



PURDUE UNIVERSITY
MINORITY ENGINEERING PROGRAM
2015
ANNUAL REPORT



TRANSFORMATION

From The Director



Virginia Booth Womack, Director
BSIE, BA Psychology
18 Years Industrial and Manufacturing
Experience

The year 2015 was a year of heartfelt reflection. Our theme, “Honoring Our Past, Forging the Future” ushered in a 40-year celebration of the National Society of Black Engineers (1975) and a 41-year celebration of the Minority Engineering Program (1974). MEP has touched the lives of students from all ethnicities with focus on Hispanic American, Native American and African Americans interested in pursuing careers in engineering.

Nearly 3000 engineering graduates from historically underrepresented populations trace their academic roots to Purdue University, and have become phenomenal leaders and world changers in their field of expertise. These include individuals who might not have considered engineering as a career but received an invitation to participate in a Summer Engineering Workshop at Purdue University while in middle school or high school that changed the trajectory of their lives. These outreach initiatives continue at Purdue, but the future will be shaped by how we address national and institutional focus on diversity, equity, and inclusion.

The demographics of the United States continues to shift towards a more diverse population and with this shift comes the need for an approach to improve curriculum design, pedagogy, assessment of student success and institutional climate that promotes the understanding and value that comes with diversity of race and ethnicity. There is also a need to shift how we think about and embrace the opportunities that diversity brings.

The staff of the Minority Engineering Program continues to raise the bar of excellence in the work that we do. As we close out 2015, we celebrate the following:

- Launch of the new MEP website www.purdue.edu/mep
- Historic high in the number of underrepresented minority first-year engineering students to enroll (145 students)
- Participating recipients of two Diversity Transformation Awards, Strengthening the Purdue Pipeline for URM Student Matriculation: Addressing Financial Constraints, Improving Retention, and Assessing Student Experiences” with the School of Mechanical Engineering and “Pathways to Increased Diversity for Grad School and the Professoriate” with the Office of Graduate Education in the College of Engineering
- Leadership positions of the National Association of Multicultural Engineering Program Advocates (NAMEPA) is held by MEP staff; President and Executive Director, Virginia Booth Womack, Treasurer, Darryl Dickerson, Programs Chair, Cinthia Sanchez along with 6 thought leadership positions held by Purdue University faculty and staff. We hope to showcase best practices in student success across the nation and within Purdue

Within the College of Engineering, we strive to understand, embrace and meet the needs of all of our students. We actively pursue feedback from students to learn ways to increase participation of underrepresented minority students. We recently launched a climate survey to assess what we can do to create and sustain a climate where all students are valued.

The theme for 2016 is Transformation, and the meaning can be applied several different ways. Transformation, as it relates to culture, is the dynamic process whereby living cultures of the world change and adapt to external or internal forces. Transformation as it relates to an individual is best summarized in a very familiar saying “be ye transformed by the renewing of your mind.” (Romans 12:2) In essence, at the heart of transformation is change: the type of change that completely shifts understanding. This annual report provides a snapshot into the seeds of transformation planted by the Minority Engineering Program over the past year, demonstrating the progress we have made in outreach, recruitment, enrollment, retention, graduation, and publications.

We will continue to cultivate these seeds of transformation in the College of Engineering and the university in ways that reflect the rich diversity of our nation. And we welcome all of our alumni and friends to join us by supporting the extraordinary students impacted by MEP. We are taking part in the **Ever True: The Campaign for Purdue University** capital campaign in our effort to expand our programs and to increase the number of underrepresented minority engineers at Purdue. The campaign has the potential to catalyze our transformation and will be made possible through the generosity of our alumni and friends. We thank all who have supported our work through giving over the years and we look forward to your continued engagement and partnerships.

Sincerely,



Leah H. Jamieson

The John A. Edwardson Dean of Engineering

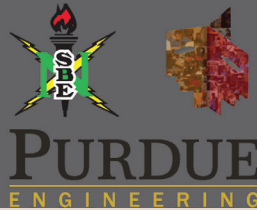
Dean's Message

It is a genuine pleasure and honor to congratulate Purdue's Minority Engineering Program. It is fitting time to pause and take stock of all MEP has done: the lives MEP has touched, the friendships forged, the futures shaped, the goals envisioned and achieved. It is a time to remember the bold past leadership of Marion Williamson Blalock and to celebrate the inspiring current leadership of Virginia Booth Womack. It is also a time to reflect on the history and the stories of the underrepresented minority engineering students, faculty, and staff who have made Purdue a different, better place. I extend my heartfelt congratulations to the extraordinary people of Purdue's Minority Engineering Program. You have had – and will continue to have – a profound impact on our world.

Dean Jamieson

40 Years Celebration

40th ANNIVERSARY



More than 100 Purdue Engineering students, alums, corporate partners, and friends joined the Minority Engineering Program (MEP) on September 13, 2015 to celebrate the 40th anniversary of the founding of the National Society of Black Engineers (NSBE) at Purdue University and the strong legacy of MEP as a catalyst for URM student success for over 40 years.

A major portion of the event celebrated NSBE's roots which grew from the Purdue campus organization known as the Black Society of Engineers (BSE) founded in 1971 by Edward Barnette (now deceased) and Frederick S. Cooper, III under the advisement of Dr. Arthur J. Bond. Their goal was to improve recruitment and retention of black engineering students. This platform led to the founding of the national organization in 1975. We were honored to have Fred Cooper serve as our keynote speaker, providing his perspective on the challenges of the past, the legacy of NSBE and MEP, and their future roles in transforming the engineering workforce and communities of color. Fred's words reinforced the key roles played by organizations like NSBE and programs like MEP in providing talented students access to world class engineering education and support for success.

