ABOUT NSBE BIRMINGHAM

The National Society of Black Engineers (NSBE) Birmingham Professionals Chapter is a 501(c)(3) non-profit association dedicated to the academic and professional success of African American engineering and technical students and professionals.

Our mission is to increase the number of culturally responsible black engineers, who excel academically, succeed professionally and positively impact the community. NSBE-Birmingham fulfills the mission of NSBE by organizing, sponsoring, and attending an array of workshops, community activities, scholarship funding, mentoring, and networking events.

We facilitate the development of strong technical professionals and leaders, encourage minority students to eagerly seek out degrees in Science, Technology, Engineering and Mathematics related fields, and empower the community with the knowledge and foresight to strengthen the very foundation that enables our community as a whole to achieve greater heights.

CHAPTER OBJECTIVES:

- Stimulate and develop student interest in the various engineering disciplines.
- Encourage and advise minority youth in their pursuit of an engineering career.
- Strive to increase the number of students studying engineering at the undergraduate and graduate levels.
- Encourage members to seek advanced degrees in engineering or related fields and to obtain/maintain professional engineering registrations.
- Promote public awareness of engineering and the opportunities for blacks and other minorities in that profession.
- Function as a representative body on issues and developments that affect the careers of black engineers.

IN THIS ISSUE

- General Body Meeting Sep. 8 2015
- NSBE Regions III FRC
- Birmingham Welcomes New City School Superintendent Dr. Gacutan
- 2015-2016 Calendar of Events
- Future Engineers of America Kick-off
The first General Body Meeting of the 2015-2016 NSBE Birmingham Service Year will be held on September 8, 2015. The meeting will be hosted at The Innovation Depot located at 1500 1st Ave. North | Birmingham, AL 35203.

Innovation Depot is a business incubation facility and program that focuses on the development of emerging biotechnology/life science, information technology and service businesses, and operates in partnership with the University of Alabama at Birmingham.

A public-private economic development effort, Innovation Depot is funded by the Birmingham regional business community, the Community Foundation of Greater Birmingham and other leading private foundations, UAB, the City of Birmingham and Jefferson County.

The agenda for the meeting will include the introduction of 2015-2016 E-Board Officers, a review of chapter goals, a tour of the facility.
Welcome back Antonia and Rashan Cylar 😊

The couple recently joined us again in Birmingham after supporting the Kemper County Start-Up in Mississippi.

MORE NSBE SITES

NSBE National
http://www.nsbe.org
NSBE Region 3
NSBE Montgomery
http://www.nsbe-mae.org
NSBE of North Alabama
http://www.nsbe-northalabamaee.com
Kelley Nicole Castlin-Gacutan, called Dr G, (born in Hueytown) is the new superintendent of Birmingham City Schools.

Castlin-Gacutan's parents both graduated from Birmingham schools and she grew up in Hueytown. She earned her bachelor of science in psychology at Tennessee State University, and was crowned "Miss Tennessee State University" in 1991. She went on to complete a master of education in early childhood education from Brenau University in Gainesville, Georgia in 1995, and a doctorate in educational leadership from Nova Southeastern University in Fort Lauderdale, Florida in 2005.

She began her career as a substitute teacher for Fulton County Schools in Atlanta in 1991, then spent a year in Kagoshima, Japan teaching English as an employee of the Japanese Ministry of Education. In 1993 she was hired as a teacher at Spalding Drive Elementary School in Atlanta. After six years she was appointed an assistant principal for Dunleith Elementary School in Marietta, Georgia and transferred to the same position at Lockheed Elementary School, in the same system, in 2000.

Castlin-Gacutan was promoted to principal of Lockheed Elementary in 2005. In 2008 she moved to Nogales, Arizona to work as director of grants for Nogales Unified School District No. 1, and filled in as interim assistant superintendent. She was appointed principal of Clarke Middle School in Athens, Georgia in 2009 and spent a year there before moving into system-wide administration with Clarke County Schools as an accountability and school improvement specialist.

In 2011 she joined the faculty of Shorter University in Atlanta as an assistant professor of graduate education programs and director of the center for teacher preparation. In 2012 she was hired as deputy superintendent of school operations for the Bibb County School District in Macon, Georgia. She began serving as interim superintendent for the system in December 2014.

Castlin-Gacutan began her tenure as Birmingham City Schools Superintendent on July 1st. [bhamwiki/Dr. Kelley Gacutan](http://bhamwiki/Dr. Kelley Gacutan)
Why NSBE Matters: How NSBE Supports 21st Century Engineering Traits


The National Academy of Engineering (NAE), based in Washington, D.C., is the highest engineering authority in the United States. In the Engineer of 2020 report, the NAE outlined 10 traits that engineering students should possess to address the challenges of the future. They are: 1) analytical skills; 2) practical ingenuity; 3) creativity; 4) communication skills; 5) business and management skills; 6) high ethical standards; 7) professionalism; 8) leadership; 9) dynamism/resilience/ flexibility; and 10) desire to be a lifelong learner.

