



# EAB Turn pathways maps into data-driven course schedules

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As colleges continue to implement Guided Pathways reform and fixed program maps, they face increased pressure to ensure that students have access to critical courses. However, many struggle to predict student scheduling behavior and default to rolling over their schedule from previous semesters, resulting in frequent bottlenecks. Monroe Community College (MCC) avoids this by using the structure of program maps to their advantage when creating course schedules. Relying on a combination of enrollment data and pathway projections, MCC staff generate schedules that flex to students' needs, while maintaining optimal enrollment.

## **Using student data to inform course scheduling**





Registrar staff start by uploading course sequences for each program into their student information system database, including the number of students enrolled and their degree progress. Using this information, they are able to estimate the number of students who will enroll in each program course.

The estimate is refined through a query of current and historical enrollment data. Specifically, registrar staff look at the number of students presently enrolled in a course, as well as how many students were enrolled in that same course at various points throughout the previous year. Collecting several unique data points give staff an accurate picture of how many students typically withdraw from, or register late for a course.

From this data, MCC staff approximate the seat capacity and projection for each course within a program and are able to offer the appropriate number of sections to meet student demand. The registrar also creates several “shadow sections”—surplus course offerings that are initially hidden from student-facing portals. As demand for a specific course increases and sections fill up, the registrar can then open these shadow sections to students, avoiding both costly bottlenecks and under-filled classrooms.

## Shows Where They'll Register Next

### *Hypothetical Seat Projection for Chemistry*

| Course Sequence  | Enrolled Ratio              | Needed Seats    |
|--|-----------------------------|-----------------|
|  CHE 151<br>General College<br>Chemistry I  | <div>1,452/<br/>1,788</div> | <div>336</div>  |
|  CHE 152<br>General College<br>Chemistry II | <div>1,377/<br/>1,788</div> | <div>411</div>  |
|  CHE 251<br>Organic<br>Chemistry I          | <div>1,001/<br/>1,788</div> | <div>787</div>  |
|  CHE 252<br>Organic<br>Chemistry II        | <div>324/<br/>1,788</div>   | <div>1464</div> |

### **Making pathways work for everyone**

By utilizing enrollment data already housed on campus to inform course scheduling, MCC staff get a clear picture of their students' typical registration behavior. The structure present in Guided Pathways program maps provides additional predictive certainty, allowing MCC to anticipate student need with a high degree of accuracy. Integrating these two types of information while creating course schedules eliminates headaches for the registrar and provides students with a hassle-free route to program completion.