Other special guests for this celebration of the many contributors to URM student success included: Michele Cooper, Fred Cooper's sister, first female National Treasurer of NSBE; Jacquelyn Cooper, Fred Cooper's mother; Angela Marshall, Ed Barnette's widow; Camille Flowers, Ed Barnette's daughter; Ed Coleman, NSBE founder; Brian Harris, NSBE founder; George Smith, NSBE founder; Marion Blalock, former Purdue MEP Director and former NSBE National Advisor; Dr. Leah H. Jamieson, Dean of the College of Engineering; Dr. Mark JT Smith, Dean of the Graduate School and member of the Diversity and Inclusion Leadership Team; Dr. Gary S. May, Dean of Georgia Tech's College of Engineering, Purdue Parent, former National Chair of NSBE, and current NSBE National Advisor; Matthew Nelson, National Assistant Treasurer Special Projects from the NSBE Board of Directors; and Dr. Karl W. Reid, Executive Director of NSBE and former National Chair of NSBE.



NSBE founders with Dean Leah H. Jamieson, Dr. Karl W. Reid, Dean Mark JT Smith, and Dean Gary S. May.



Michele Cooper receives recognition as first female National Treasurer of NSBE.



Fred Cooper delivering his keynote address.



Camille Flowers (Ed Barnette's daughter) receives a plaque honoring her father.



The Cooper family celebrates. (from left) Fred Cooper, Jacquelyn Cooper, and Michele Cooper.



Richard Smith accepts award on behalf of GM, premier sponsor of MEP.



Marion W. Blalock celebrating with Michele Cooper.

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History, Mission, Objectives



History: Then and Now

The Minority Engineering Program at Purdue was one of several initiatives to improve diversity and inclusion in the College of Engineering. Leadership that championed this cause includes but is not limited to the individuals pictured above. Left to right, 1974 Purdue President Arthur Hansen; 1974 Dean of the College of Engineering, John C. Hancock; 1974 Head of First-Year Engineering, Dr. Richard Grace, who also launched the Freshman Honors Program and the Women in Engineering Program; Office of Minority Affairs in First-Year Engineering, Mrs. Saunie Taylor; Electrical and Computer Engineering Professor, Dr. Arthur Bond, the only African American in 1974 in the College of Engineering, championed the cause for increasing diversity in the College of Engineering; 1974 Director of the Minority Engineering Program, Marion Williamson Blalock, established a strong metric foundation for URM matriculation and over 30 years of service brought Purdue to national recognition for K-12 programs; 1974 Head of First-Year Engineering, Dr. Harold Amrine provided funding and encouraged full faculty support for these initiatives. These and so many other individuals like Dr. Phil Wankat, Dr. Eric Furgason, Barrett Robinson, Dr. William Lebold, and Jane Daniels paved the way for underrepresented minority student access and success at Purdue. Today, we have continued this commitment to diversity and inclusion under the leadership of the current Dean of the College of Engineering, Leah Jamieson, and our current president, Mitch Daniels.

Mission:

To advance engineering learning, discovery, and engagement in fulfillment of the Land Grant promise through outreach, recruitment, and retention of historically underrepresented students in their pursuit to become extraordinary Purdue engineers. Although our programs are open to all students without regard to race, ethnicity, or gender, underrepresented students at Purdue University include African Americans, Latino/Hispanic Americans, and Native Americans/Hawaiians/Pacific Islanders.

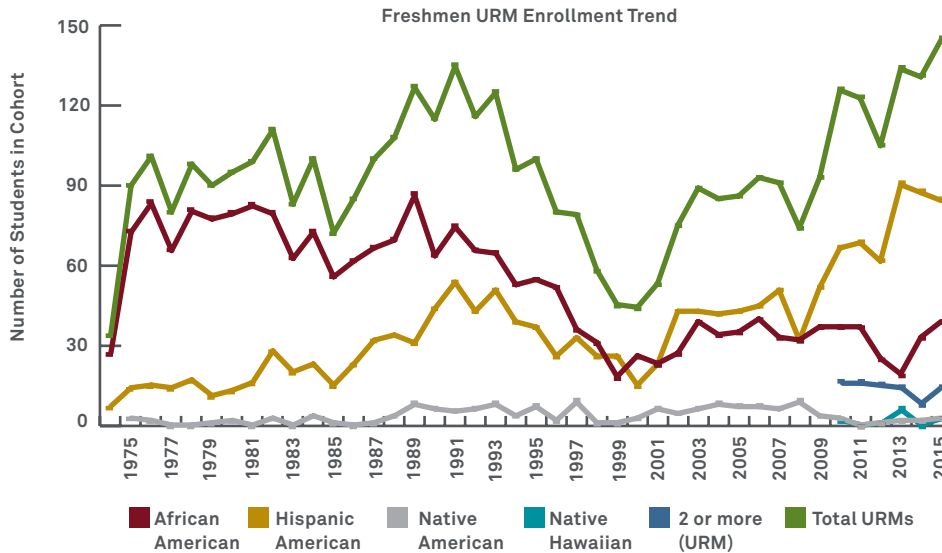
Objectives:

Established in 1974, our programs have been nationally recognized and replicated. The following objectives guide our activities:

- To identify metric-driven strategies to increase the participation of historically underrepresented domestic students in engagement, learning, and discovery activities about engineering.
- To encourage interest, recruitment, enrollment, and matriculation of underrepresented domestic students in engineering at the undergraduate and graduate level.
- To provide programs that increase K-12 focus on mathematics, science, and engineering and inspire students to learn how they can use these tools to serve humanity, improve the quality of life, and make the world a better place.
- To create an environment that fosters the celebration of cultural diversity across all engineering disciplines and promotes global learning opportunities.
- To provide metrics and publications that stimulate collegial and corporate dialogue to champion the national effort to achieve workforce diversity and inclusion.