The researchers surveyed 289 African-American engineering students and graduates from across the country who participated in up to three activities (BGOs, MEPs and NSBE) to determine whether they felt that involvement in any of these organizations or activities had a greater influence than the others on the Engineer of 2020 traits. And if so, to which organization would they uniquely link the development of the traits?

Respondents said NSBE membership was most influential in developing the following four Engineer of 2020 skills.

Communication
Engineering has always engaged multiple stakeholders — government, private industry, and the public. In the new century the parties that engineering ties together will increasingly involve interdisciplinary teams, globally diverse team members, public officials, and a global customer base. We envision a world where communication is enabled by an ability to listen effectively as well as to communicate through oral, visual, and written mechanisms. Modern advances in technology will necessitate the effective use of virtual communication tools.

Business and Management
In the past those engineers who mastered the principles of business and management were rewarded with leadership roles. This will be no different in the future. However, with the growing interdependence between technology and the economic and social foundations of modern society, there will be an increasing number of opportunities for engineers to exercise their potential as leaders, not only in business but also in the nonprofit and government sectors. Policy decisions in technological societies will demand the attention of leaders who understand the strengths and limitations of science and technology. New levels of sophistication will be needed as choices that affect physical, human, and political infrastructures and decisions that define priorities and objectives for a community, region, or nation are made.

Professionalism
Many of the challenges of the new century are complex and interdependent and have significant implications for the technologies intended to address them and the ways in which those technologies affect the planet and the people that live here. Effective and wise management of technological resources is integral to engineering work. The choices will be gray in nature, balancing (for example) economic, social, environmental, and military factors. Leaders, and those who influence these choices, will benefit from a sense of purpose and clarity. Successful engineers in 2020 will, as they always have, recognize the broader contexts that are intertwined in technology and its application in society.

Leadership
In preparation for this opportunity, engineers must understand the principles of leadership and be able to practice them in growing proportions as their careers advance. They must also be willing to acknowledge the significance and importance of public service and its place in society, stretching their traditional comfort zone and accepting the challenge of bridging public policy and technology well beyond the roles accepted in the past.

To read more go to:

Karl Reid Blog (July 2015): Why NSBE Matters
NSBE Birmingham is excited about the upcoming programs and events that will be offered this year!

Mark your calendars for planned activities.

### 2015

#### September
- NSBE General Body Meeting (Sept 8)  
  Innovation Depot  
- Week 6 NSBE Run (Sept 12)  
  Lakeshore Trail  
- Future Engineers of America (Sept 13)  
  Alabama Power HQ  
- Week 7 NSBE Run (Sept 19)  
  Veteran’s Park  
- Week 8 NSBE Run (Sept 26)  
  Lakeshore Trail

#### October
- Managing Your Health / Breast Cancer Awareness (Oct 1-10)  
- Future Engineers of America (Oct 11)  
  Alabama Power HQ

#### November
- Future Engineers of America (Nov 8)  
  Alabama Power HQ  
- Book Discussion & Leadership Roundtable (TBD)

#### December
- NSBE Holiday Mixer (Dec 8)  
  The Club of Birmingham  
- Future Engineers of America (Dec 13)  
  Alabama Power HQ

### 2016

#### January
- Future Engineers of America (Jan 10)  
  Alabama Power HQ  
- MLK Day of Service (Jan 18)  
  Inhabit Bush Hills

#### February
- Future Engineers of America (Feb 14)  
  Alabama Power HQ  
- General Body Meeting (TBD)

#### March
- Future Engineers of America (March 13)  
  Alabama Power HQ  
- Scholarship Application Review Process

#### April
- Future Engineers of America (Apr 13)  
  Alabama Power HQ  
- Scholarship Interviews

#### May
- Future Engineers of America (May 1)  
  Alabama Power HQ  
- 35th Annual Scholarship Banquet (May 7)  
  McWane Science Center

#### June
- NSBE Birmingham Executive Board Nominations & Elections

#### July
- NSBE Birmingham Family Fun Day (TBD)
Future Engineers of America Kick-Off

The kick-off meeting for our Future Engineers of America (FEA) program is September 13, 2015.

In our Future Engineers of America (FEA) Program students are exposed to different aspects of the engineering profession through monthly interactive sessions.

The innovative program allows students to participate in engineering based group activities that will help them determine which Engineering discipline best fits their goals and personality.

The program hosts 3-5 fully funded college trips and also offers the opportunity for students to volunteer in scheduled NSBE-Birmingham community service projects.

FEA meetings are held at the Alabama Corporate Headquarters. Topics that will be covered during the 2015-16 school year are shown below.

- Mechanical Engineering
- Civil Engineering
- Computer Science
- Electrical & Computer Engineering
- Materials Engineering
- Chemical Engineering
- Biomedical Engineering

Future Engineers of America is led by PCI chairs Julian Grant and Kreana Pye.
Give Us Your Feedback!

What can we do to improve your membership experience?
Please send comments and suggestions to our
Programs/Membership Chair at membership@nsbebham.org

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Contact us:

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