

## UHCL Degree Planner

<https://github.com/mikegainey/UHCL-degree-planner>

### Purpose

This program will help UHCL Computer Science B.S. students select courses for the next term and all subsequent terms until graduation.

### Features

- Students will be presented with a list of only the courses eligible to be taken for each term. Courses that have unmet prerequisites will not be shown. Upper-Level CSCI and CENG courses will not be shown until the CS Lower-Level Core is complete.
- For each course that can be taken, the number of other courses for which that course is a prerequisite will be shown. This should encourage students to prioritize taking courses that are prerequisites for subsequent courses.
- At the beginning of the program, students can indicate courses already completed through keyboard input and/or from an input file.
- After choosing courses for each term until all requirements are completed, students will be presented with a degree plan summary that can also be saved to a file.

### Inputs and Outputs

Input	Data defined in constants include ...
	COURSECATALOG      all courses, courses titles, and their prerequisites
	LANG_PHIL_CULTURE    Language, Philosophy, and Culture courses
	CREATIVE_ARTS        Creative Arts courses
	SOCIAL_SCIENCE       Social/Behavioral Science courses
	UNI_CORE              University Core courses
	MAJOR_REQ            CS BS Major courses
	LLC                    CS BS Lower-Level Core courses
	ELECTIVES            CS Major Electives
Input	The student will be prompted to enter courses already completed and/or a file name with a list of courses to load.
Output	The program will verify each course that is successfully added.
Input	The student will be prompted to enter their starting term (Fall, Spring, or Summer).
Input	The student will be prompted to enter their starting year (last 2-digits only).
Output	The program will print a heading for the term (e.g. "Spring 2018 choices:") followed by a numbered menu of eligible courses to take.
Input	The student will select courses by menu number, pressing <Enter> when finished.
Output	The program will restate the courses selected for that term.
	The program will continue in a loop, presenting a course menu for subsequent terms until all required courses are complete.
Output	After all required courses have been chosen, a complete degree plan summary will be presented showing which courses are planned for each term until degree completion.

Input	The student will then be given the option to enter a file name to save the degree plan summary.
Output	If a file name is entered, the degree plan summary will be saved to the file, otherwise the program will just end.

### **Schedule**

Nov 7	The program already works. The pseudocode is complete. Add introductory and explanatory text output and improve the presentation of prompts to the user. Continually make incremental improvements to the program code and in-line comments. Start writing the test document. Try using the unittest module from the standard library to test functions.
Nov 14	Continue developing the test document.
Nov 21	Test document complete. Write the flowchart.
Nov 28	Flowchart complete
Nov 30	Presentation