

14 Metrics for Adaptive Course Planning

At most institutions, the course schedule is seemingly never quite fine-tuned enough to support student demand: seats go empty, modules overflow, staff are left scrambling to get instructional resources in place, and students struggle to get into the modules that meet their interests or worse, that they need to complete their degrees on time. But it doesn't have to be this way. Institutions that leverage data to inform course planning decisions and monitor registration in real time can proactively plan in a way that supports student progress, maximises instructional resources, and adapts quickly as needs change.

Explore this infographic to learn 14 metrics institutions can use to achieve adaptive course planning and understand how unreliable—or unavailable—data in the course planning process impacts staff, academics, and students. Plus, learn how each set of metrics can improve your course planning process.

Planning Phase



Baseline Review

1. Total number of modules offered per course for the past term

Why does it matter?

Know how many modules were offered in the past term to make informed decisions about adding or cancelling modules to accommodate student demand.



Enrolment

(Course- and module-level)

2. Fill rate for the past term
3. Enrolment capacity for the past term

Why does it matter?

Understand how full courses and modules were in relation to the number of available seats. If a course or module was over-subscribed, consider increasing the enrolment capacity before adding an additional section.



Student Progress

(Course- and module-level)

4. Attempted student credit hours by single honours and joint honours students, as well as any electives for the past term
5. Completion rate for the past term
6. Repeats rate for the past term
7. Failure and dropout rate for the past term

Why does it matter?

Identify which courses and modules students struggled to earn credit—surface opportunities to improve student progress, such as by standardising workload across all course modules.



Student Preferences

8. Modules
9. Module (and if relevant, tutorial or lab) times

Why does it matter?

Consider student preferences and needs to promote timely degree completion and greater student satisfaction. For example, adjusting an early morning module time to occur in the afternoon may better align with student preferences.

The Pitfalls of Bad Data

Impact on Staff

Academic leaders typically don't have easy access to the metrics listed to the left, so the Registrar is inundated with individual requests, and it becomes easiest to roll over the previous term's schedule without proper evaluation. This leads to high numbers of low-fill and high-fill sections and, ultimately, ineffective utilisation of space and instructional capacity.

Impact on Students

Poorly planned module offerings can inhibit students' paths to timely degree completion. For example, high-fill modules act as access bottlenecks when student demand for the course exceeds capacity, and students cannot register for the module.

Registration and Adjustment Phases



Academic Unit

10. Total number of modules offered per course
11. Number of unique students registered per module
12. Total enrolment capacity per module

Why does it matter?

If your academic unit has the resources to monitor these metrics daily during course registration, you can consider the number of modules per course to be flexible. Compare how many unique students your academic unit or course(s) will serve to the total enrolment capacity and adjust the number of modules as necessary. Changing the enrolment capacity is typically less resource-intensive than adding a section to accommodate high student demand.



Course and Module Level

13. Course and module fill rate
14. Course and module enrolment capacity

Why does it matter?

Compare how many seats will be filled to the number of available seats. Make adjustments to accommodate student demand, such as by adding a module or tutorial or increasing the enrolment capacity for an over-subscribed module. For under-filled modules, consider removing or cancelling and reallocating those resources to a high-demand module.

The Pitfalls of Bad Data

Impact on Staff

By the time academic leaders receive course enrolment and registration data, it is typically out-of-date. This results in reactive rather than proactive decision-making.

Impact on Students

If courses or modules are added too close to the end of the registration window due to reactive planning, students may miss the chance to enrol in preferred or required modules needed for timely degree completion.