Optimizing Your Schedule to Accelerate Student Progression

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Today's Speakers

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Agenda

- Introductions
- New Urgencies for Schedule Optimization
- A Closer Look at Scheduling Analytics
- Optimizing Your Course Schedule
- Q&A

New Urgencies for Schedule Optimization

- Student impact of inefficient scheduling
- Institutional impact of inefficient scheduling

Historical Scheduling Processes No Longer Work

"We have trouble during late registration having enough 'high demand' courses and sections available for all students"

"Despite high graduation rates, too many classes are clumped at the same time and overlapping timetable options generate time conflicts. This causes unnecessary stress for all constituencies and reduces student satisfaction"

"Many students don't find the courses they need – they go off the path early in their academic career"

Students Feel the Effects of Poorly Aligned Course Schedules

Why can't I get into the classes I need? They're always full.

The classes I need aren't offered at a time that works with my schedule. I need to work.

Why are both the classes I need to take offered at the same time?

I can't get into the pre-reqs I need to start my chosen major.

1 in 3 First-Year Students Consider Leaving if They Can't Access the Classes They Need
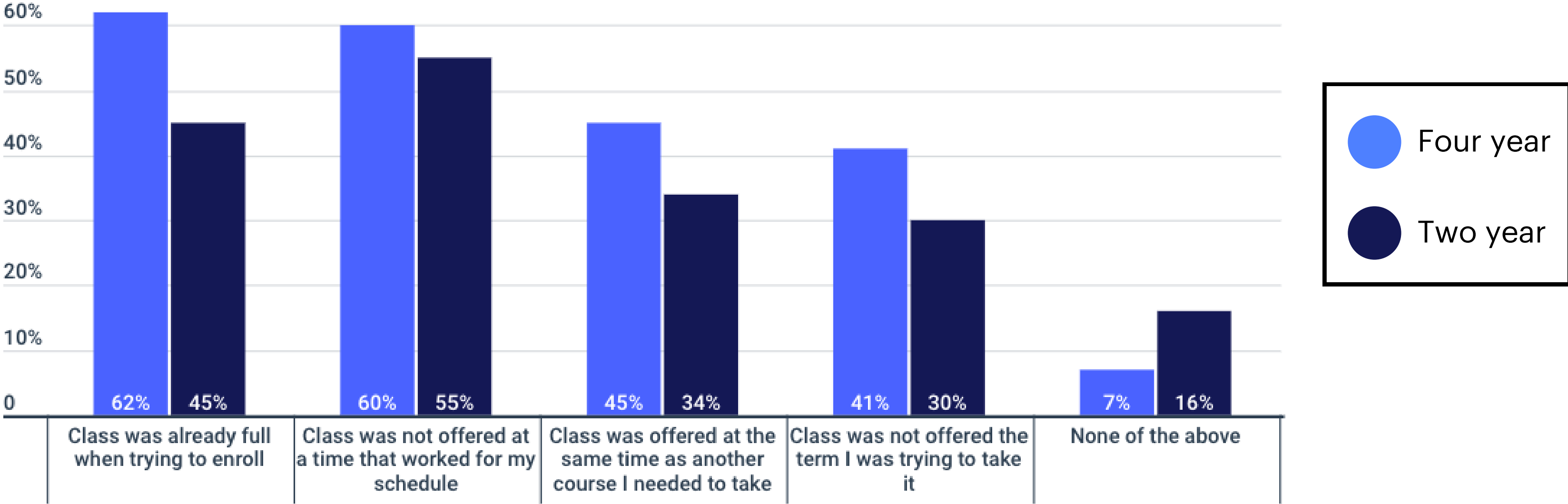
Question: Which of the following reasons do you think is the <u>most common</u> reason students at your institution are unable to access the courses they need?

- Class not offered the term they need it
- Class offered at the same time as another class they need to take
- Class not offered at a time that works for the student's schedule
- Class is already full when they try to register
- Other

Student Progression Stalled by Inaccessible Courses

Question: Which of the following challenges have you experienced while trying to enroll in the classes that you need to meet your requirements?

