Registration Pattern Analysis

1. Frequency of Registration Gaps (Days Between Registrations)

As shown in Figure 1, the median gap between registrations is one day, while the mean is 35.3 days due to a few outliers. Most multi-course enrolments occur within one day, showing a clear tendency for batch registrations.
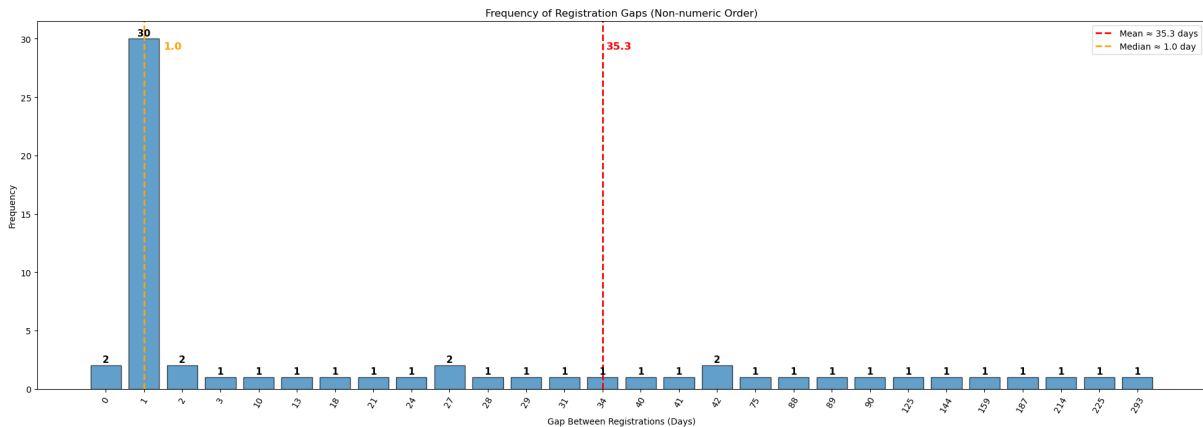

Figure 1: Frequency of Registration Gaps (Days Between Registrations)

2. Most Popular Course Combinations in Student Baskets

Figure 2 shows that *burger + pizza* is the most common bundle, followed by *nugget + sausage* and other fast-food combinations.

3. Registration Sequences with 2 Courses

Figure 3 demonstrates that *burger → pizza* is the leading sequential choice.

