3hrs, Lin Alg w/Comp. Apps. (preferred) or

     MATH 415 3hrs, Linear Algebra or

     MATH 416 3hrs, Abstract Linear Algebra

Computer Science Courses

_____ CS 100 1hr, Fresh. Orientation *(Recommended)*

_____ CS 124 3hrs, Intro to Computer Science I

_____ CS 128* 3hrs, Intro to Computer Science II

_____ CS 173** 3hrs, Discrete Structures

_____ CS 222* 1hr, Software Design Lab

_____ CS 225** 4hrs, Data Structures

_____ **CS 240** 3hrs, Intro to Computer Systems**

_____ **CS tech*** 3hrs 400-level CS Elective**

_____ **CS tech*** 3hrs 400-level CS Elective**

OR

_____ *CS 233** 4hrs, Computer Architecture*

_____ *CS 241** 4hrs, Systems Programming*

_____ CS 357** 3hrs, Numerical Methods

_____ CS 374** 4hrs, Algorithms & Models of Comp

_____ CS 421** 3hrs, Programing Languages and

     Compilers

_____ CS 450** 3hrs, Numerical Analysis

*Has prerequisites and/or co-requisite; See Course Explorer **&** if you have earned credit for CS 225, see a CS advisor

** Has prerequisites and/or co-requisite; See Course Explorer

***400 level above CS 403, excluding CS 421 and CS 491. These two courses must be distinct from all other courses used to fulfill program requirements or options.

Student must select one (1) course from each of the following groups:

_____ **Group I:** CS 361 (preferred), MATH 461, OR STAT 400/MATH 463

_____ **Group II:** MATH 412 (preferred), MATH/CS 413, MATH 417, or MATH 427

_____ **Group III:** MATH 441, MATH 446, or, MATH 484

_____ **Group IV:** MATH 424, MATH 444, OR MATH 447

_____ **Group V:** MATH 414, CS/MATH 473, CS/MATH 475, CS 476, CS 477

_____ **Additional Group Course**

Additional Notes

To meet a course's prerequisites you will need to have earned the listed prerequisite credit or be on path to earn the prerequisite credit before the course begins. Some courses are offered fall-only or spring-only. Be sure to plan ahead!

Working ahead in your CS coursework does not guarantee entrance into the next CS course.

_____ 120 hours required for graduation

_____ 60 residency hours required for graduation

It is recommended that you work in concert with your assigned academic advisor to ensure you are on track to successfully complete your degree.