Legend:
- Four year
- Two year

Challenge	Four year	Two year
Class was already full when trying to enroll	62%	45%
Class was not offered at a time that worked for my schedule	60%	55%
Class was offered at the same time as another course I needed to take	45%	34%
Class was not offered the term I was trying to take it	41%	30%
None of the above	7%	16%

Institutions Feel the Impact of Inefficient Course Schedules
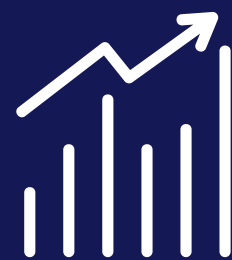
Inefficient Allocation of Instructional Resources

A large quantity of small and underfilled sections that aren't critical to student degree paths take up a disproportionate amount of instructional resources.

Rising Cost Per Student

Resources needed to maintain low-demand sections along with additional resources needed for areas of high-growth lead to rising costs.

Difficulty Keeping Up With Demand

Institutions struggle to find the space and resources to offer enough courses and sections for growing programs.

A Closer Look at Scheduling Analytics

- Historical scheduling data sources
- Leveraging degree audit & program map data

Historical Data Offers a Glimpse Into Demand

Course distribution throughout day, week

Are a high percentage of courses clustered on certain days, between certain hours?

Course and section fill rates

What courses, sections are consistently at maximum capacity? At low capacity?

Enrollment data by academic program, course

Which programs have seen an increase in enrollment? A decrease in enrollment?

Time to completion by academic program

Which academic programs have higher rates of students not completing them on time?

Enrollment trends by course modality

How have modality trends changed over time? How did the pandemic impact this data?

Time to completion by student segments

Which student groups take longer to complete programs? How might course access inhibit them?

Moving Beyond Traditional Scheduling Sources

Traditional Scheduling Sources

- Faculty preferences
- Faculty availability
- Schedule from previous term
- Space availability
- Time block popularity

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- Greater emphasis on faculty needs
- Maintains the status quo
- Doesn't account for changing student needs and preferences

Forward-Looking Scheduling Sources

- Projected new student enrollment
- Degree audit data
- Data from program maps

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- Schedule created with needs of current students in mind
- Uses real time data, rather than relying solely on historical data

Question: Does your institution use data from degree audits to help determine the course schedule?

- Yes
- No
- Unsure

Degree Audit & Program Map Data Provide New Insight

Few Institutions Take Full Advantage of These Data Sources

Degree Audit Data

Which requirements and courses student have already completed

Which requirements students still need to complete

1 in 3 undergraduate institutions have a significant or modest analytics strategy for degree audit data

Program Map Data

Which courses students will likely take in future terms to meet requirements

Which term students will likely take certain courses to meet requirements

1 in 4 undergraduate institutions have a significant or modest analytics strategy for student planning data

Optimizing Your Course Schedule

- Identifying conflicts to student progression
- Thinking critically about when courses are offered
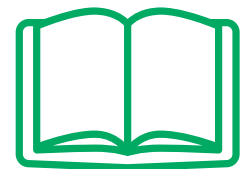- Using scheduling data to inform program maps

Identify Courses Commonly Taken Together to Prevent Conflicts

Types of Courses to Watch for Conflicts

Pre-requisite courses

Courses needed for programs in multiple disciplines

Gateway courses not offered every term

Students across multiple STEM programs may need to take the same courses in one term such as:

- Biology 101
- Chemistry 101
- Calculus 101

2 in 5 students struggled to enroll in a class they need because the class was offered at the same time as another course they needed to take

Question: How do you identify conflicts in the course schedule at your institution?

- Talk with other departments to compare schedules
- Run reports once the schedule is entered into our SIS
- Manual review
- Students bring conflicts to our attention during registration
- Identify conflicts in real-time as courses are scheduled in our scheduling tool
- Other

