

Vaughn

COLLEGE MAGAZINE

WINTER 2024



IT'S YOUR FUTURE.
**LET'S MAKE
IT WORK.**



TABLE OF CON

2

IT'S YOUR FUTURE.
LET'S MAKE IT WORK...EVEN BETTER!



10

AIR TRAFFIC CONTROLLER SHORTAGE
IN THE SPOTLIGHT



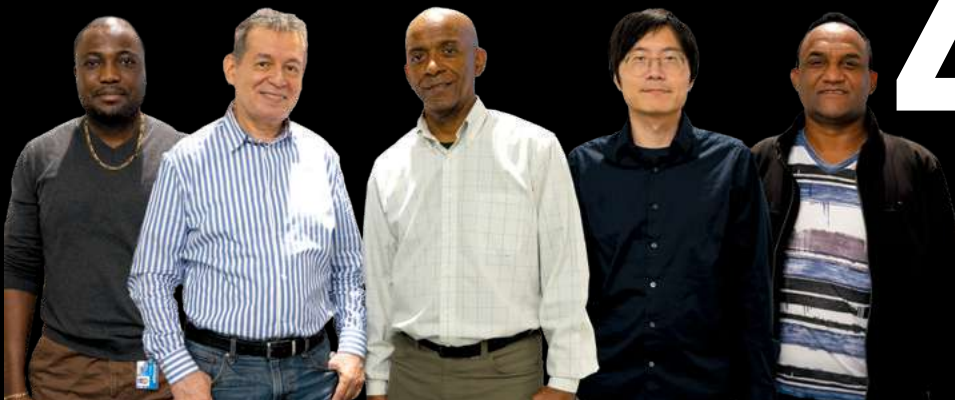
14

\$3 MILLION GRANT AWARD TO SUPPORT
HISPANIC AVIATION MAINTENANCE STUDENTS



24

FIVE DYNAMIC ADDITIONS
ADD LUSTER TO VAUGHN'S
ENGINEERING DEPARTMENT



TENTS

VAUGHN IN BRIEF



31

VAUGHN LAUNCHES NEW ADVERTISING CAMPAIGN FEATURING ARTIFICIAL INTELLIGENCE (AI) GENERATED IMAGES

33



SPRING 2023 VAUGHN COLLEGE GALA

VAUGHN MAGAZINE

Managing Editor: Maureen Kiggins; **Contributing Writers/ Photographers:** Elena Garcia, Wendy Hauser, Nicholas Ingenito, Maureen Kiggins, Shelley Mazor; **Design:** hgDesign NYC, Inc.

SOCIAL MEDIA

Join the Vaughn College communities on Facebook, YouTube, Instagram, LinkedIn and TikTok:

 facebook.com/VaughnCollegeFB

 youtube.com/VaughnCollegeTV

 [@VaughnCollege](https://instagram.com/VaughnCollege)

 linkedin.com/company/vaughncollege

 [@VaughnCollege](https://tiktok.com/@VaughnCollege)

12 Computer Science Degree

Supply Chain Management Certificate **13**

16 Internships

Vaughn Spotlight Alumnus Philip Bredu '22 **18**

20 Vaughn Spotlight Student Suraiya Nawaz '24

Awards **21**

22 Vaughn in the News

Campus Updates **28**

32 New Mascot/Golf Outing

Save the Date for the 2024 Vaughn College Gala

BC

BACK COVER



IT'S YOUR FUTURE. LET'S MAKE IT WORK.

Now more than ever, families across the nation are seeking assurance of a strong return on their educational investment. While many institutions are struggling to respond to this demand, Vaughn College—with its history of serving many students who are first generation, first in the family to attend college and from underserved communities—continues to show [exceptional outcomes for its graduates.](#)

“Vaughn has always needed to respond to market forces and in this moment a pathway to a successful career is uppermost in the minds of our students and their families,” said President Dr. Sharon B. DeVivo. “Inflation has really been tough on our students. Some wonder, ‘Do I need a college degree?’ Families are more detailed in their calculation and understanding of ‘return on investment’ when deciding which college to attend. They want to know about internships, placement rates and starting salaries. We are in a unique position to show students the amazing jobs and fields in which they can achieve a lifechanging outcome for themselves and their families.”

Vaughn’s new ad campaign, “It’s your future. Let’s make it work,” speaks to our history, the present moment and the bright futures our graduates are on track to achieve.

...EVEN BETTER!



RANKED #1
IN UPWARD MOBILITY
AS REPORTED IN THE
NEW YORK TIMES.*



OF VAUGHN GRADS—78% IN
THEIR FIELD—ARE EMPLOYED
OR CONTINUE THEIR EDUCATION
WITHIN ONE YEAR.†



RANKED IN TOP 4%
OF COLLEGES WITH HIGHEST ROI FOR
STUDENTS FROM UNDER-RESOURCED
COMMUNITIES.**



The College has always been focused on student success, and the 98% employment rate for Vaughn graduates with 78% in their field of study, a #1 ranking in upward mobility, a social mobility badge from US News and a top 4% ranking of colleges with highest return on investment for students from under-resourced communities are all the result of that focus. These numbers count even more today.

THE STUDENTS' JOURNEY

From the first semester at Vaughn, there are resources and support mechanisms in place to help students navigate college and acclimate to their educational journey. From the freshman year experience to ongoing support from career services, access to financial resources and

scholarships—coupled with industry connections and partnerships—Vaughn helps pave the way to success by offering marketable internships, exposure to multiple career opportunities, professional conferences, and quality, in-demand academic programs.

CAREER DEVELOPMENT: EVEN MORE OPPORTUNITIES

Career services is Vaughn's central hub linking students and employers, and students are encouraged to visit early and often. Chaundra Daniels, the department's director, reported that the fall [2023 career and internship fair](#) was the best yet.

