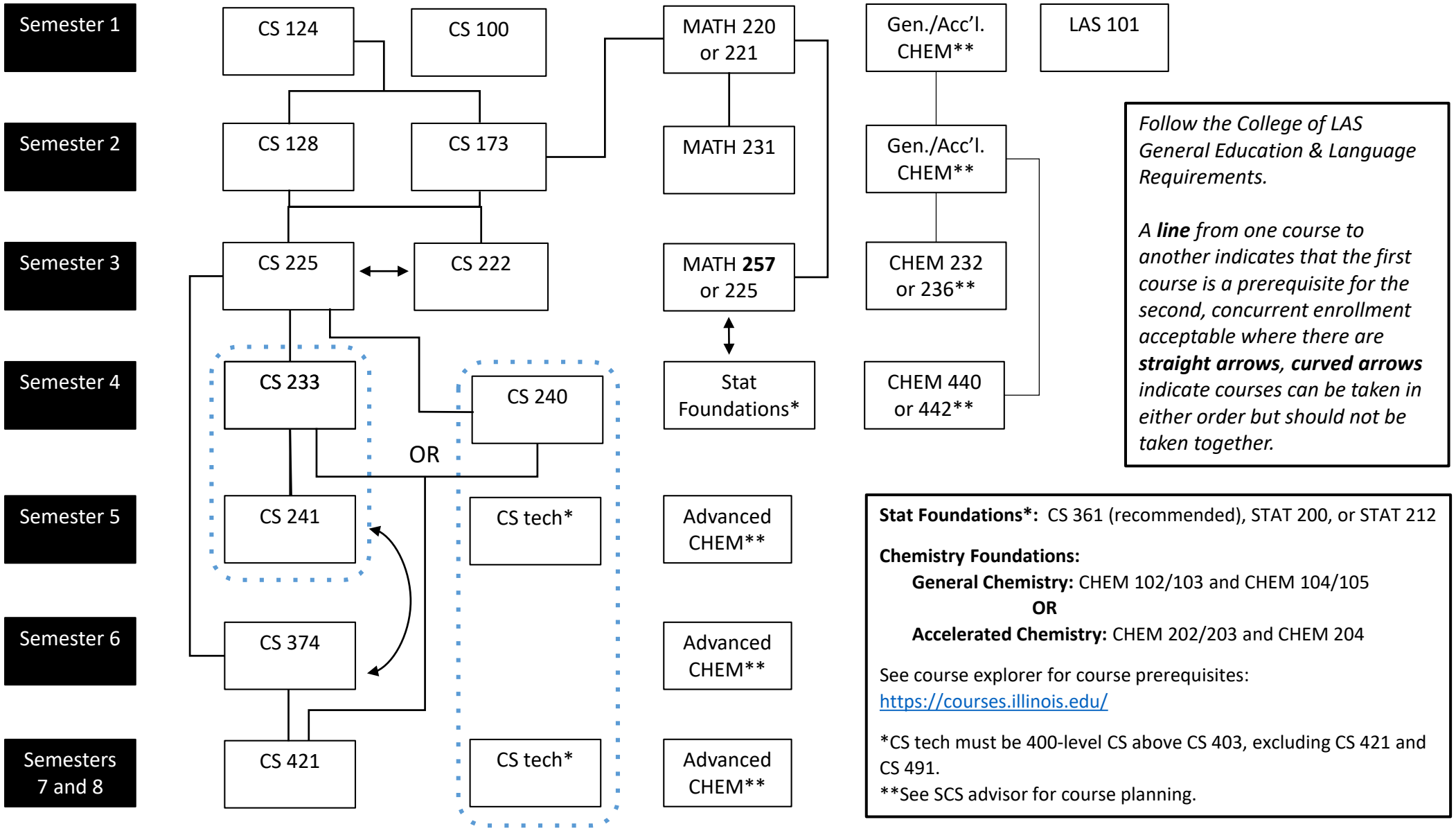
Curriculum Flow Chart for Computer Science + Chemistry



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.*

Stat Foundations*: CS 361 (recommended), STAT 200, or STAT 212

Chemistry Foundations:

General Chemistry: CHEM 102/103 and CHEM 104/105

OR

Accelerated Chemistry: CHEM 202/203 and CHEM 204

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

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

**See SCS advisor for course planning.

Curriculum Plan: Computer Science + CHEM 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

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_____ 3hrs Social Behavioral Science

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_____ 3hrs Natural Sciences & Technology*

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Cultural Studies

_____ Western Culture

_____ Non-Western Culture

_____ US Minority Culture

*Completed with Chemistry Foundations Courses

Math & Stat Courses

_____ MATH 220 5hrs, Calc or
MATH 221 4hrs, Calc I

_____ MATH 231 3hrs, Calc II

_____ MATH 257 3hrs, Lin Alg w/Comp Apps or
MATH 225 2hrs, Into Matrix Theory

_____ **STAT Foundations:**
CS 361** 3hrs, STAT 200 or STAT 212

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**

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OR

_____ CS 233 4hrs, Computer Architecture**

_____ CS 241 4hrs, Systems Programming**

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

_____ CS 421** 3hrs, Programing Languages and Compilers**

*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.

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 hours required for residency

Chemistry Foundations:
General CHEM (8 hours)

_____ CHEM 102* 3hrs, General CHEM I (NAT)

_____ CHEM 103* 1hr, General CHEM Lab I

_____ CHEM 104* 3hrs, General CHEM II (NAT)

_____ CHEM 105* 1hr General CHEM Lab II

OR

Accelerated CHEM (8 hours)

_____ CHEM 202* 3hrs, Accelerated CHEM I (NAT)

_____ CHEM 203* 2hrs, Accelerated CHEM LAB I

_____ CHEM 204* 3hrs, Accelerated CHEM II (NAT)

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_____ CHEM 232* 3/4hrs, Elementary Organic CHEM I **or**
CHEM 236* 4hrs, Fundamental Organic CHEM I

Advanced Chemistry 12hrs, Consult with SCS Advisor

_____ CHEM 440* 4hrs, Physical CHEM Principles or
CHEM 442* 4hrs, Physical CHEM I

_____ Advanced CHEM _____ **3-4hrs

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

**The following courses may not be used to complete the advanced chemistry hours: CHEM 315, CHEM 397, CHEM 445, CHEM 447, CHEM 492, CHEM 494, CHEM 496, CHEM 497 and CHEM 499; any course in another unit, such as any BIOC or MCB course.

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