College administrators are sending a message to their students: Hurry up. Low graduation rates hurt a school’s reputation, and staying enrolled for extra years adds to the tab for students. So dozens of schools and statewide systems are trying to cut back on the number of “super seniors” milling about campus.

Schools have embraced marketing gimmicks like “Class of ’17” bumper stickers to rally students around their graduation year. But they also are changing how they price a semester to make it easier to stay on pace to graduate, notifying students eligible to graduate that they should do so soon, and altering the classes offered in a given term to help students take the courses they need.

“The most effective way to lower student debt is to lessen the time toward completion.”

Cleveland State University President Ron Berkman

The Obama administration proposed in its fiscal 2017 budget request a $300 bonus payment to Pell recipients who take 15 credits or more each semester. And Congress is weighing reinstituting year-round disbursements of Pell funds, which could help students speed up school by taking more summer classes.

Sevag Alexanian had been taking between 12 and 14 credits most semesters at California State University, Northridge. He realized last year that it would take 4 1/2 years to graduate at that pace, but he opted to stick around for an entire fifth year, tacking on a major in marketing to his business management degree.

“It adds value to the college degree,” he said of the second major.

It also adds time—and money.

A report last month by personal-finance website NerdWallet found that two additional years in school can cost $300,000 over a person’s life, including money spent on tuition and student loans, lost income and missed retirement savings.

Schools are trying to catch students like Mr. Alexanian before they fall behind.

More than 190 campuses nationwide have implemented or will launch in the next year “15-to-Finish” campaigns, which drill into students the need to take 15 credits each term in order to graduate in four years, according to Complete College America, a nonprofit that advocates for higher graduation rates. Six states have rolled out the programs across their entire university systems, the group said at a conference on the topic late last month.

The University of Hawaii has blanketed local media and posted 15-to-Finish slogans on T-shirts, cups and pens since 2012. It holds a drawing for free textbooks for students who took 30 credits their first year, weighted graduation rates more heavily in school-funding formulas, and it even stopped renewing scholarships for students who didn’t take 30 credits the prior year.