4. Registration Sequences with 3 Courses

As shown in Figure 4, only a handful of students follow three-step sequences, the most popular sequence being *burger → pizza → fried_chicken*.
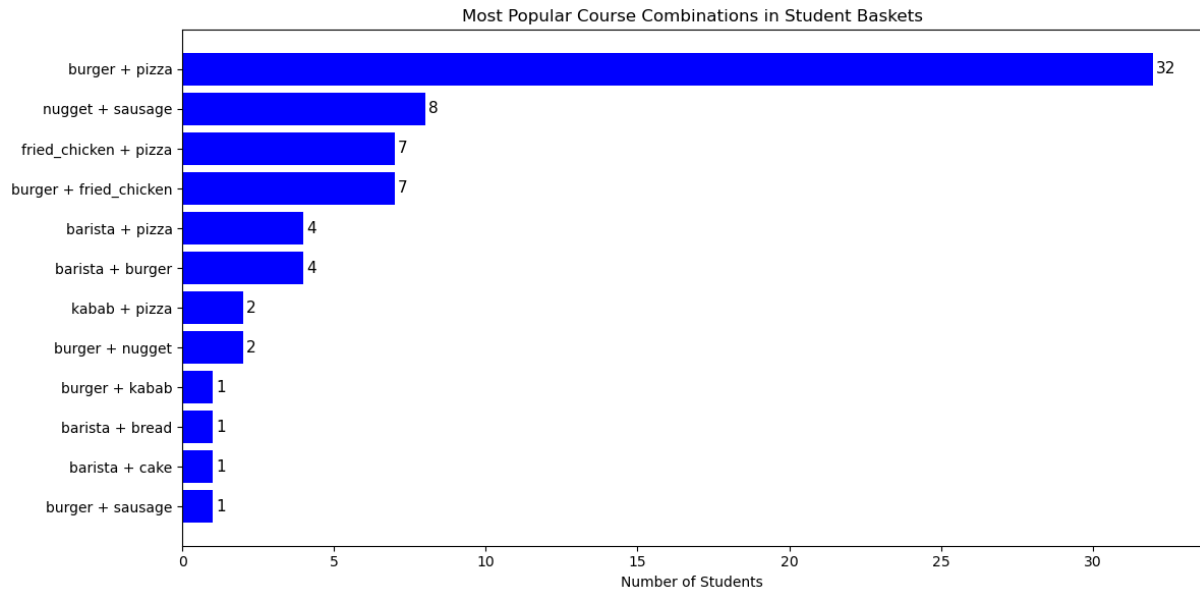
Figure 2: Most Popular Course Combinations in Student Baskets
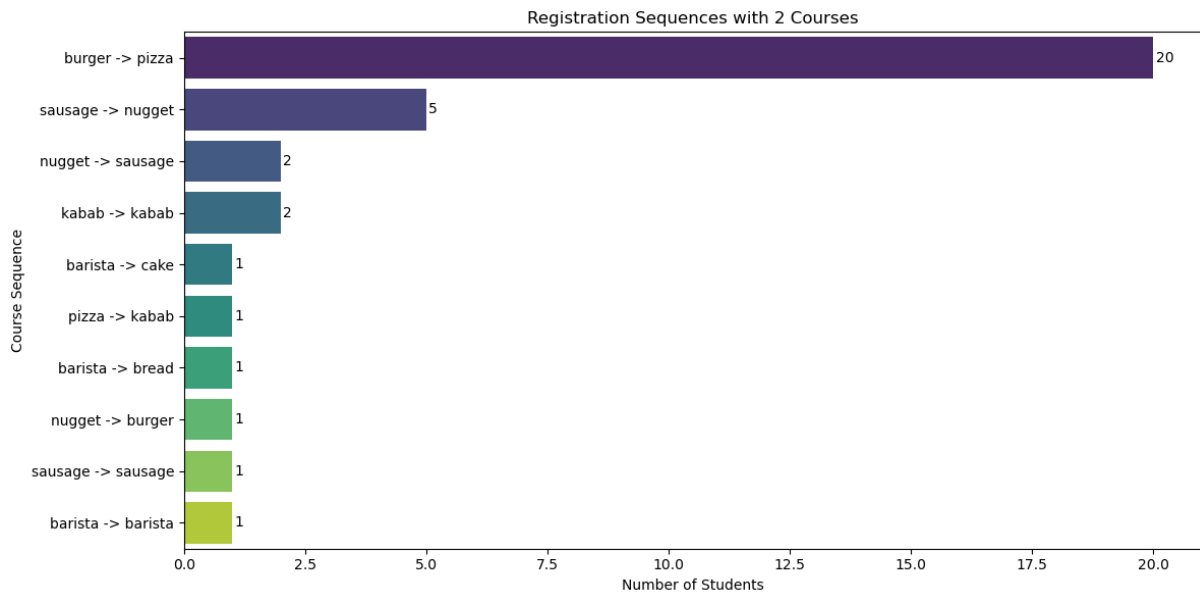