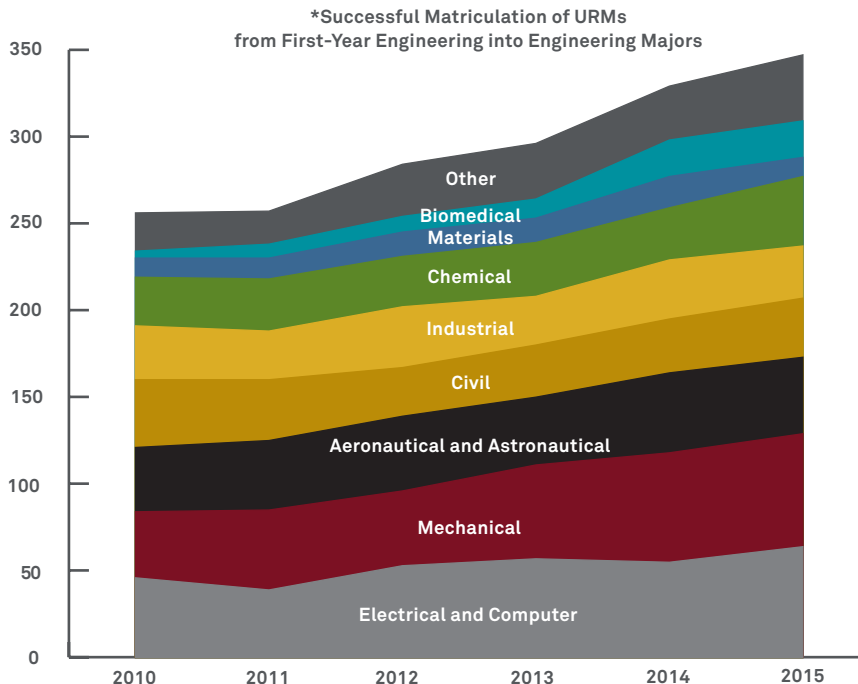
Enrollment- First-Year and Matriculation into Engineering Majors

FRESHMEN URM ENROLLMENT



> Fall 2015 marks a historic high in first-year enrollment with 145 URM students. The previous high was 135 URM students in 1991. Hispanic American/Latino enrollment continues to hold steady. For the second consecutive year, African American first year enrollment, which had been showing a steady decline, improved with additional scholarship offers.

MATRICULATION OF URMS



> Continuous improvement in the first-year curriculum, student advising, learning communities, retention initiatives, and diversity focus within the schools have led to underrepresented minority (URM) students identifying majors earlier. The top majors of choice are Mechanical Engineering, Biomedical Engineering, Electrical and Computer Engineering, Aeronautical and Astronautical Engineering, and Industrial Engineering.

Recognition

RESEARCH & PUBLICATIONS

- At the 2015 American Society for Engineering Education Conference in Seattle, Washington, our team presented an examination of the utilization of different statistical analysis methods entitled “Comparing Independent Population and Paired Match Analyses of Performance: A Five-Year Study of an Academic Boot Camp for Incoming Freshmen” by Dr. Carol Stwalley, Tasha Zephirin, Dr. Darryl Dickerson, and Virginia Booth Womack.
- An additional study of the efficacy of the Academic Boot Camp experience was reported in the “Transitioning Students Navigating Engineering Identities,” presented at the 2015 Frontiers in Education Conference in El Paso, TX. This paper, authored by DeLean Tolbert, Dr. Morgan Hynes, Dr. Darryl Dickerson, and Dr. Monica Cardella examined how underrepresented minority students transitioning into a university environment examined their engineering ability.

AWARDS

➤ Diversity Transformation Award

The Diversity Transformation Award (DTA) program is a new initiative developed by the Office of the Provost and the Diversity and Inclusion Team to tap into the intellectual knowledge of the university to conceive and implement projects that advance campus diversity. The Minority Engineering Program partnered with faculty members in the School of Mechanical Engineering, the School of Engineering Education, and the Office of Graduate Education in the College of Engineering for the inaugural DTA. The proposal with the School of Engineering Education titled “Pathway to and through Purdue Engineering: Research and development to recruit and retain low socioeconomic students” was selected as 1 of 20 finalists in the competition. The proposals “Strengthening the Purdue Pipeline for URM Student Matriculation: Addressing Financial Constraints, Improving Retention, and Assessing Student Experiences” with the School of Mechanical Engineering and “Pathways to Increased Diversity for Grad School and the Professoriate” with the Office of Graduate Education were both selected to receive funding over the next two years.

➤ Provost’s Advisory Committee on Diversity

Dr. Darryl Dickerson was named to the Advisory Committee on Diversity, a group of selected faculty, staff, and students from around the university chartered by Dr. Deba Dutta, Provost and Executive Vice President for Academic Affairs and Diversity, to help set the diversity, equity, and inclusion goals, metrics, milestones for the university and establish strategies for achieving those goals.

NATIONAL RECOGNITION

➤ NAMEPA National Officers

Virginia Booth Womack, Director of Purdue’s Minority Engineering Program, was elected as the President and Executive Director of the National Association of Multicultural Engineering Program Advocates (NAMEPA) from 2015 – 2019. Dr. Darryl Dickerson, Associate Director, was elected Treasurer and Dr. Cinthia Sanchez, Outreach and Retention Administrator, was appointed Programs Chair. They will serve on the NAMEPA Board of Directors and part of the leadership team working towards standardization of methods and templates for diversity programs in outreach, recruitment, yield, and retention initiatives.

