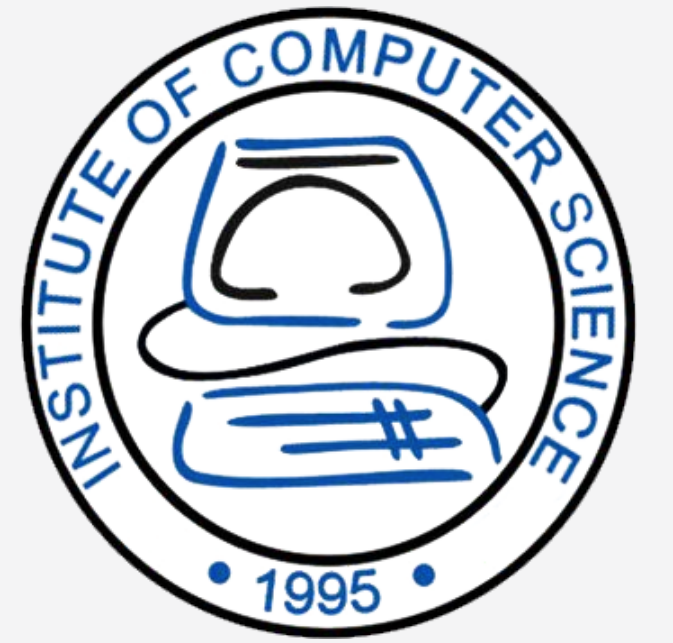




# A SPECIALIZED DEGREE PLANNER FOR UPLB STUDENTS



Kyle Edward P. Aquino and Rodolfo C. Camaclang III

## INTRODUCTION

- Students face obstacles such as enrollment issues, course failures, and program transfers, making it difficult to follow the prescribed curriculum and graduate on time.
- Degree planners help students track progress and plan semesters, with specialized planners tailored to specific universities and universal planners adaptable to any program.
- UPLB's existing planner lacks essential features and usability, necessitating the development of a more effective tool to improve academic planning and advising, ensuring timely graduation.

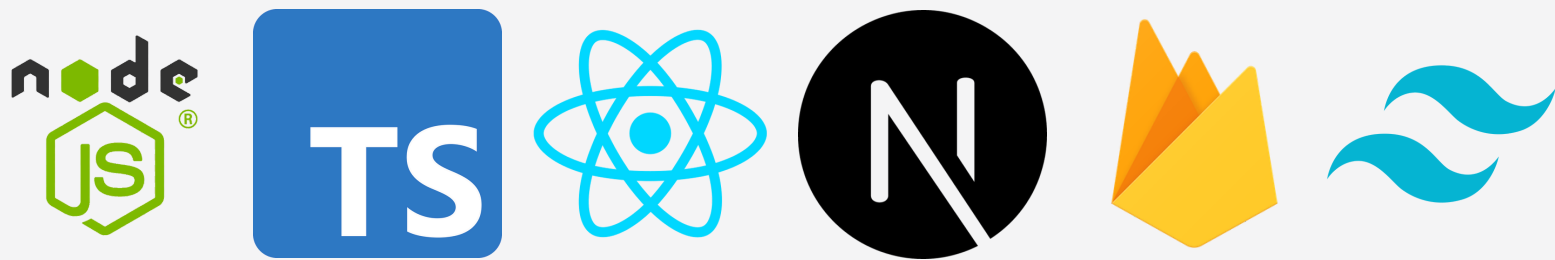
## OBJECTIVES

The general objective of this study is to develop and evaluate a degree planner web application specifically designed for use in UPLB and to evaluate the usability of the application. Specifically, the study aims to:

- develop a web application for planning, tracking, and visualizing the coursework of UPLB students;
- implement features that ensure course plans comply with university rules, including prerequisite requirements, unit limitations, and sequencing restrictions;
- give users the ability to easily generate documents that use information from the planner;
- assess the overall usability of the application.

