



Points of Pride 2016

North Carolina A&T State University's College of Engineering will cultivate leaders to solve the technical and societal challenges of the world, and be a globally competitive college that achieves excellence in Academics, innovation and research.

N.C. A&T welcomed North Carolina Governor Pat McCrory to campus to thank voters for their support of the 2016 \$2 billion Connect NC bond referendum, which received approval from over 65 percent of the state's voters on March 16, 2016. **N.C. A&T will receive \$90 million** to construct its new Engineering Research and Innovation Complex (ERIC).



N.C. A&T's Center for Cyber Defense is designated as a **National Center of Academic Excellence in Information Assurance/Cybersecurity** through 2021.



Congratulations to **Madeline Keefer (BS, Biological Engineering '16)** the 2016 awardee of both the **University Award for Academic Excellence** and the **College of Engineering's Namaskar Award**. The Namaskar Award provides tangible recognition of a graduating senior engineering student who has excelled as a scholar, demonstrating qualities of professionalism and leadership as an undergraduate student. It is intended to draw attention to the importance of excellence in engineering and to encourage students to strive for excellence in their endeavors.

Each academic year, the College of Engineering hosts the **Dean's Distinguished Speaker Series**. The series focuses on innovations and innovators, bringing speakers from industry, government and academia to N.C. A&T to interact with students and faculty, to speak about innovative advances and approaches anchored in engineering and computer science. This year's speakers were Charles Johnson-Bey, corporate open innovation program manager for Lockheed Martin; Marc de Vinck, professor of practice in creativity at Lehigh University; Brad Kemmerer, president of ABCO Automation Inc.; and Dr. Adriane Brown, president and COO of Intellectual Ventures (pictured above with Dr. Robin Coger).

N.C. A&T is the **official North Carolina Affiliate Partner for the FIRST LEGO League (FLL) and FIRST Tech Challenge (FTC) robotics programs**, performing outreach to students in grades 4 - 12 from across the state of North Carolina. Since 2013, the number of FLL and FTC robotics teams in North Carolina has increased from 362 to 402 and from 54 to 85, respectively, due to the efforts of Dr. Kory Bennett, A&T alumnus (PhD, EE 2005, MSEE 1996) and faculty member in the Department of Electrical and Computer Engineering.



The College of Engineering continues to hold its consistent ranking as **No. 1 one in the nation for the number of degrees awarded to African Americans at the undergraduate level** for 15 consecutive years, and as the leading producer of African American female engineers at the baccalaureate level. (Source ASEE)

N.C. A&T professor Dr. Salil S. Desai was one of 17 faculty members chosen to receive the **University of North Carolina Board of Governors 2016 Awards for Excellence in Teaching**. Desai has been an A&T faculty member in the Department of Industrial and Systems Engineering since 2004. His work and research has netted more than \$5 million from various public and private agencies including the National Science Foundation, the Department of Defense and the Department of Energy.

Congratulations to the newly-elected **Mr. and Miss N.C. A&T 2016-2017**. Jeffron Smalls (Georgetown, South Carolina) and Jasmine Boles (Raleigh) are both students in the Department of Industrial & Systems Engineering.

College of Engineering faculty researchers attracted **over \$13 million in total annual research dollars during the 2014-2015 academic year**. The college continues to rank second in annual research dollars among the four North Carolina public engineering schools.

The N.C. A&T campus and its ASCE student chapter hosted the three-day annual **Carolinas Conference of The American Society of Civil Engineers (ASCE)**. Fourteen universities attended: 10 schools from North Carolina, South Carolina and Georgia and four international universities representing the countries of Egypt, India and the United Arab Emirates. The impressive engineering competitions were the main focus of the conference, with students working all year to design and construct the concrete canoes and steel bridges they used for competition. Students also conducted business meetings, delivered professional and technical presentations, engaged in social and networking activities, and hosted an awards banquet.



Austin Ogletree (industrial and systems engineering major and student government association president) and computer science major Angelica Willis were selected from a national applicant pool of 450 to serve as **All-Star Ambassadors for the White House Initiative on HBCUs**.



QUICK FACTS

Departments:

Chemical, Biological & Bio Engineering
Civil, Architectural & Environmental Engineering
Computation Science & Engineering
Computer Science
Electrical & Computer Engineering
Industrial & Systems Engineering
Mechanical Engineering

Five COE Cross-Departmental Research Strengths:

Energy & Sustainability
Healthcare Applications
Multiscale Materials Development & Analysis
Aerospace & Transportation Systems
Cyber Security & Network Operations



Students in the Department of Civil, Architectural & Environmental Engineering (Davon Quarles, Charles Stanback, Amma Calhoun, Deanna Ho, Chelsea Davis, Marshall Eddleman) placed third at the **U.S. Green Building Council Sustainable Energy Competition** in April. Hosted by the State Chapter in Raleigh, A&T students submitted a detailed, interdisciplinary project for consideration by the Kaleidoscope Charter High School scheduled to be designed in Morrisville in 2017.

Dr. Lauren Davis, an associate professor in the Department of Industrial and Systems Engineering at N.C. A&T, is fighting hunger with knowledge. **Her research is impacting the efficiency of The Food Bank of Central & Eastern North Carolina.** She is using statistical and mathematical models to predict the amount of food donations that will be received by donor, food type, and/or receiving location. In addition, Davis' mathematical models are helping determine how to allocate food equitably among the food bank's service area. In the future, Dr. Davis will utilize data mining and other statistical techniques to predict the demand for food in each county, and to help guide spending of donated funds to augment and complement the types of donated food.



Dr. Jagannathan Sankar, Distinguished University Professor in the Mechanical Engineering Department, addressed the National Research Council, the National Academy of Engineering and the National Academy of Sciences on a "FUTURE Center-Based Model for the Nation." He also received North Carolina's highest civilian honor from Governor Pat McCrory, The Order of the Long Leaf Pine.

N.C. A&T's Center for Advanced Studies in Identity Science (CASIS), in collaboration with Carnegie Mellon, Clemson and the University of North Carolina at Wilmington, is the first and only National Intelligence Science and Technology Center of Academic Excellence in the United States. Under the leadership of Dr. Gerry Dozier, CASIS director and chair of the Department of Computer Science, the Center received a five-year, \$8.93 million grant from the Army Research Laboratory, which led to its establishment. A&T is the lead university in the Center.

North Carolina A&T State University

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Mechanical Engineering (BS, MS, PhD)

Enrollment:

1,278 Undergraduate students
337 Graduate students

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