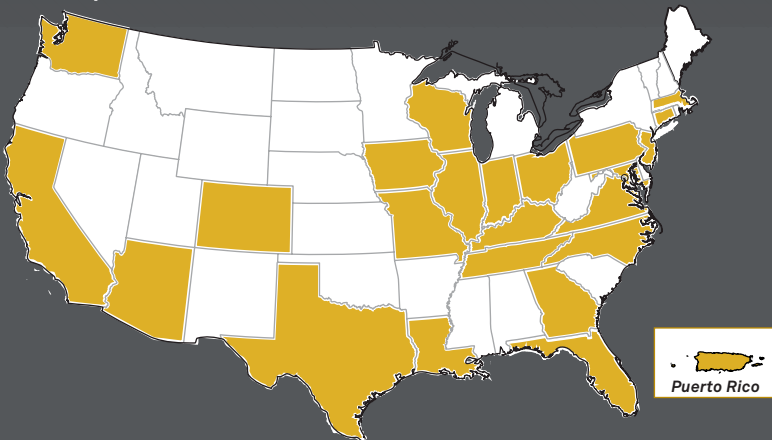
Outreach

> 6th/7th/8th Grade Summer Engineering Workshop (SEW)

Developed in 1976, MEP Summer Engineering Workshops were initiated to invite middle school students to Purdue University for a full week of discovery, engagement, and learning about college and careers in engineering. The workshops provide students with hands-on activities that make engineering come to life as well as academic preparation, particularly in math, to accelerate their pathway to college. Other components of the workshops include:

- Tours of engineering laboratories
- Engineering design process
- Academic success strategies
- Engineering careers and impact
- Campus life
- College preparation
- Life skills

> Participants from SEW and PREFACE



> Summer Engineering Workshops have touched 152 students from 23 states plus Puerto Rico, as well as three countries (Colombia, Ghana, China). Note: map is not to scale.

> PREFACE

In 1980, the Purdue University Pre-Freshman and Cooperative Education (PREFACE) program was developed for rising sophomore and junior year high school students. Similar in structure to SEW, the academic and engineering content is more advanced and additional focus is placed on college preparation including standardized test preparation. This past summer, through targeted partnerships with high schools and community based organizations, we hosted a historic high of 102 students in our PREFACE program and continue to look at program expansion.



> MEP Ambassador Program & School Visits

Developed in 2014, the Minority Engineering Program (MEP) Student Ambassadors work with the MEP Program office staff to deliver outreach services to expose elementary, middle, and high school students to the field of engineering. The goal of the MEP Ambassadors is to increase interest in engineering by providing a positive STEM experience. Through partnerships with target schools in Indiana and Chicago, the MEP Ambassadors deliver hands-on engineering projects to inspire and encourage students at an early age to pursue careers in engineering. This past year the MEP Ambassadors reached more than 1400 pre-college students by visiting their schools. In addition, the MEP Ambassador Program supported the expansion of MEP outreach efforts by hosting more than 300 pre-college students through a series of one day campus engineering visitation programs. These programs and visits are high impact. When asked about engineering, only 14% of the students said they wanted to be an engineer before the program. However, 63% were more interested in engineering at the conclusion of their program, and 92% enjoyed the project that they worked on.

MEP 2015 Student Ambassadors



Mia Sheppard, Freshman, First-Year Engineering Program, Hometown: South Bend, IN

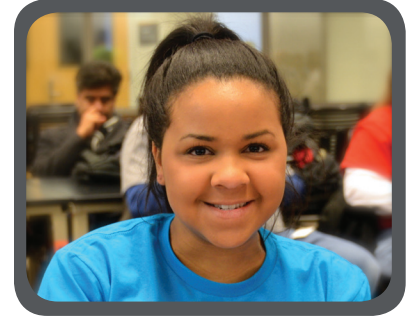
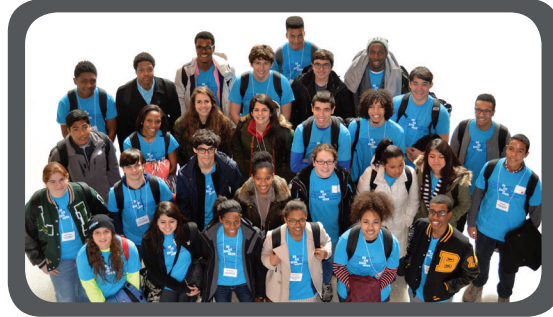
Mia first became involved with the Minority Engineering Program as a 10th grader. When asked how she learned about the program, she said “My mom’s friend told her about the Summer Engineering Workshops and that’s when I started attending.” Mia continued her involvement through the Engineering Academic Boot Camp after being accepted into the College of Engineering. Looking back on her first semester, Mia shares “I am an MEP Ambassador and am actively involved with the National Society of Black Engineers (NSBE). As a NSBE member, and an Emerging Leader Scholar, I have participated in leadership development programs, study tables, and mentoring activities.” Mia’s advice to prospective students is, “Purdue is very competitive. Take all of the accelerated science and AP courses you can. Do well and you will be prepared for the rigorous curriculum.” Upon graduation, she aspires to pursue opportunities in construction, designing ‘green and efficient’ residential and commercial structures.

2015

Photo Credit: Malachi Boyd



Recruitment



>MITE Academic Boot Camp

Target Audience: Selected Rising High School Seniors

Goal: Academic Preparation

The Multiethnic Introduction to Engineering (MITE) program was initiated at Purdue University in the summer of 1975. Originally a two-week program, MITE is now a five-week college simulation program modeled after the Freshman Engineering Academic Boot Camp. MITE attendees are immersed in first-year engineering courses including Chemistry, Calculus, and engineering projects. The agenda includes SAT review, engineering design, time management, and social acclimatization to college life. Student participants build a strong sense of community and are able to return to their high schools with a better evaluation of their potential. We have seen an average improvement in SAT math scores of 90 points. The highest increase was 240 points last year as measured through pre- and post-testing. All participants begin the application process to Purdue at the close of the program.

University Collaboration:

MITE participants learn about all STEM disciplines during the five weeks. For one week, students participate in the Seminar for Top Engineering Prospects (STEP). Collaboration with the Purdue Bound Program and diversity directors in STEM have resulted in several MITE participants matriculating into the Purdue Polytechnic Institute and the College of Science in addition to engineering majors.

>MEP PROMISE

Target Audience: Selected College-Ready High School Seniors

Goal: Apply to Purdue!

