I’m pleased to welcome all of you to the Georgia Tech campus for SECME’s annual Summer Institute. This year we are celebrating SECME’s 25th anniversary of working to increase the number of minority students who go on to a college education in engineering, math, science, and technology. The Summer Institute was one of SECME’s first projects, and this is the 24th annual Institute for K-12 educators and students.

Over the past 25 years, SECME has grown into the largest pre-college alliance in the country, bringing together 40 universities, 70 industries and government agencies, and 107 school systems representing 900 schools and 20,000 students in 16 states plus the District of Columbia. It now reaches beyond the Southeast, to include school systems in New York and Indiana.

And its work is making an important difference. Of 60,000 SECME graduates to date, 90 percent have gone on to a four-year college or university, with three-fourths of them majoring in science, math, engineering, or a technology-related field.

We are very pleased to welcome Dr. Yvonne Freeman to her first Summer Institute as SECME’s new executive director. Dr. Freeman is certified as a teacher and as a principal, and she has worked in higher education on a variety of campuses, including Morehouse School of Medicine and Clark-Atlanta University here in Atlanta. She has also worked in science and technology industry, and during the mid-90s, she was the highest-ranking African-American woman at NASA. We are very excited to have her at SECME and to have a chance to interact with her in our daily life here on the Tech campus.

Over the past four decades, the discussion and struggle and effort to bring minorities into mainstream American life have focused on civil rights. Today we know that the color that trumps both black and white is green. And the best thing we can do for the up and coming generation of minority students is give them the opportunity to participate fully in the economic life of our nation as well as its civil life.

Technology is at the heart of the blossoming, “new economy” of the 21st century, and the way to catch the wave of future prosperity is to be educated and skilled in science, math, engineering, and technology. We are already seeing a talent crunch in technology-based industries, and high-tech companies are increasingly attracted to places where they know they will have access to an educated workforce.
As technology becomes ever more pervasive, experts in science and technology are also gaining power and influence. It used to be that the MBAs ran the world while the scientists did experiments in the lab and the engineers tinkered with mechanical things in the back shop. Today scientists and engineers increasingly control their own destiny, and the broader leadership opportunities for experts in science, math, engineering, and computing are growing astronomically.

The leaders of the 21st century will be those who can create and manage technology. Minorities need to be full partners and participants in these opportunities, and not be left behind. But we have work to do to achieve that goal.

Today minorities make up 30 percent of the nation’s population aged 18 or younger – that’s nearly a third of our students in K-12 schools – and that percentage will grow rapidly during the 21st century. However, minorities presently earn only 13 percent of the nation’s bachelor’s degrees, 11 percent of our professional degrees and 6 percent of our PhD’s. For engineering, those numbers are even worse: Minorities receive 10 percent of bachelor’s degrees, and 3 percent of PhD’s.

Minorities comprise 23 percent of our overall population, but only 6 percent of the engineering/technology workforce. So we have a very important job to do, if minorities are to be fully represented in the knowledge-based jobs of the future.

At Georgia Tech, we are working to improve those numbers. Tech was the first university in the deep South to integrate voluntarily without court order, and it was done peacefully with the support of both students and faculty. Today, Georgia Tech is a national leader in graduating minority engineers. We rank first in the nation in awarding PhD’s to minority students and second in awarding bachelor’s and master’s degrees. And we hope that some of you students will be coming to Georgia Tech to study in the coming years.

Georgia Tech is a founding partner in SECME, and the SECME headquarters office is here on our campus. We have numerous programs and support organizations to help our own minority students to succeed academically and get involved in campus life. And we recently took the initiative to found EMERGE, which takes the idea of SECME to the next level. Like SECME, EMERGE involves an educational coalition, and its purpose is to prepare minority college students to go on to graduate school.

Georgia Tech became one of the eight universities that founded SECME in 1975, because we knew we needed your help as K-12 educators to get minority students excited about
math, science, engineering and technology, and to prepare them for post-secondary education. And the goal of this Summer Institute is strengthen and support you in that task.

Last October the College Board released a study suggesting that affirmative action, important as that is, is not enough. We also need “affirmative effort.” We have to do more than simply open the door. We have to provide encouragement and support for minority youth to step through it. It will take the effort of all of us working together to generate interest and enthusiasm for science and technology among minority youth, and to give them the skills and confidence they need to compete and succeed.

Those of us who represent the 40 colleges and universities in SECME need you K-12 educators as our partners in “affirmative effort,” because preparing minority students to succeed in college begins long before they fill out their first college application. It is a big enough adjustment for any 18-year-old to leave home and face both the academic rigors and the freedom of college. Students of any color who are not prepared with strong academics and good study skills risk failure. But it is doubly challenging and doubly important to go the extra mile in stimulating the interest of minority students and giving them the skills and the confidence in their ability to succeed.

Over the next 10 days, SECME will give you students an opportunity to get a feel for a university campus and imagine yourself as a college student. You’ll also get a better feel for what it is like to be a scientist or an engineer. You can turn on your TV any night of the week and see doctors and lawyers in action, but it’s a little harder to find out what scientists and engineers do on the job. So SECME will give you hands-on experience with labs and technology. And we’re also going to hold the finals of the Mousetrap Car competition.

For you educators, Summer Institute will give you hands-on experience with technology tools for teaching. It will bring you up to date on the latest curriculum content, and help you develop inquiry-based teaching strategies. And in the process, we hope that you will be re-energized and revitalized, and that you will return to your schools and classrooms with renewed enthusiasm for the task of preparing minority students for post-secondary education in science, math, engineering and technology.

Again, we are pleased to have all 550 of you on our campus and to be your hosts for SECME’s 24th Summer Institute, which is also a celebration of our silver anniversary. Thank you for coming, and we look forward to working with you to give our minority youngsters a bright and prosperous future in science, math, engineering, and technology.