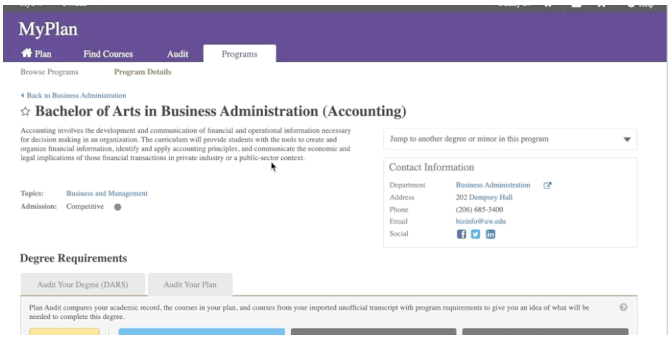
Academic Explorer

Prior to Academic Explorer, students had to consult multiple, unconnected and hard to find resources to learn what degrees UW offered. This meant that many students had no idea what their options were and paid thousands of dollars for a degree they essentially settled for. We wanted to help them.



My Role: *Principal Designer.* I was responsible for end-to-end research, design, and advocacy for Academic Explorer. I worked with students and academic counselors to understand the pain-points of academic major selection and with heads of departments, the registrar's office, , and UW data scientists to advocate for giving students the tools and data they needed to make that selection earlier and better.

Most Fun: I loved meeting with the students. I interviewed dozens of students about their path to their majors and was awed by their thoughtfulness and organization and saddened by how many of them felt they wasted time and money on majors they didn't really believe in. Their energy and disappointment motivated me to fight on their behalf and to build something that would ensure the next generation of students wouldn't have to settle for majors they didn't like.

Biggest Challenge: The biggest challenge was convincing departments to empower students with the data they needed to make their decisions. Departments tended to be very secretive about their data including % of students admitted to their programs, avg. grade point of students who were admitted, and what the graduation rates were for the programs. This information was important for students to know to understand how competitive they might be.

What I'd Do Differently: I would have worked harder to engage with outside companies to get the data we needed for this tool. One of the biggest questions students had was "what can I do with this degree", and although we had early discussions with Payscale to get that data, it fell by the wayside as we ran into challenges even getting the basic information (e.g. contact info, degrees offered, etc). I think the addition of job-placement information would have done a lot to help students and wasn't entirely dependent on the other systems that were giving us the other troubles.

The Process

User Need

"A tool like this would have shown me my other options more clearly. I'm still not sure what my options are ***so now I'm trapped in this degree****. I am currently a Junior."*

Most undergraduates enter the University of Washington with little to no frame of reference for how to choose a major. They tend to have a vague notion that degree=job and are aware of a handful of the more prominent majors (business, computer science, etc.) but otherwise don't know their options or how to find out what's out there. This situation was only exacerbated by the the antiquated systems and resources available to learn about what degrees were out there and how to assess whether they were a good fit or not. To top it all off, many of the most popular majors were highly competitive, so by the time the student had decided on the major they may have no real chance of getting into it. This situation led to enormous anxiety and stress among students and in many cases pushed them into degrees that were a bad fit or into additional years at UW due to late major switches.

Opportunity

This project was funded by the student technology fee, and was picked among many competing projects because of the dire need for a tool to help navigate the 180 majors offered at the university. We set out to be good stewards of the students' money and to give them a tool to alleviate the stress of finding and getting into a major.

Research

Through our general My Plan research (usability testing, persona creation, etc.) we had a lot of existing research about how students chose majors and then created plans to pursue them. In that research were a lot of red flags pointing towards the ambiguity, anxiety, and general difficulty for undergrads to make their degree selection. I pored through this existing data and reviewed and came up with a general framework to use to guide our work. There was a pattern of a "hierarchy of needs" and we would need to provide assistance at each level. Before committing to a major, students need to know:

1. That the program exists
2. That the program has features they find interesting:
    - Curriculum matches their interests
    - It provides a path towards future they desire:
        - Career
        - Grad school
3. That they have the grades or experience to get into the program
4. They will not hinder their academic progress by taking this program

"I knew I wanted to do something with computers, but... didn't have the aptitude nor desire to pursue a degree strictly related to coding. .. Luckily I found the Informatics program, but too often many students around me don't know that options like informatics and HCDE exist for them."

On top of this work, I set up long-form interviews with six undergrads to dig deep into what the individual students' experiences were like. Overall, I was aiming to understand where users got their information about majors, what compelled them to pick what they did, how they tracked their research, and how they felt about their decisions after the fact. I found that even when students had ultimately found their major, they tended to have some regrets and felt that the process was too ad hoc to be truly comfortable.