Purdue's Recruitment Of Minorities Interested in the Schools of Engineering (PROMISE) program was established in 1975. PROMISE is a two-day campus based recruitment effort designed for high school seniors. Participants learn about the admissions process, financial aid, the first-year engineering curriculum, and college success strategies. The agenda includes engineering classroom visitation, campus tours, meals in our world class dining halls, research laboratory tours, and social activities. At the close of PROMISE, participants have the opportunity to complete their applications. PROMISE is offered at no cost to the participants and occurs before the admissions priority deadline to ensure students are considered for scholarships. Students are responsible for their travel to and from campus. This past year the PROMISE program hosted 28 participants from 11 states and Puerto Rico.

University Collaboration:

MEP collaborates with the Office of Admissions by offering office visits to underrepresented students and interested families who visit during Fall Preview Days. This collaboration provides another opportunity for prospective families to visit and learn more about the MEP support.

>MEP Engineering Preview

Target Audience: Admitted Engineering Students

Goal: Choose Purdue!

Engineering Preview was launched in 1975 to encourage students who have received offers of admissions to choose Purdue. The average yield (percentage of students accepting their offer of admissions) of URMs in the College of Engineering is 18%. Preview is a two-day program that gives participants an opportunity to meet and hear from current engineering students, faculty, and staff about their experiences and have their questions answered regarding life at Purdue. The yield for MEP Engineering Preview participants last year was 50%. Engineering Preview is provided at no cost to participants, except for their travel to and from campus. This past year the PREVIEW program hosted 36 participants.

University Collaboration:

Office of Admissions: The Admissions-based Destination Purdue program collaborates with MEP Preview by providing campus and cultural center tours, organizing additional student panels, and providing information and materials to assist with yielding students to Purdue.

Division of Diversity and Inclusion (DDI): The DDI mirrors Engineering Preview through the campus-wide launch of OurPurdue. This event is a cross collaboration of all Multicultural and Minority Program Directors to invite admitted students from Indiana and Chicago for a two-day campus experience at no cost.



2015

Photo Credit: Malachi Boyd

Jeffery French, First-Year Engineering Program, Computer Engineering, Hometown: Fishers, IN

Jeffery French is currently a freshman in the first-year engineering program focused on entering the Electrical and Computer Engineering program. He is from Fishers, Indiana and attended both the 2009 MEP Summer Engineering Workshop and the 2014 MEP PROMISE program. In addition to his involvement with the Minority Engineering Program and pursuing his degree, Jeffery is also involved with ENGR 180 and the National Society of Black Engineers. “Academically, it has given me study tips for all of my classes. Professionally, it has given me advice for standing out at IR (Industrial Roundtable)” he states when asked about how MEP has contributed to his success. Jeffery plans on going forth to pursue a job in designing computers, smart phones, and innovative new technologies.

Retention

> First Year Retention

While the academic rigor and Purdue environment present a difficult transition for students in general, underrepresented minorities may face additional obstacles such as academic and social isolation and negative stereotypes. We know that every student admitted to Purdue has the ability to successfully attain a Purdue Engineering degree. Our role is to ensure that students have the confidence and resources to achieve their goals, and find their place as extraordinary engineers within the Purdue Engineering community. For incoming students, participation in our two transition programs, the Engineering Academic Boot Camp (ABC) and Engineering 180 (ENGR 180), is correlated with a higher first-year retention rate for underrepresented minorities.

> Engineering Academic Boot Camp (ABC)

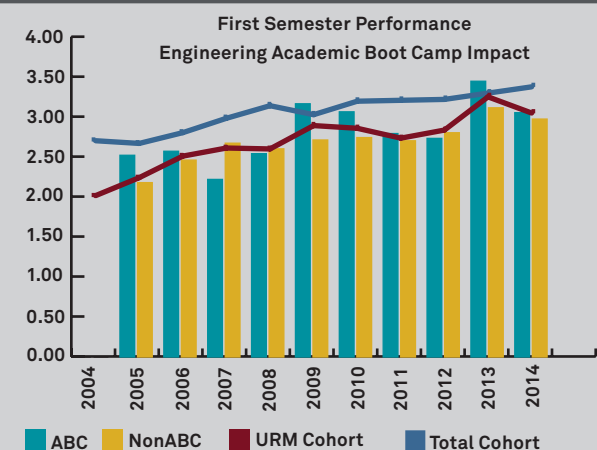
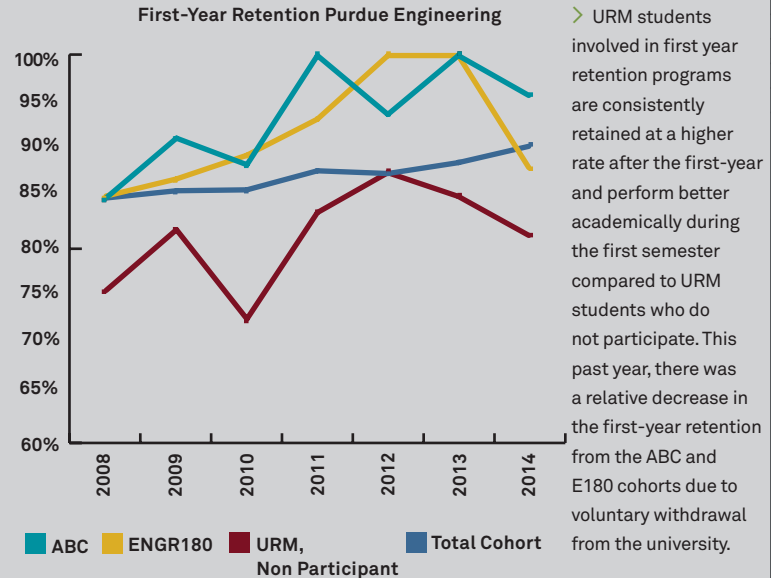
Launched in the summer of 2005 in the College of Engineering, the Engineering Academic Boot Camp was developed to improve the transition of underrepresented engineering students into the majority campus culture. Former MEP Assistant Director Allene Manning developed a structure that condensed a full semester of work into a non-credit bearing five-week simulation of the first semester engineering experience at Purdue. Calculus, Chemistry, Physics, MATLAB, English, and an engineering design project were included along with professional mentoring, corporate tours, time management, team building, and social activities. Embracing the best practices of learning communities, engineering students were required to live, study, and have classes together in preparation for global competition in the fall. In 2006, the College of Science and the Purdue Polytechnic Institute adopted the Academic Boot Camp model; the College of Agriculture was later included. Each college designed their programs to align with the needs of their college. After a three-year pilot period, the Engineering Academic Boot Camp has demonstrated the importance of transition of URMs into a majority institution in achieving first semester performance and first-year retention in engineering.