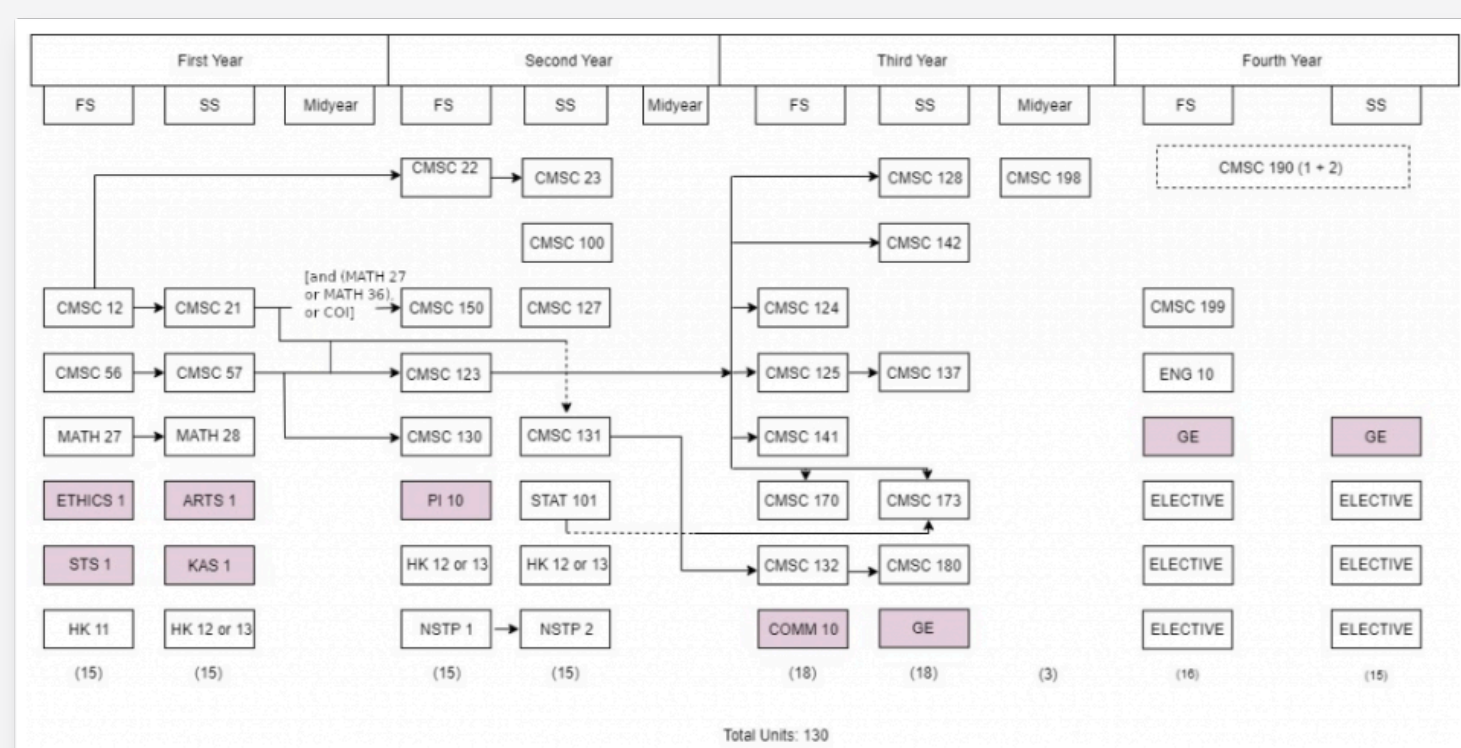
## METHODS

### Technologies

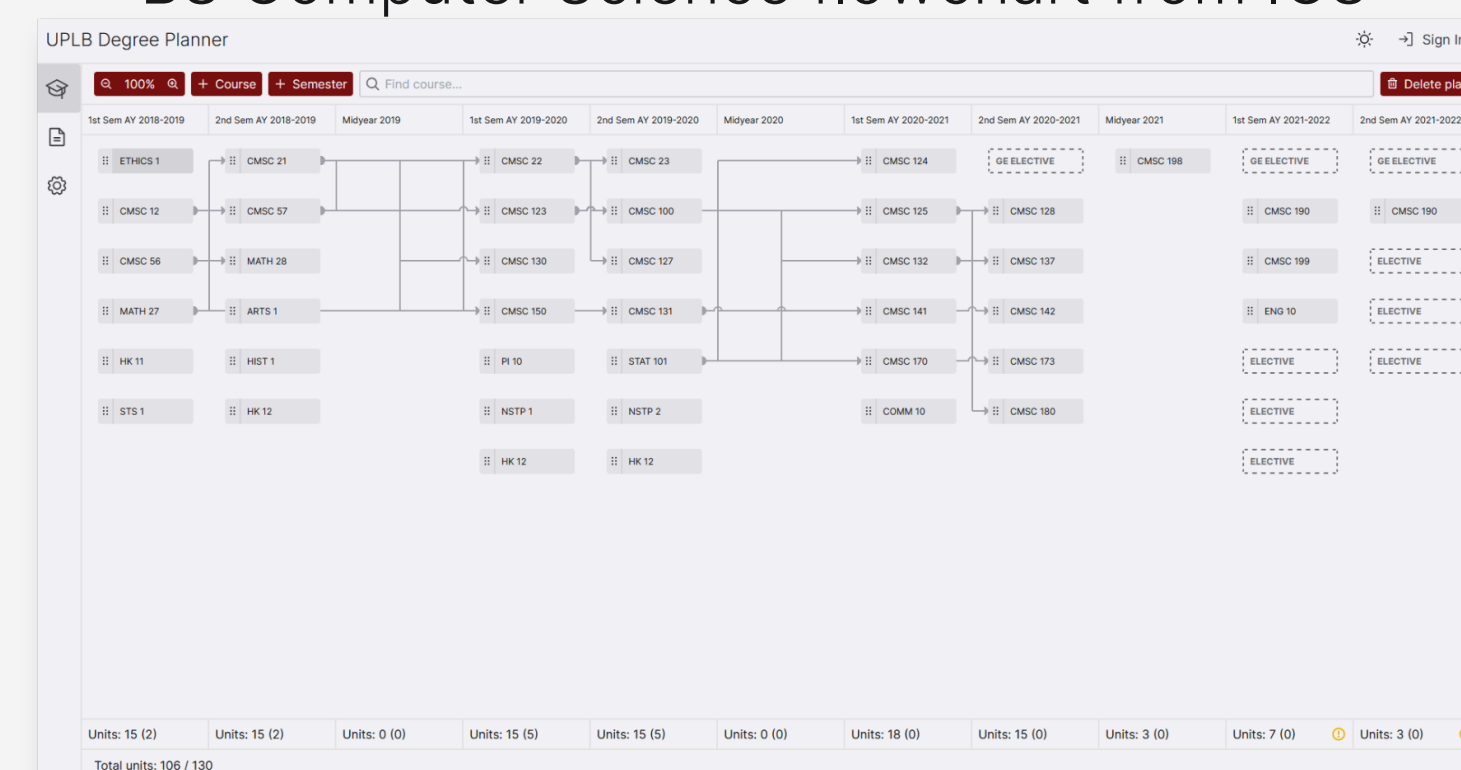


### Application Interface

The planner interface uses a grid system similar to UPLB's curriculum visualization, with each column representing an academic semester and containing grid items for courses. Arrows between courses indicate prerequisite relationships.



