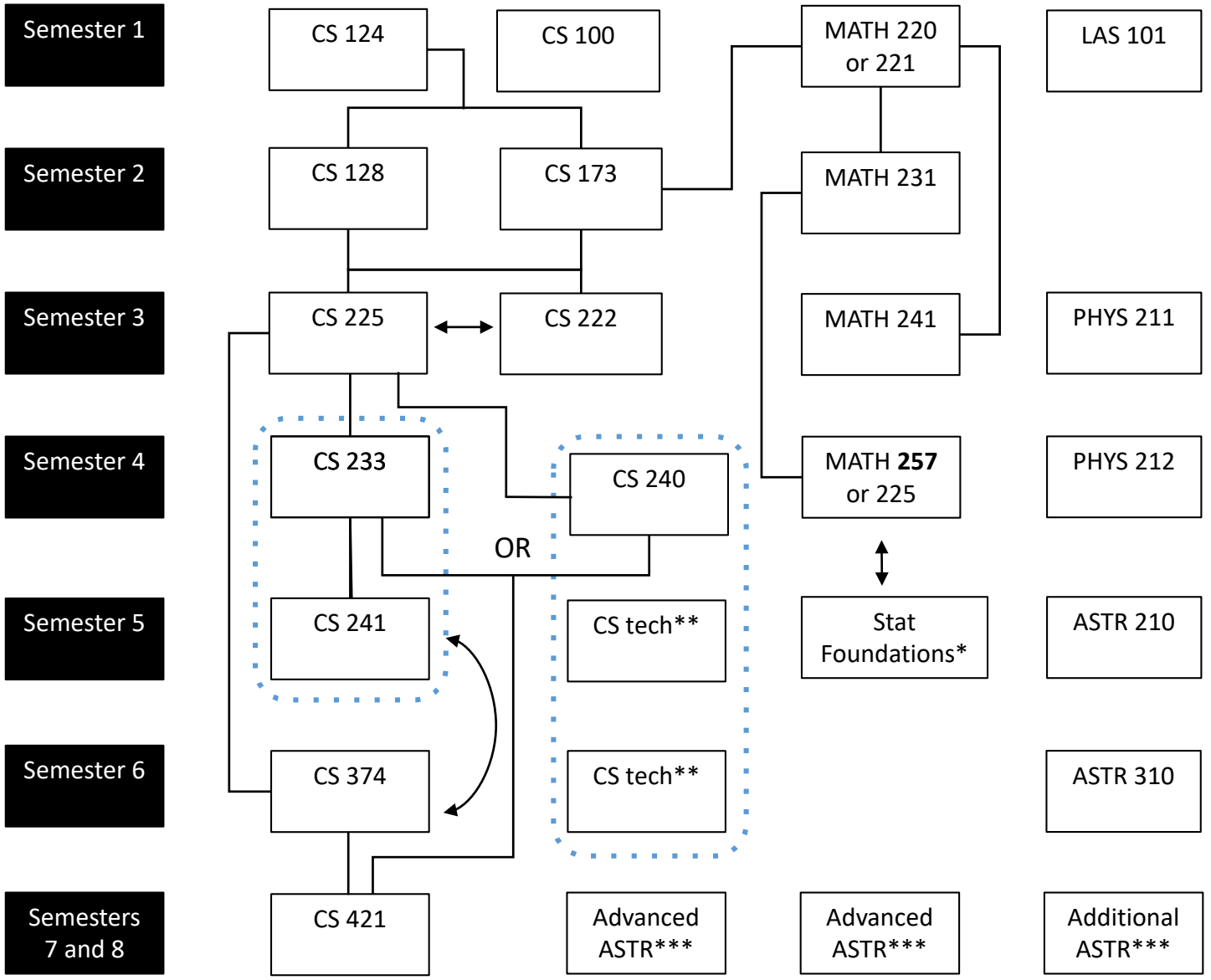
Curriculum Flow Chart for Computer Science + Astronomy



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

Advanced Astronomy, 6-7hrs, choose 2: ASTR 404, 405, 406, or 414

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 Astronomy advisor for course planning.

Curriculum Plan: Computer Science + ASTR 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

*Completed with Astronomy Foundation Courses

Math & Stat Courses

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

_____ MATH 231 3hrs, Calc II

_____ MATH 241 4hrs, Calc III

_____ 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**

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

OR

_____ CS 233** 4hrs, Computer Architecture

_____ CS 241** 4hrs, Systems Programming

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

_____ CS 421** 3hrs, Prog. 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.

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

Physics Foundations

_____ PHYS 211 4hrs, Univ. Physics: Mechanics (NAT)

_____ PHYS 212 4hrs, Univ. Physics: Elec & Mag (NAT)

Astronomy Foundations

_____ ASTR 210 3hrs, Intro to Astrophysics

_____ ASTR 310 3hrs, Computing in Astronomy

Advanced Astronomy, 6-7hrs, choose 2:

____ ASTR 404 3hrs, Stellar Astrophysics

____ ASTR 405 3hrs, Planetary Systems

____ ASTR 406 3hrs, Galaxies and the Universe

____ ASTR 414 4hrs, Astronomical Techniques

Additional Astronomy Elective, 2-3hrs

____ ASTR 3-- or 4-- *(See ASTR Advisor for approved list)*

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