Academic Boot Camp has allowed me to not only find lifelong friends who share the same passion and drive for engineering as me, but has also given me the support and guidance that I need to succeed now and in my future career. ABC has opened up a world of opportunities to me and has brought me mentors and tutors that have helped me become my best self. The connections and lessons that I have learned during and after ABC are priceless and ones that I look forward to sharing with others. - Robbie Williams

> Engineering 180 (ENGR 180)

Engineering 180, the Minority Engineering Program Seminar, was established in 1987 to promote awareness of campus-wide academic and non-academic support systems; to facilitate interaction between students, faculty, staff, upperclassmen, alumni, and corporate sponsors; and to develop and share strategies for academic and professional success. Open to all students, it offers a platform for corporate and alumni supporters to meet and greet students as mentors and/or prospective employers. Through weekly assignments, students develop content for a personal portfolio to guide their educational development and showcase their personal, professional, and technical skills.





2015

Photo Credit: Malachi Boyd

Flor Albornoz, Junior, Electrical Engineering, Hometown: Lima, Peru

Flor Albornoz is originally from Lima, Peru, and first became involved with MEP when she participated with the Academic Boot Camp (ABC). ABC offered Flor a very challenging program where she had first-hand experience with the Purdue Engineering curriculum. Being a part of ABC definitely prepared her to excel in her courses, helping her to transition between high school and college. She had confidence that her participation would provide her with time management skills and allow her to start building a network with faculty and staff that would be available to guide her towards her success as an engineer. She enthusiastically recommends the ABC program to incoming students. Flor now serves as a tutor in the MEP Academic Success Center where she enjoys helping students develop effective study strategies for their classes. She became involved as a tutor because she wanted to be able to assist students during their learning process from her point of view as a fellow student.

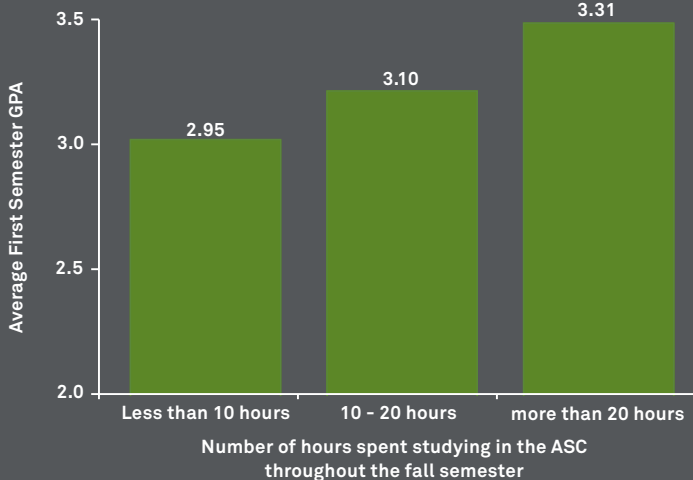
Retention

> Academic Success Center

The Minority Engineering Program (MEP) Academic Success Center is located in the Neil Armstrong Hall of Engineering. The Center offers a dynamic environment for study and collaborative learning for all students with free tutoring services in gateway engineering courses, supplemental instruction, and exam prep sessions. The goal of the Academic Success Center is to provide strategies for learning and interventions leading to academic excellence. In 2015, through the end of November, the Academic Success Center has been visited 3,018 times. The analysis of center usage demonstrates that more frequent attendance correlates with increased first semester academic performance.



Academic Success Center (ASC) Impact on Incoming Cohort First Semester GPA (Fall '14)



> Scholarships

Through gifts from our alumni and friends, endowments, university funds, and generous corporate and non-profit support, MEP offers a number of scholarships to reward academic achievement and provide need-based support to students. We currently support more than 160 students through our holistic scholarship program. In a survey of students who declined their offer to attend Purdue, more than half cite financial reasons for their decision. MEP scholarships have been an instrumental tool in improving student access and success by making attendance more affordable.

> BoilerMentor Program

MEP partners with the Division of Diversity and Inclusion in the BoilerMentor program providing peer mentoring to incoming students who are recipients of the Emerging Leader scholarship as well as other exceptional students. The program connects students from diverse backgrounds to resources and leadership development opportunities across campus that will support academic success and social inclusion through a peer mentor experience. Through this program, BoilerMentors assist their fellow students in creating an inclusive network that involves upperclassmen and graduate students, faculty, staff, and alumni.

> Student Organizations

We have a rich 40+ year history with student organizations that promote diversity and inclusion in engineering. The oldest organization on campus is the National Society of Black Engineers (NSBE), founded at Purdue University in 1975. The most recent diversity-focused student effort is the Latinos in Science and Engineering (MAES) organization. The Purdue chapter of MAES was established in 2009. MEP formally advises the Purdue chapters of NSBE and MAES, and we provide support to the American Indian Science and Engineering Society (AISES) and the Society of Hispanic Professional Engineers (SHPE). Involvement in these student organizations is correlated with higher retention rates and higher academic performance compared to peers.