Transparency Across Departments Helps Prevent Conflicts

Manual Scheduling

- Departments create schedule and send to clerk to enter into SIS

- Clerk spends 3-5 weeks entering information into the SIS

- Departments can see what other departments scheduled and correct for errors

Platform-Based Scheduling

- Departments enter scheduling information directly into platform

- Departments can see what others are scheduling in real-time

- Conflicts and other adjustments can be made immediately, without waiting for manual entry
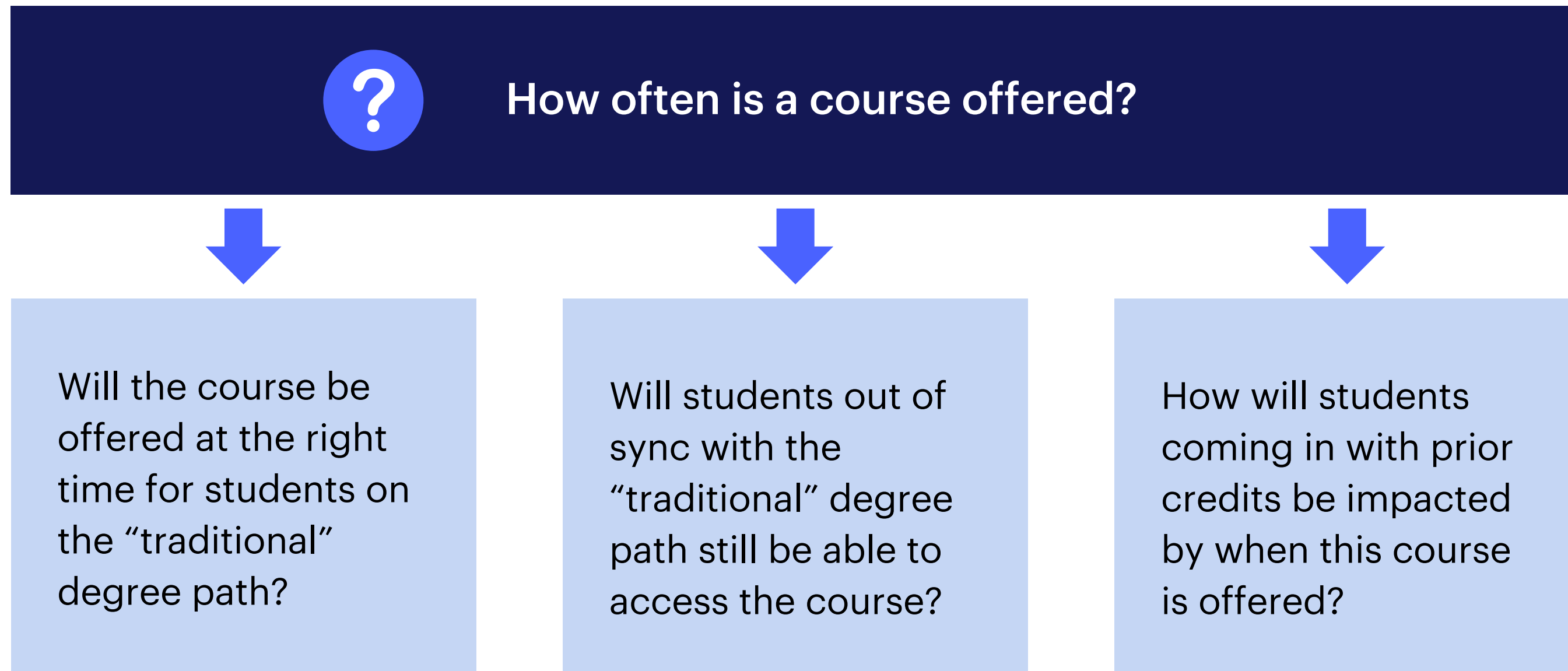
Higher likelihood of catching conflicts

Reduced time to identify and correct conflicts

Increased transparency

Offering the Right Sections, the Right Term

Course Sequencing More Than Just a List of Courses

? How often is a course offered?

Will the course be offered at the right time for students on the "traditional" degree path?

Will students out of sync with the "traditional" degree path still be able to access the course?

How will students coming in with prior credits be impacted by when this course is offered?

