

Oct 9, 2025

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# Start with Figma Designs



## Low to mid fidelity

- We need a straightforward and programmable design for the website frontend page
- Could be sectioned into three, sort of like Wikipedia or Fandom style sites
- Using CS Links and Resources Discord as a starting point for student-reviewed content on classes
- Feature: Students can mark them as “Taken”
- [CS\\_Flowchart 2023](#) - Advanced idea (implementing an interactive CS flowchart, can mark classes for completion, “Taken”)
  - You should be able to hover over classes and transfer to a class page (as shown above)

## Key Designs (Making Low and Mid Fidelity Designs)

- Design Home page
- Design flowchart
  - 
  -
- Design individual pages
- Figma Pair 1: Trenton & Rohan (working between Friday [10/10] and Sunday [10/11])
  - Making basic stuff to start Rohan off

- Flowchart
- Figma Pair 2: Tam & Ayush (working between Sunday [10/12] and Tuesday [10/14])
  - Making basic stuff to start Ayush off

### Programming Aspect

- The flowchart can possibly be implemented through a Trie
  - A child node, multiple children
  - How are copies handled (Have a customized Trie to store c
  - Home Page & Individual Pages

### CS Class Info

#### Required Classes

Format is Course, Difficulty Level, Description

**CS 111 (4/5)** - Intro to basic programming with Python. Weed out class, if you pass Reckinger's material with at least a B, you will be in a good spot for 141.

**CS 141 (3/5)** - Intro to more advanced programming with C++. Teaches concepts such as pointers, memory management, etc. Doing well in this class will build the foundation for 211 and 251.

**CS 151 (2/5)** - Logic and Proof class. Very chill class regardless of prof.

**CS 211 (3/5)** - Learning basic data structures through coding them up in C and applying them. Projects take up a lot of time so plan schedule accordingly and don't keep them to the last day.

**CS 251 (3/5)** - Learning data structures through using them as the base in C++ to build more advanced programs. Projects take up a lot of time so plan schedule accordingly and don't keep them to the last day.

**CS 261 (4/5)** - Binary, Assembly, and low-level stuff. Not much actual coding, more understanding of concepts. Probably the hardest class below 300.

**CS 277 (1/5)** - Communication, networking (LinkedIn), portfolio building (GitHub), resume writing, and interview preparation (LeetCode etc). This is a very easy class with a generous number of drops and make ups that prepares you to start working in the industry. Perfect to take in the spring semester to start applying for internships in summer.

**CS 301 (3/5)** - Builds off of 151 as another theory class with automata and state machines. Concepts are more complex than 151's, but not impossible. Will need to know how to write proofs from 151 unless you have DasGupta.

**CS 341 (2/5)** - SQL, Python, F# (database querying and functional programming). Concept-wise, this class is pretty easy, most people manage to finish the hw and projects with high grades. The exams are tricky since not enough time given unless your understanding of the material is solid.

**CS 342 (3/5)** - Object-oriented programming using Java. Honestly the best class in the 300s for SWE. Changed my perspective on planning how to write the code and made it more organized.

**CS 361 (5/5)** - Focuses on low-level computer software stuff with harder theory, building off of 261. Hands down the hardest CS class at UIC below 400. Expect to spend a lot of time per week for the homework/projects and understanding the material.

**CS 362 (2/5)** - Arduino coding, more of an Electrical Engineering class tbh. Teaches about logic gates and low level hardware stuff. If you have Diaz, do good on the midterm and you only need to care about your project after that, can skip the final.

**CS 377 (1/5)** - Ethics class. Definitely take Clayville over Burton if you want easier life.

**CS 401 (5/5)** - Algorithms, the second hardest required class in UIC CS. Take DasGupta if possible, otherwise you will suffer a lot.

### Tech Electives Difficulty Tier List (My opinion, feel free to give feedback, 1/5 here means 3/5 on normal tier-list):

Easiest (1/5):

**351, 378, 418, 421, 480**

Easy-Medium (2/5):

**407, 422, 424, 477, 478, 494**

Medium (3/5):

**427, 473, 474, 475, 476, 484**

Med-Hard (4/5):

**411, 426, 428, 440, 442, 450, 453, 454, 455, 466, 479, 485, 489**

Hardest (5/5):

**402, 412, 415, 425, 441, 461, 468, 483, 486, 487, 488**

### Math Classes After Calc Tier List

**MATH 310, STAT 381** >= **IE 342, MATH 215** or **MATH 220** if you don't like proofs and don't mind it being a bit harder

### Easy Random Electives From Reddit

**MUS 114, MUS 118, MUS 127, POLS 101, ECON 111, HN 202, CLJ 101, CLJ 121, CLJ 210, PYSCH 100, AHS 200, SOC 100, THTR 103** (edited)



- Aim to get this done before we meet again next Thursday

## Backend

We will use a Trie to store UIC classes and use BFS to get all the prerequisites for a class

If Trie does not work, we switch to a priority queue

\* Trie

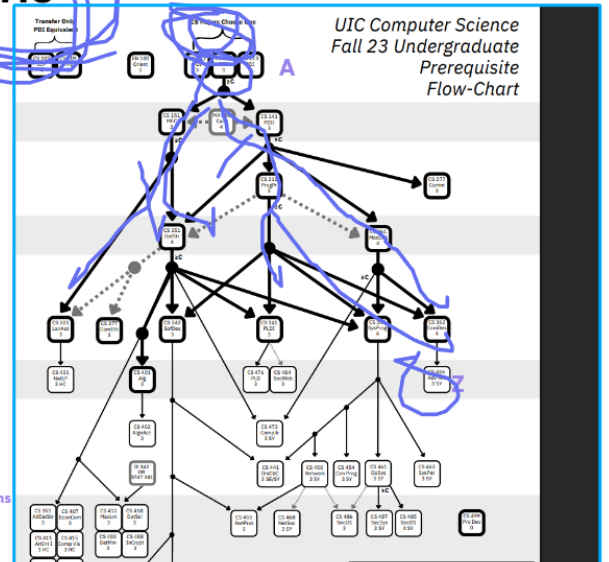
ZXWHGA  
ZXWHEBA

Use a BFS from a ending class  
to get all of the potential paths

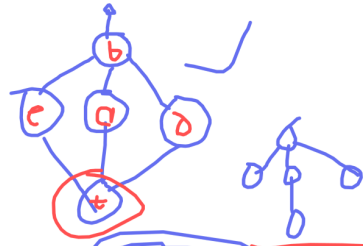
Know what classes we want to use,  
and we have clear prereqs for

Advanced: As soon as you have a path, you filter them out

If I want a path to CS 466 that also takes 251 --> could narrow down possible paths



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- Use a BFS from a ending class
- to get all of the potential paths
- Know what classes we want to use,
- and we have clear prereqs for
- Advanced: As soon as you have a path, you filter them out
- If I want a path to CS 466 that also takes 251 --> could narrow down possible paths
- Classes have higher priority than others (CS 141 may have more than one kind of priority)



**\* Trie**

Shared child

ZXWHGA  
ZXWHEBA

Use a BFS from a ending class  
to get all of the potential paths

Know what classes we want to use,  
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If I want a path to CS 466 that also takes 251 --> could narrow down possible paths

UIC Computer Science  
Fall 23 Undergraduate  
Prerequisite  
Flow-Chart

