Curriculum Flow Chart for Computer Science + Geography & GIS

Semester 1
- CS 124
- CS 100
- MATH 220 or 221
- GIS Elective**
- LAS 101

Semester 2
- CS 128
- CS 173
- MATH 231
- GEOG 371

Semester 3
- CS 225
- CS 222
- MATH 257 or 225
- GEOG 379

Semester 4
- CS 233
- CS 240
- Stat Foundations*
- GEOG 380
- OR
- CS tech***

Semester 5
- CS 241
- CS tech***
- GEOG 380

Semester 6
- CS 374
- CS tech***
- GIS Elective**
- GEOG Elective**

Semesters 7 and 8
- CS 421
- CS tech***
- GIS Elective**
- GEOG Elective**

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

**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.
# Curriculum Plan: Computer Science + GGIS Beginning Fall 2021

## 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 & 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
- **CS tech*** 3hrs, 400-level CS Elective
  - **OR**
- **CS 233** 4hrs, Computer Architecture
- **CS 241** 4hrs, Systems Programming
- **CS 374** 4hrs, Algorithms & Models of Computation
- **CS 421** 3hrs, Programming Languages and Compilers

### Required GGIS Courses

- **GEOG 371 4hrs, Spatial Analysis**
- **GEOG 379 4hrs, Intro to GIS Systems**
- **GEOG 380 4hrs, GIS II: Spatial Prob. Solving**

### GIS Electives, 6hrs**

- **GEOG 371 3/4hrs**
- **GEOG 379 3/4hrs**

### GEOG Electives (Human and/or Physical), 6hrs**

- **GEOG 371 3/4hrs**
- **GEOG 379 3/4hrs**

### 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**

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

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*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.