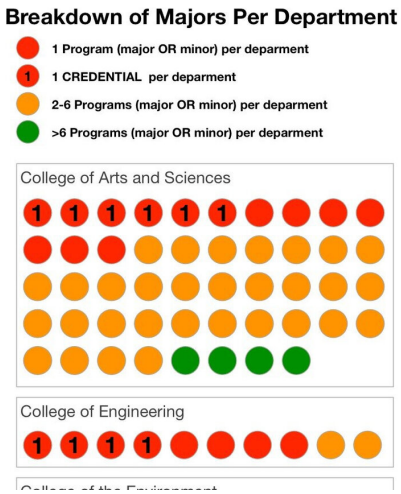
Another other major area of research that I undertook was to get the insights of departmental and undergrad counselors to understand what their students found useful. I set up a group of consulting counselors from across campus and met with them regularly. This was also helpful in gaining the trust of the departments, who would be key to providing us with the data we needed to support the tool. This group became a great way to test ideas and understand which topics or data would be seen as sensitive and to whom.

Design

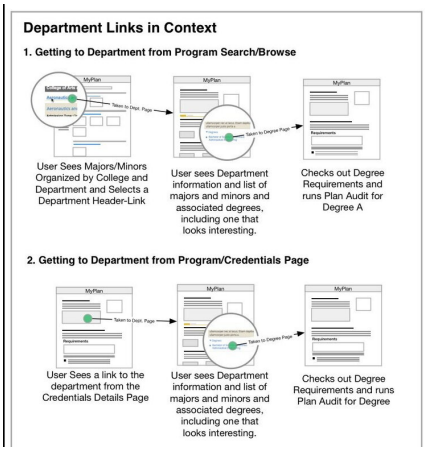
Before I could do any major design, I needed to dig into the data and understand what the scope of degrees/majors/programs were, which would help us decide on what level (degree, major, department) would be most helpful for users to browse and search on by default. There was no easy way to get raw numbers as far as things like:

1. How many majors in a given department?
2. How many degrees per major?
3. How is this spread across different schools?

My hypothesis was that we should structure it by major or degree since those were the things students were used to talking about, but was uncertain whether we might have too many to show, or would lose some nuance if we only presented those things. I worked with a business analyst to compile this data and then created some visualizations to help us understand how we might architect the Academic Explorer section of My Plan.



I discovered that it was very rare for any department to have more than 6 programs. This seemed to imply that we could present all of the programs for a department on a department details page if we needed to. The visualization also helped us to see that besides the College of Arts and Sciences, most colleges had very few departments or programs in them, so we probably didn't need to add an additional level of architecture to show all departments for a college. Instead, we could use college as an organizing/sorting option on the browse page to help users who were more familiar with the university to go straight to colleges they found most interesting.



Once I had a better understanding of the landscape of majors and degrees I started on design in-earnest. I knew that data was going to be the biggest challenge, since the University's various systems were largely still run on isolated mainframes, so work would need to be done to get some of the more interesting data that we wanted to provide (career trajectories of graduates, avg. GPA of admitted students, etc.). In the mean time, I worked on the MVP designs that would give the user as much detail as they needed to know if they wanted to learn more or not. Given the number of programs, this gave me plenty to figure out while we worked with the departments and central administration to come up with inventive ways to get and present richer data.

My goal was to make browsing as easy as possible. We had heard over and over that students' biggest worry was that they were missing things that would be meaningful to them, so I wanted to give them an easy way to get the lay of the land and dig in and save things that were interesting for later consultation. The heart of the experience was a browse page that showed all programs and gave users tools to filter (by college, topic, competitive/not, etc) and re-sort by college.

Our initial data set was fairly limited, since we needed to work with each department to provide the general information about the programs (competitive/not, topics, degree options, etc.) and departments (contact information) since there wasn't an accessible central repository of this data. However, for our most important audience (freshmen, sophomore students), this was actually something of an advantage. We found that talking to someone in the department was the best way for a student to really get to know a program, so we saw it as our goal to give users enough information to decide on a subset of interesting programs and give them the contact information to set up a meeting with an academic counselor.

MyPlan

WI 16 ▾

Related: Related Link 1 | Related Link 2 | Related Link 3

Find A Major or Minor

UW Seattle | UW Bothell | UW Tacoma

174 Majors and Minors

Filters (0) Remove all filters

Sort Alphabetically | Sort by Department

American Ethnic Studies

Admission Type: Open ○

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▶ Degrees and Minors

Anthropology

Admission Type: Open ○

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▶ Degrees and Minors

Applied Computational Mathematics

Admission Type: Competitive ●

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▶ Degrees and Minors

Architectural Design

Admission Type: Open ○

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Architecture

Admission Type: Open ○

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Art

Admission Type: Open ○

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