American Indian Science and Engineering Society (AISES)

To increase substantially the representation of American Indian and Alaskan Natives in engineering, science, and other related technology disciplines.



Latinos in Science and Engineering (MAES)

To promote, cultivate, and honor excellence in education and leadership among Latino engineers and scientists.



National Society of Black Engineers (NSBE)

To increase the number of culturally responsible black engineers, who excel academically, succeed professionally, and positively impact the community.



Society of Hispanic Professional Engineers (SHPE)

SHPE changes lives by empowering the Hispanic community to realize its fullest potential and to impact the world through STEM awareness, access, support, and development.



NATIONAL SOCIETY OF BLACK ENGINEERS
Manifested Through Past, Present, And Future Leaders
Founded At Purdue University
April 12, 1975
FOUNDERS:
JOHN W. LOGAN, JR. BRIAN R. HARRIS
EDWARD A. COLEMAN STANLEY L. KIRTLEY
ARTHUR BOND

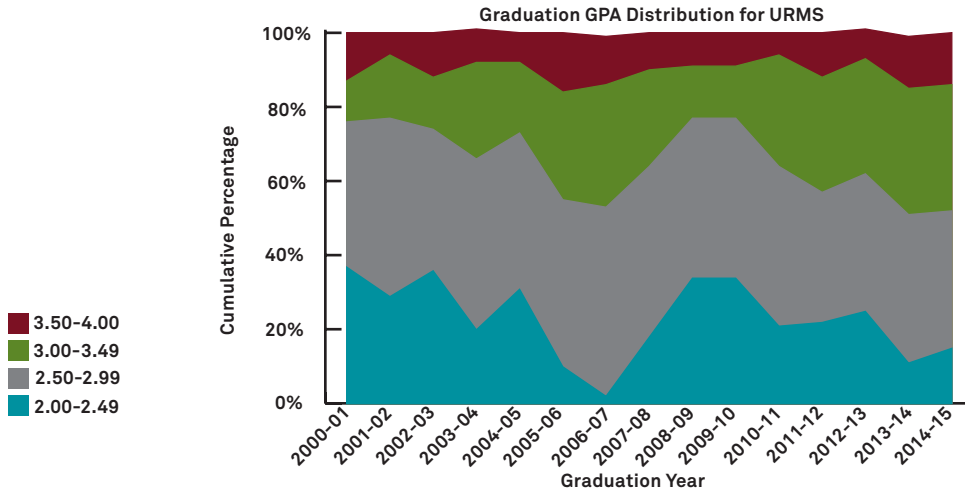
2015
Photo Credit: Malachi Boyd

Adam Williams, Junior, Chemical Engineering, Hometown: Cleveland, Ohio

Adam Williams is currently a junior pursuing a degree in Chemical Engineering. When asked about MEP, Adam stated: “MEP was my pathway to Purdue.” Attending Purdue’s Engineering Academic Boot Camp (ABC) the summer before his freshman year assisted in making the transition to a global classroom and a different cultural climate. “Everyone became an extension of my family. Seeing familiar faces across campus to study with, connect with, and attend Purdue activities with made the university feel like a home away from home.” Adam is a social activist and has been involved in the Minority Engineering Program (MEP) throughout his studies at Purdue. He tutors Chemistry in the Academic Success Center, is the Programs Chair for the Purdue Chapter of the National Society of Black Engineers (NSBE), and Philanthropy Chair for Phi Beta Sigma fraternity, Inc. His advice to incoming students is, “Get involved with MEP and build your network to the broader Purdue community.” Adam has completed two internship rotations with Kimberly-Clark and accepted a third internship with Chevron — expanding his professional skills.

