Good evening. It is an honor and a privilege to join so many outstanding students and your families, our faculty, and other special guests tonight. It is an evening to celebrate you, your accomplishments, and your potential.

On behalf of Georgia Tech, I want to express our gratitude to the many companies and foundations that sponsor the awards and scholarships for the young women we will be recognizing tonight. They share our commitment, and know that investing in people is the best investment you can make. The more than $140,000 in scholarships we will award tonight speaks well of the sponsors, but is also a reflection of the outstanding quality of our students.

The recipients have been selected because they aspire to a career in engineering, and have proven that they are willing to work hard to make those careers a reality.

However, success in life is seldom a one-person effort. Many people have invested in you, with their time and encouragement, and financially, paving the way for your success. Some of you have mentors and parents with you tonight. They have believed in you; told you from the time you were young, that “girls can be just as good as boys in math and science, and sometimes better,” and they have cheered you on through your successes and your challenges. Please join me in recognizing and thanking these family members, professors, and other mentors, with a round of applause.

Tonight is a proud moment for all of you, and for Georgia Tech. It is symbolic of how far we have come. I know it is hard to believe, but for the first 67 years of the Institute’s existence, women weren’t allowed in Tech’s full-time programs. Under the leadership of Tech’s fifth president, Blake Van Leer, that all changed.

He and his family shared a commitment to engineering education for women. His wife, Ella Wall Van Leer, was a graduate of the School of Architecture at the University of California. His daughter Maryly earned her Chemical Engineering degree from Vanderbilt because women weren’t accepted in full-time programs at Tech.

In the spring of 1947 President Van Leer proposed to the Board of Regents that they consider changing the policy at Georgia Tech. The proposal was controversial. There were a number of letters in the Technique from students opposing the idea. The list of reasons for this opposition included a need to rearrange dorms and classes - Tech might even have to install bathrooms for women - the need to maintain strict rules of attitude, speech, conduct, and appearance, the fact that girls were an “academic distraction,” and perhaps one of the most compelling reasons was that it might make it harder to get football tickets!

The regents actually rejected President Van Leer’s proposal to admit women. The exact reason is unknown, but it was probably related to either football tickets or bathrooms. Times were indeed different!

What happened next, however, is a great example of the power of women working together. President Van Leer enlisted Tech’s librarian, Mrs. Dorothy Crosland, to help. She had been
Tech’s librarian for 20 years and had great personal influence with several of the regents and others in the community. Ella Van Leer and Dot Crosland helped to mobilize a number of outside women’s groups. They worked on the issue for three years. The Women’s Chamber of Commerce in Atlanta formally petitioned the regents. The Tech student council adopted a resolution favoring the admission of women, and the faculty and administration strongly supported the admission of women as well.

On April 9, 1952, just four months before I was born, the regents voted to admit women on a full-time basis by a vote of seven to five. It was a limited resolution. They could only enter programs not offered at other units within the University System, including engineering, architecture, and a master’s in applied mathematics. As hard as it is for many of you to believe, that restriction was not lifted until 1968.

Tech’s first two women graduates in 1956 were Diane Michel and Shirley Clements. In an interview on the day before graduation, they discussed their years on campus.

When asked the recurring question at the time, Miss Clements said she definitely didn’t come to Tech to find a husband. “Any girl who does is getting one the hard way. Not that Tech men aren’t good husband material - They’re the best. It’s just that this is such a tough school, and the girls who come here for a lark don’t last long enough to get married.”

Her accomplishments at Tech and as an alumna were hardly a lark. In 2000 Shirley Clements Mewborn, who served as the first female president of the Georgia Tech Alumni Association, retired as vice president and treasurer of Southern Engineering after a 41-year career. She has been an inspiration to thousands of Tech women and the Shirley Clements Mewborn softball field is named in her honor.

Today, we are now the number one producer of female engineers in the country. Thirty percent of Georgia Tech’s 20,000 students are women. And I’m proud to say they now occupy forty-two percent of leadership positions in our 400 student organizations, including a female president of both the undergraduate and graduate student government associations.

I continue to be impressed with Georgia Tech student leaders. Because of the academic rigor of our Institute, balancing academics and campus leadership activities can be challenging. Yet, many of our student leaders continue to be involved in numerous organizations. The two students who introduced me, Laura Armanios and Melissa Minneci, are shining examples.

Laura is a fourth year Aerospace Engineering major who finds time to serve as senior vice president in the Executive Roundtable, as well as leadership roles on the Aerospace Student Advisory Council, and in her sorority. In her spare time she serves as a mentor and regular speaker for Women in Engineering outreach programs.

Melissa is an officer in the Society of Women Engineers and is a team coach, mentoring incoming transfer students. Both young ladies speak several languages. Students like Laura and Melissa are willing to take on demanding academics and balance that with student leadership. The leadership experience that students have while at Tech will serve them well in their careers and in the community upon graduation.

When working on my comments for tonight, I wanted to highlight some success stories—women who had the courage and determination to use their talents and interests to their fullest. Let me share a few inspirational examples.
Ellen Swallow Richards was a pioneer in the field of environmental engineering. Here at Georgia Tech we are leading the nation in sustainability research and implementation. Fifteen years before Georgia Tech was founded in 1870 Ms. Richards conducted the first water quality studies of the rivers and water basins in Massachusetts. She developed methods still being used today and is known as the “mother of environmental engineering.”

