

INFORMATION BRIEF 2014-20

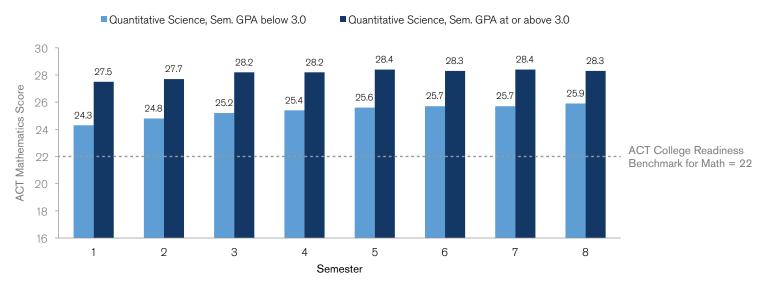
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There is a connection between ACT Mathematics test scores and college GPA for students who major in the quantitative sciences.

Average ACT Mathematics Scores for Quantitative Science Majors

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Mean ACT Mathematics Scores for Quantitative Science Majors, Disaggregated by Semester GPAs



Note: Data for the study came from 26 four-year institutions. There were 15,516 declared quantitative science majors in the first semester of college, and the number decreased to 7,159 students in the eighth semester due to student attrition (changing majors or leaving school).

Widespread concern about the number of science, technology, engineering, and mathematics (STEM) majors in the United States has led to numerous calls to strengthen our education system so that the nation can remain competitive in the global economy. Recent ACT research on STEM majors has provided useful information about a subset of STEM majors: students in the quantitative sciences, which includes computer science, engineering, mathematics and statistics, and the physical sciences (primarily chemistry and physics).

For each semester, the mean Mathematics score on the ACT[®] college readiness assessment was calculated for quantitative science majors earning a semester grade point average (GPA) of 3.0 or higher and

for those earning a semester GPA less than 3.0. The data show that for quantitative science majors who earned GPAs of 3.0 or higher, the average ACT Mathematics score rounded to 28 across all eight semesters. The mean score for students with semester GPAs below 3.0 rose from 24.3 to 25.9 over the eight semesters. These averages are well above the ACT College Readiness Benchmark of 22 for the ACT Mathematics test. Since students who meet the Benchmark already have approximately a 75% chance of earning a C or better in first-year college algebra course, high school students should understand the level of preparation needed to perform well in the quantitative sciences is high.



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