DATA SAY:
The sharp rise in the number of candidates for the M.S. in Computer Science in recent years saw an increase in attrition due to failure of the comprehensive exam that the faculty considered unacceptable.

SO WHAT:
The faculty developed an internal assessment exam for incoming candidates which would determine whether remediation was necessary in a number of prerequisite areas; students were then admitted with the provision that this assessment and subsequent requirement of remediation would take place prior to beginning coursework.

HOW WE CHANGED:
A majority of the incoming students were found to need remediation in a majority of the prerequisite subject areas. These students were then provided the opportunity to build a solid foundation upon which to proceed into graduate coursework. The assessment exam will also be administered upon completion of the degree, allowing for statistical analysis of improvement.

WHAT WE GOT:
While the required testing and remediation are too recent to have seen students graduate under them, remediated students participating in subsequent graduate coursework have been able to perform fundamental tasks with much greater skill and alacrity.
DATA SAY:
Seniors who had entered the M.S. Computer Science program having passed the entrance exam graduated with significantly higher grades than students who failed the entrance exam and therefore matriculated into the regular program after completing one semester of accelerated coursework. Once enrolled in the regular program, students who had taken accelerated prerequisite coursework earned 76% more C’s than those who did not require prerequisite coursework. Specifically, 16 C’s were given, and 9 were assigned to students who had required prerequisite coursework.

SO WHAT:
Students who do not pass the entrance exam for the M.S. Computer Science program generally are from non-technical backgrounds, and they have trouble performing in the graduate program. In order to maintain a quality program, all students must be able to apply prerequisite knowledge to their graduate coursework.

HOW WE CHANGED:
The 12 hours of prerequisite, accelerated coursework were modified to include intensive weekly assignments which require students to apply content and master the core prerequisites needed for successful graduate work.

WHAT WE GOT:
100% of 2013 graduates successfully passed the comprehensive exams, but students who had taken accelerated prerequisite coursework clearly struggled more. Data will be analyzed again next year.