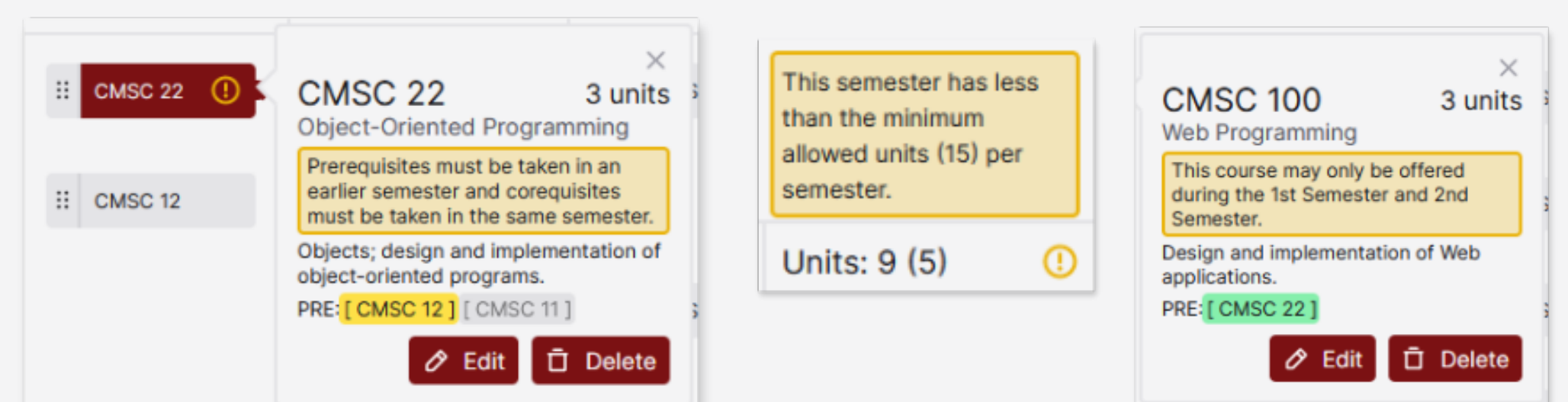
BS Computer Science flowchart from ICS



Planner interface with BSCS plan

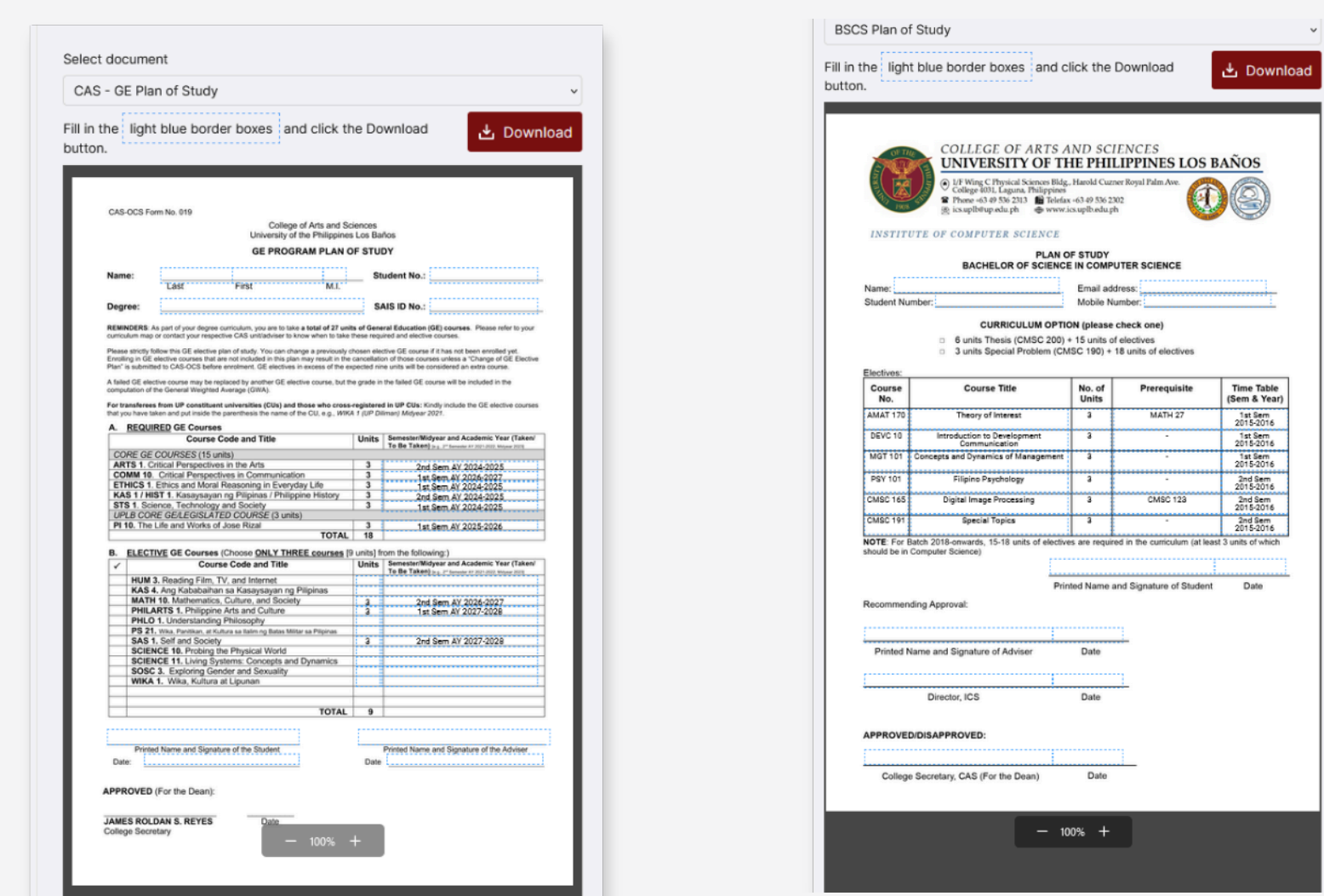
### Plan Validity and Warnings

The degree planner uses warnings to help students make sure that their current plan is valid. The three general types of warnings in the planner are for: course requisites, number of units, and which semesters offer a specific course.



### Document Generation

The application offers the ability for users to generate documents related to course requirements by using the data from the degree plan.



## RESULTS AND CONCLUSION

The user evaluation of the UPLB Degree Planner involved 10 undergraduate students, yielding an average SUS score of **84.75**, well above the average score of 68 and indicative of an "A+" grade on the Sauro-Lewis curved grading scale. Users found the application useful and intuitive but suggested improvements like detailed instructions and a mobile-friendly interface. The high SUS score and positive feedback confirm the planner's effectiveness in meeting usability goals, though some features, such as adjusting course connections and the importance of placeholder courses, were initially unclear.

## REFERENCES

J. R. Lewis, "The system usability scale: Past, present, and future," International Journal of Human-Computer Interaction, vol. 34, no. 7, pp. 577-590, 2018. [Online]. Available: <https://doi.org/10.1080/10447318.2018.1455307>

## EXTRA

The web application is available at:  
<https://uplb-degree-planner.vercel.app/>