

Graduation Planner





Problem

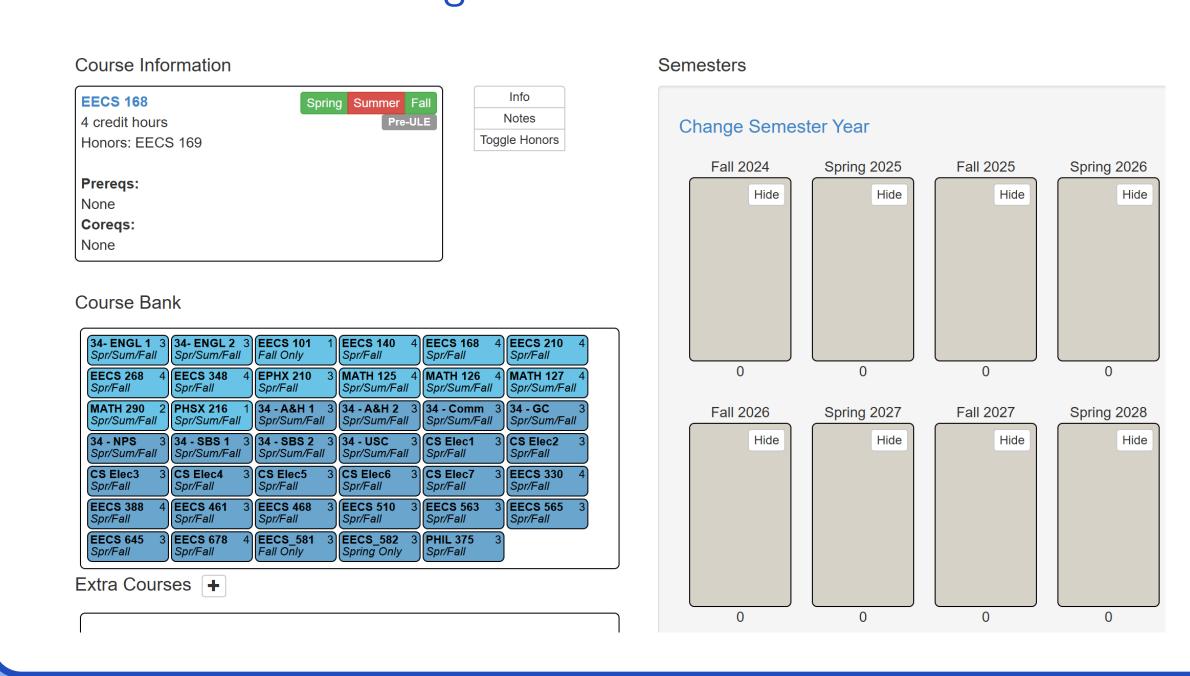
- Students often **struggle to organize** their course plans, leading to missed prerequisites, unmet degree requirements, delayed graduation, and added stress.
- Graduation planning is often confusing or inflexible, making it harder for students and advisors to track academic progress efficiently.

Solution

- Graduation Planner is a **web application** that helps students organize courses **semester-by-semester.**
- Students upload their degree requirements, and the site dynamically generates course options, making it **customizable** to different majors and universities.
- A drag-and-drop interface allows students to easily build semester schedules while checking prerequisites.
- Advisors can quickly audit student plans to ensure degree progress and on-time graduation.

Inspiration: current EECS gradplan website

- extremely helpful for my own degree planning
- friends and students of other majors expressed interest in having a tool like this available to them



<u>Iterations & Changes</u>

- Initial Idea: Build pre-programmed course plans for every major at KU.
- Iteration: Scope became too large and too school-specific for my timeline
- Change: Switched to a dynamic file upload system where students upload their own degree plans, cutting back on time spent researching specific degree plans and manually adding majors
- Focus Adjustment: Prioritized broader usability for students at any university, not just KU.

Results

- Core functionalities built:
 - Drag-and-drop interface allowing students to easily move courses into specific semesters for clear academic planning.
 - Semester organization feature to help students visualize their full academic timeline.
 - Upload and parsing system that reads degree
 requirement files and dynamically generates a list of available courses.
- Current version demonstrates:
 - Successful dynamic course loading, adapting to different degree files.
 - Prerequisite checking, ensuring students place courses in the correct sequence.
- Progress is ongoing:
 - Focus on expanding functionality, such as supporting multiple degree plans, improving file upload flexibility, and enhancing the user interface.
 - Continued development planned to polish the user experience and add new features based on user feedback.

Impact

- Simplifies course planning for students, **reducing** stress and confusion.
- Helps students **stay on track for graduation** by clearly mapping out prerequisites and requirements.
- Provides academic advisors with an easier way to audit and support student progress.
- Has the **potential to improve graduation rates** by minimizing planning errors.

Personal Challenge & Growth

- Faced challenges managing project scope, and building and designing flexible backend and UI.
- Improved time management skills to stay on track throughout development.
- Strengthened web development skills, especially in frontend and backend integration.
- Gained experience in user-centered design, project adaptability, and maintaining focus while making necessary adjustments in scope and function.

<u>Sustainability</u>

- Plan to continue development after graduation, with plans to add features like multi-plan saving, course catalog integration, and advisor collaboration tools.
- Potential to open-source the project to allow future contributors to expand and maintain it.
- Could partner with universities or advising centers for adoption and support.