

Students Database

In our academic/job-placement application, most user journeys begin with a student's full profile—personal details, their academic department, coursework history (including sections, credits, and grades), and any on-campus or internship employment. By embedding **department**, **courses**, and **jobs** directly inside each **students** document, we eliminate expensive multi-collection joins at read time and support ultra-fast lookups of a student's complete record. This structure is ideal for dashboard views (e.g. “view student transcript and work history”) and reporting (e.g. “fetch all CS majors with GPA ≥ 3.5 and >10 hrs/week jobs”) without compromising data integrity—foreign keys are preserved in the embedded subdocuments should we ever need to reference back or update individual course, department, or job tables.