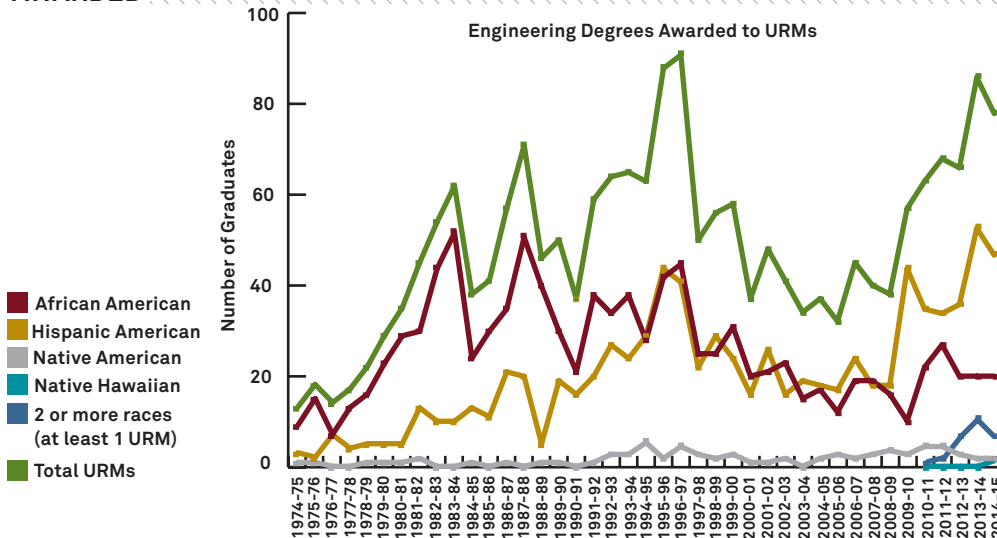
Graduation

GRADUATION GPA DISTRIBUTION



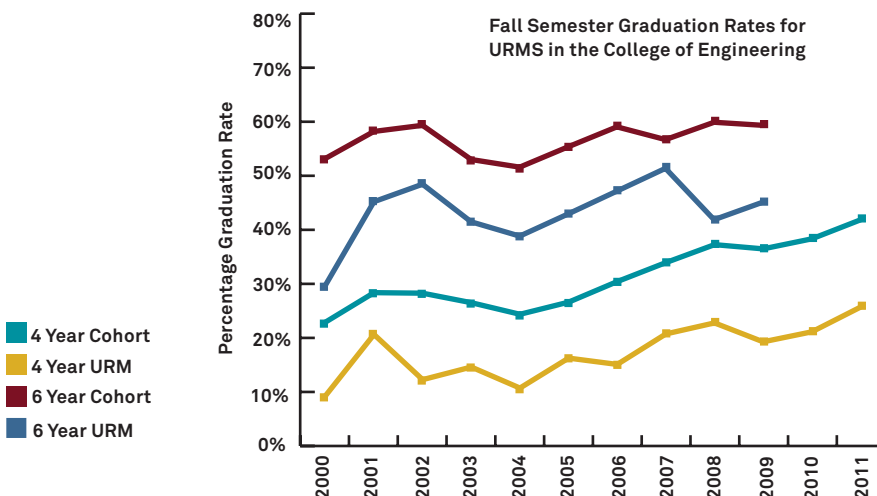
➤ GPA distribution at graduation for URMs in engineering has trended towards higher performance. Since 2013, nearly 50% of graduates were above a 3.0 grade point average.

DEGREES AWARDED



➤ Bachelor's degrees awarded to URMs in engineering over the last 40 years correlate with enrollment trends. The current upward trend in degrees awarded since 2008 reflect enrollment increases since 2001.

GRADUATION RATES FOR URMS



➤ The graph displays 4- and 6-year graduation rates for URMs and the total cohort in the College of Engineering for the cohort starting in the fall of the year listed. All graduation rates for URMs have steadily trended upward since 2004.

Luis Sotelo Martin, Sophomore, Chemical Engineering, Hometown: Elkhart, IN

Luis Sotelo Martin has been involved in the Minority Engineering Program (MEP) throughout his studies at Purdue. He is the President of MAES (Latinos in Science and Engineering); is involved in two national honor societies — Phi Sigma Pi and Alpha Lambda Delta Phi Eta Sigma; and is also devoted to the Latino Cultural Center's (LCC) Mentors and Embajadores program. His advice for the next generation of Purdue students who might want to get involved with MAES, "The program helps to create a sense of family or 'familia' as well as advance the professional and academic careers of Hispanics in STEM majors on campus. I would say that it is important to get involved in clubs such as MAES in your first year — this is a way to network, build a resume, get help academically, and learn outside of the classroom." Luis plans to work as a chemical engineer in industry for a few years before going on to graduate school to obtain a computer science degree. He aspires to work for NASA, Microsoft, or Google.



Total Giving FY 2015

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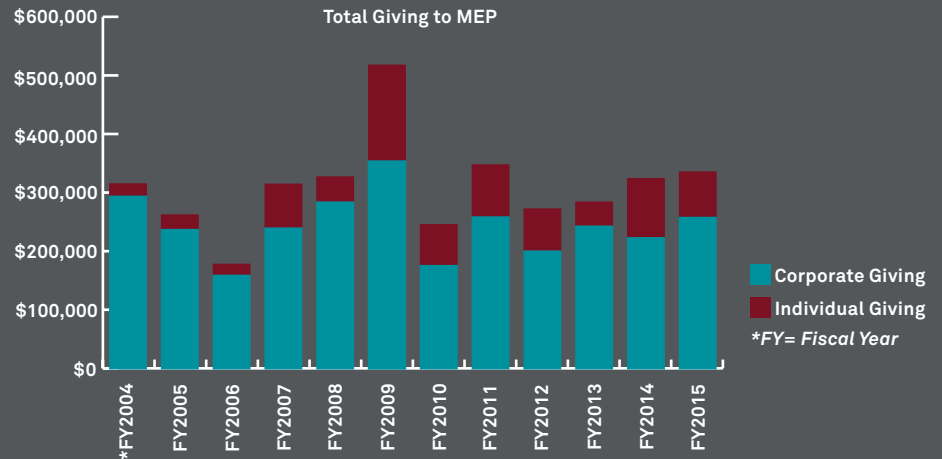
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- Boeing Company
- Global Impact
- Johnson & Johnson
- Lockheed Martin
- Rockwell International Corp Trust

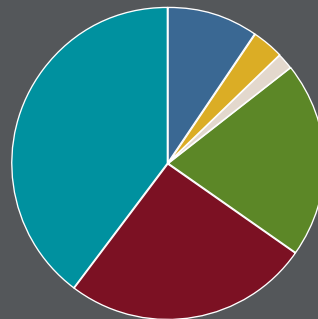
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- 3C-Cynthia Cobb Consulting
- AT&T Foundation
- Lockheed Martin University Matching Gift Program
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Annual Giving Trends

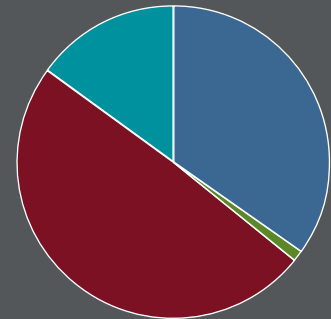


2015 Annual Program Budget



MEP Expenses

- Administration
- Communications
- Recognition
- Pre-College Outreach
- Recruitment
- Retention



MEP Income

- Program Registration
- University Funds
- Corporate Gifts
- Alums and Friends



We welcome all of our alumni and friends to join us in our efforts to support the Minority Engineering Program. We are taking part in the *Ever True: The Campaign for Purdue University* capital campaign, through which we would like to expand our programs and grow the number of underrepresented minority engineers at Purdue. The campaign is an exciting endeavor with transformative potential and is made possible both by the generosity of our alumni and friends and by the commitment of our faculty, staff, and students. If you would like to make a contribution, please go to giving.purdue.edu or contact Hilary Butler at 765.494.6383 or habutler@prf.org.

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Designed by: Heather Marie Coar, 2015
EA/EOU

Minority Engineering Program

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