Using Scheduling Data to Inform Program Maps

Understand Successful Students' Paths

☑ Successful course sequences

☑ High course completion rates

☑ When milestone courses are taken

☑ Successful course combinations within a term

Analyze Where Students Frequently Struggle

☒ High DFW rates

☒ High repeat rates

☒ High-fail course combinations

☒ Where students frequently transfer or stop-out
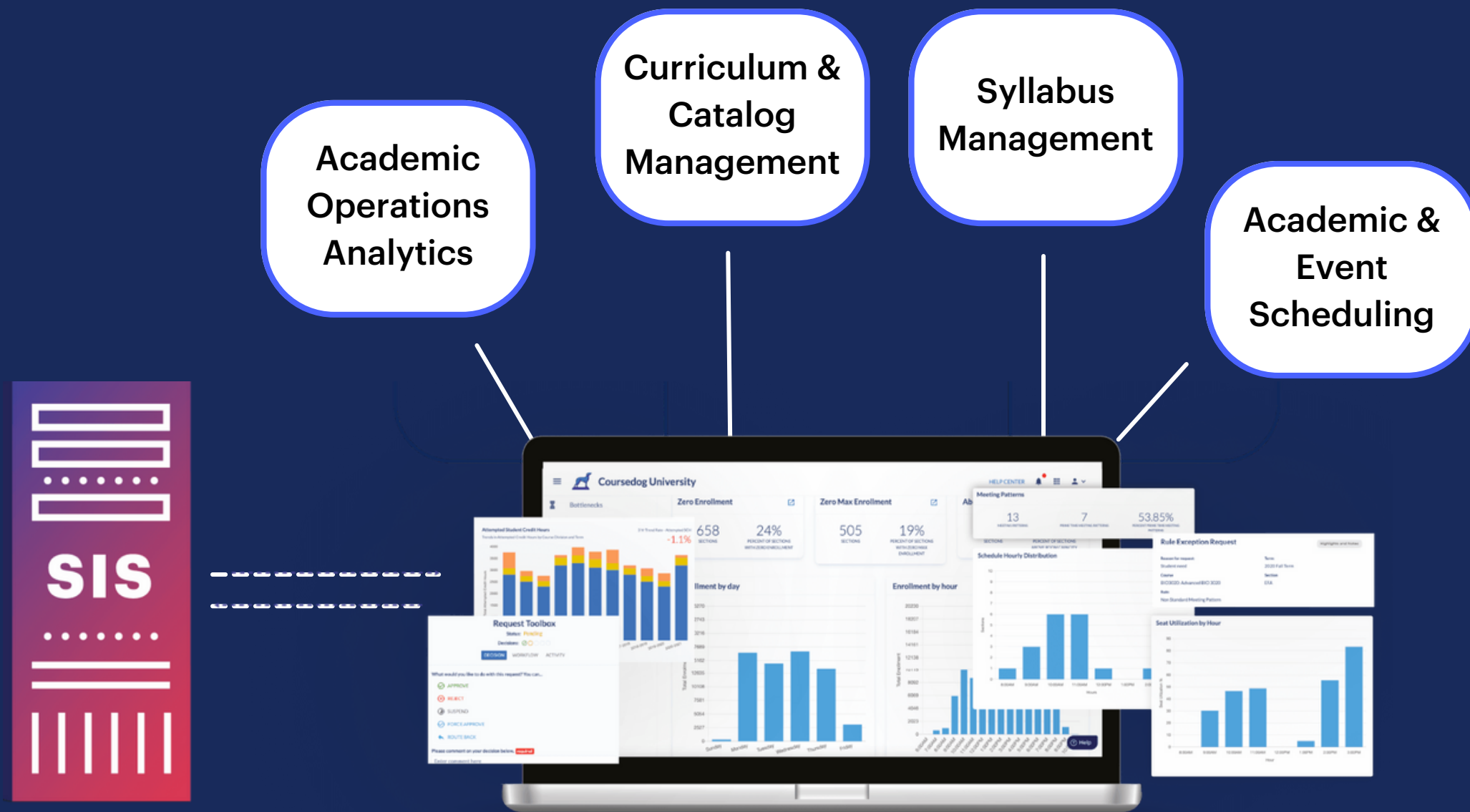
Questions to Consider

Are specific courses required for a large number of majors, creating a bottleneck?

If a student goes off sequence or takes a leave of absence, what happens?

Which pre-reqs are most likely to result in completions for the given requirement?

Improving student success is a holistic initiative – your academic operations should be, too.

Academic Operations Analytics

Curriculum & Catalog Management

Syllabus Management

Academic & Event Scheduling

SIS

Learn more at www.coursedog.com

Student-centric

Improve access, engagement, persistence, and completion with student-first offerings.

Flexible technology

Technology that fits the needs and processes of your institution.

Data driven

Democratize access to data to inform decisions across campus.

Questions?

Are you interested in learning more about how Coursedog can help you use analytics to achieve student-centric scheduling?

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