Figure 3: Registration Sequences with 2 Courses

5. Course Registration Network

Figure 5 displays the overall registration network, highlighting transition pathways between courses.
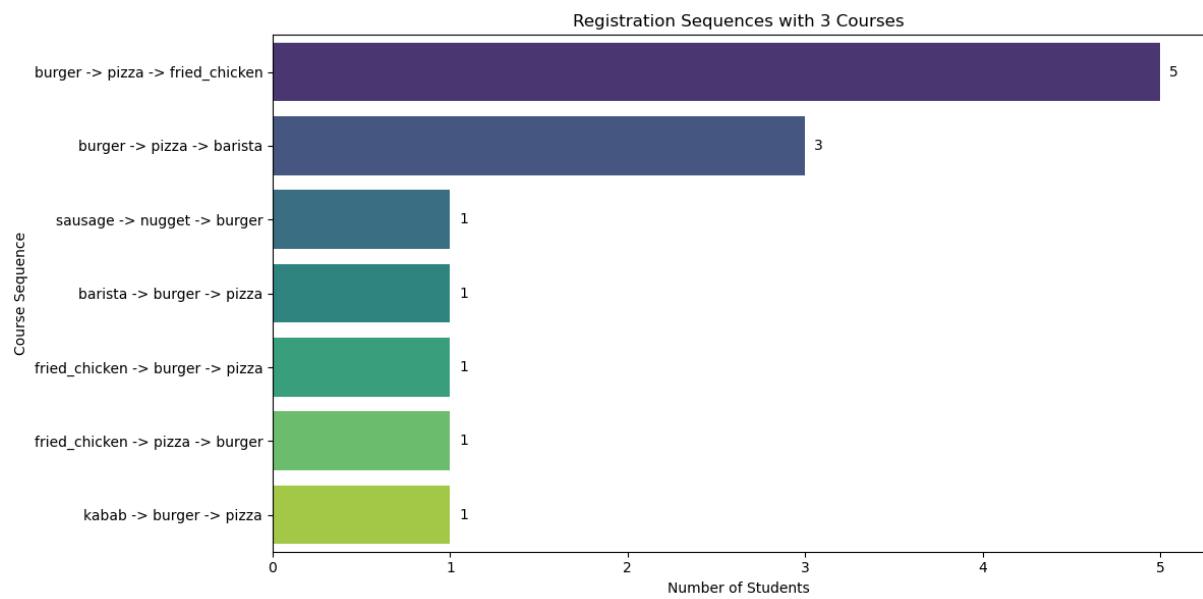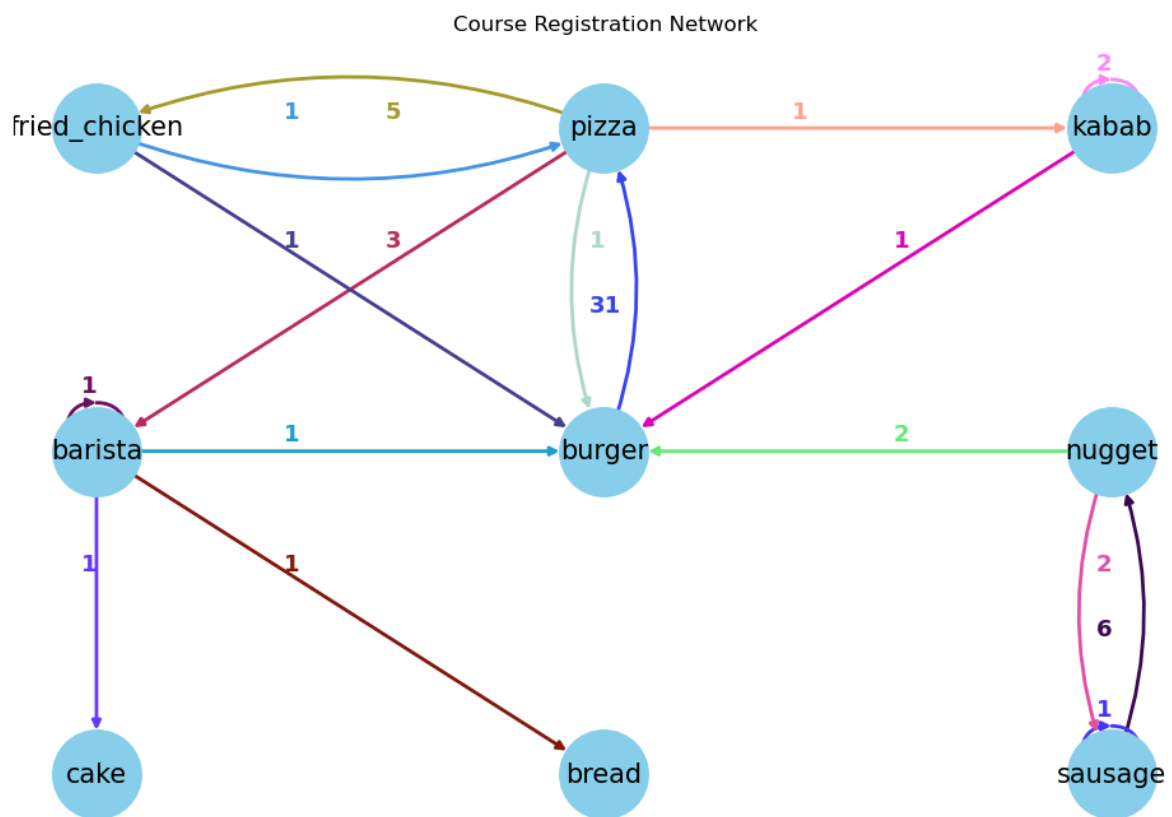
Figure 4: Registration Sequences with 3 Courses

Figure 5: Course Registration Network

Summary

- Most multi-course registrations happen within 1 day, showing planned or bundled registrations.

- Burger and pizza courses dominate both combinations and sequences.

- These findings are valuable for designing bundles, recommending next courses, and understanding the actual learning journey.