We can thank Emily Roebling for the completion of the Brooklyn Bridge. She was the wife of the engineer who designed the bridge. To help him, she studied and learned civil engineering, math, strength of materials, and cable construction. In 1872 she took over the technical supervision when her husband’s health failed during the bridge construction. When he became paralyzed and could not talk, she became the real technical leader of the project.

Grace Murray Hopper earned her PhD from Yale in 1934. She developed the first computer compiler as a research fellow at Harvard’s Computation Laboratory. She invented COBOL language, the term “computer bug,” and was a visionary in the use of computers in the public sector. She was the first woman Admiral in U.S. Navy. Interestingly, in 1969, she was awarded the first ever Computer Science Man-of-the-Year Award -- yes, you heard correctly “Man of the Year,” -- from the Data Processing Management Association.

But let’s also look at some more contemporary examples.

A UCLA professor, Thelma Estrin, was a pioneer in the field of biomedical engineering, using computer technology to solve problems in health care and medical research. She became the first woman to hold a national office in IEEE.

Stephanie Kwolek is known for the invention of Kevlar®, a steel-like fiber used in radial tires, crash helmets, and bulletproof vests. She worked for DuPont and advanced to their research labs. She has 19 U.S. patents and was awarded the National Medal of Technology, the highest award in engineering in the U.S.

Gail Boydson is a chemical engineer with Eli Lilly Co. She is helping to develop new types of insulin, forecasts worldwide manufacturing capacity needs for chemical and biotech facilities, and is responsible for mentoring and training new engineering hires at Eli Lilly.

If you were fortunate enough to attend the Georgia Tech Black Leadership Conference event in the Ferst Center last month, you heard Dr. Mae Jemison. A NASA astronaut for six years, she was the first woman of color in space. She is the founder and president of two technology companies. She is an inspirational speaker, talking on everything from science literacy to medical innovations.

There are countless others, many of whom went to Tech. By our count, there are now at least 18 female Georgia Tech graduates working at NASA. In 1992, Tech’s first alumna to become an astronaut boarded her first space flight on the Shuttle Endeavour. Today, Jan Davis (Biol ’75) is a veteran of three space shuttle flights.

Susan Still Kilrain, (MS, AE ’85), made astronaut history in 1997 as a member of the first Shuttle crew to fly back-to-back flights, and was the second woman to pilot a space shuttle. She is now the lieutenant commander of the Office of Space Flight at NASA headquarters in Washington, D.C.
Deborah Nash Harris, (ISyE, ’78) who is on the Georgia Tech Foundation Board of Trustees, retired in her prime as a senior vice president for human resources at Microsoft Corporation.

Sandra Adamson Fryhofer, (ChE ’79) is an internist in private practice and an associate professor at the Emory University School of Medicine. She became the youngest, and second female president of the 115,000-member American College of Physicians – American Society of Internal Medicine. She has been a frequent medical correspondent for CNN Headline News and the Today Show and a blogger for the Woman’s Day Web site.

One of our judges last night for the InVenture Prize competition was Lara O’Connor Hodgson. Lara earned her BS in Aerospace Engineering from Tech before going on to Harvard for her MBA. While at Tech, she was a scholarship member of the varsity track and field team. She is an internationally recognized speaker and facilitator, leading seminars on creativity, diversity, and innovation. A longtime entrepreneur, Lara most recently founded Nourish Inc., which produces formula-ready bottled water for infants and toddlers and in February was named one of the most innovative new products in Georgia.

While there still may be a glass ceiling for some top leadership positions, it’s getting quite a few cracks in it, thanks to the courage and determination of women, like many of you, who are willing to lead the way, and mentor and encourage others in the process.

Mimi Philobos’ work is a wonderful example. She developed M & M Mentoring that has recently been extended to admit men at Georgia Tech – now there is an interesting twist! Entering freshmen are assigned a mentor to help them adjust to the academic rigor of Tech and to manage their time, and to just be someone to come along side them and give them the encouragement they need. Many times, sharing failures is just as powerful as sharing successes. I’m sure many of you here tonight are, or have been, involved in that program.

In closing, as you plan your career, I challenge you to think beyond just your field of engineering. Most of society’s biggest challenges will require interdisciplinary solutions—the combined mind power of people working together to come up with answers to problems whose solutions exist at the boundary or intersection of disciplines.

A good example is the Wallace H. Coulter Department of Biomedical Engineering, a joint effort between Georgia Tech and Emory. Eleven years ago neither institution had a biomedical engineering program; yet today, our joint program is ranked among the very best in the country.

At Georgia Tech, we don’t just want to prepare graduates with technical expertise. We want to prepare leaders for a constantly changing world. You have the potential to be those leaders. Thanks to the good work of men and women who have paved the way for you, you have limitless opportunities.

Georgia Tech’s President Van Leer had the pleasure of seeing his daughter, Maryly, enroll at Tech as its first female PhD student. Unfortunately, he did not live to see the first woman graduate from Tech. But, he was a man of vision. Maybe he envisioned a time when we would celebrate the accomplishments of several hundred of Georgia Tech’s most outstanding students, who just happen to be women – exactly what we are doing here tonight. I am confident that he would be every bit as proud as I am. Thank you for allowing me to join you tonight, and thank you for the tremendous way you’re representing Georgia Tech.