"It really clicked," Daniels said. "We had more students attend—over 250—from different academic programs and classes, including many freshmen, which we really encourage as a way to build awareness of opportunities early on. More employers (48!) registered, too, with a great balance of industries, ranging from military and government to transportation, logistics and aerospace, and even education and research." The department also used surveys to get instant feedback from students and employers, to see what worked and what needed improvement.

The career fair is part of a three-pronged strategy intended to expose students to what their futures could look like, a strategy that has soared since Daniels' arrival in 2021. When career fairs were suspended during the COVID-19 pandemic, Daniels launched employer engagement days, one-day mini career events that presented opportunities from employers and enabled employers and students to have one-on-one interviews in a more relaxed format. The new initiative was so successful that the department has run some 50 engagement days in the last year. The third prong in this employer-based strategy is site visits, providing students with the experience of being in the actual work environment, meeting people in the industry and having a chance to ask questions on an employer's turf.



"It really clicked. We had more students attend—over 250—from different academic programs and classes..." CHAUNDR DANIELS

"We want to give our students an experience of the future right now and connect our classrooms with the real world," said Daniels. "We have strong connections in the aviation and aerospace industry, with our graduates at senior levels in many places. At a time when students are worried about the cost of their education, it feels great to assure them they will not fail."

Alumni in high places was especially true when [Vaughn Alumna Evita Garces '02, the first Latina vice president of line maintenance at American Airlines, came to campus and spoke to students](#). She also brought two Vaughn Alumnae, Jennifer Patxot '23 and Elsie Ceilema '19, both aviation maintenance graduates who currently work for her. She spoke about her career trajectory and how Vaughn helped her succeed, reviewed the variety of employment opportunities available to Vaughn students and encouraged women to join the field.



Above: Director of Career Services Chaundra Daniels
Left: Mechatronic engineering students Kieran Gunasekara '24, Sheikh Mindad '27, Ashiq Rahman '24

THE STUDENT EXPERIENCE FUND: EVEN MORE CONFERENCE ATTENDANCE

As students progress through their course of study Vaughn works with them to help uncover a variety of opportunities to gain real-world experience. Student access to internships is helped by donations to a fund that is seemingly unique to Vaughn: the Student Experience Fund. This fund is specifically designed to support student attendance at national professional conferences and competitions where students can meet employers, present research and get on track for internships that often turn into full-time jobs.

Vaughn's chief development officer, Stephen DeSalvo, sees the Student Experience Fund as unlike any other. "I've worked at a number of colleges big and small, and this is the first institution where I've seen a concerted effort and a specially designated fund to help students travel to national conferences, to help with networking and experience what's going on in the industry," he said. "The purpose of this fund is so clear and tangible, and we can show success stories. Donors really 'get' the impact."

Most of the money for the Student Experience Fund is raised during the annual Gala via a "text to give" program, and this year, a record-setting \$23,045 was raised for the fund just that night. During the evening, student stories are highlighted from those who have attended a conference and received an internship or job offer stressing the significance of how important that exposure is on the road to employment.

Kelli Smith, vice president of student affairs, who oversees career services among other aspects of student life notes that employers who participate in the career fair prefer to donate to the Student Experience Fund rather than pay a fee as they do at most other colleges. "They can see the return on investment on their end—helping students connect and network with employers at conferences and competitions by giving to this fund, and they entirely, wholeheartedly find value in that," Smith said.

For the 2023-24 academic year, there were 65 applications, with 24 accepted and awarded grants to attend the American Association of Airport Executives, National Gay Pilots Association, National Business Aviation Association, Society of Hispanic Professional Engineers and Women in Aviation International conferences, among others. Each grant is up to

\$1,000 per student per year for one event. When students apply, they must provide a cover letter demonstrating what they hope to learn, along with a resume, a letter of recommendation from a faculty member and a budget projecting costs for the conference.

Help in making dollars from the Student Experience Fund go farther comes from valued Vaughn partners like United Airlines, which provides vouchers to students when they fly to conferences, and Aviation Week Network, which now gives students free, all-access passes to a vast array of aviation and aerospace conferences through a recently formed partnership with Vaughn.

Most of the money for the Student Experience Fund is raised during the [annual Gala](#) via a "text to give" program, and this year, a record-setting \$23,045 was raised for the fund just that night.



Grants were awarded to attend these conferences:

- AMERICAN ASSOCIATION OF AIRPORT EXECUTIVES
- BUSINESS AVIATION ASSOCIATION
- NATIONAL GAY PILOTS ASSOCIATION
- NATIONAL SOCIETY OF HISPANIC PROFESSIONAL ENGINEERS
- WOMEN IN AVIATION INTERNATIONAL

SUPPORT THE STUDENT EXPERIENCE FUND (SEF) BY MAKING A DONATION AT WWW.VAUGHN.EDU/GIVE-A-GIFT. AND CHOOSE SEF FROM THE DESIGNATION DROPDOWN.



Aviation Week Network has been a longtime supporter of Vaughn College, regularly participating in the annual Gala as a sponsor.

For Anna Dariotis, a senior project manager who runs the workforce initiative and diversity, equity and inclusion (DE&I) efforts at [Aviation Week](#), the connection with Vaughn is obvious. “Vaughn is in our backyard,” she said. “We like that the students are first-generation to college and often first-generation Americans who are discovering opportunities in the aviation and aerospace world. Vaughn is unique, and it’s a great way to support the school and support the future of the industry we are both so passionate about.”

So, when she heard President DeVivo and the 2021 fall [Gala honoree, Stephen A. Alterman](#), former president of Cargo Airline Association, at the Gala talk about the urgent need to get students out of the classroom and into trade shows and conferences, a light bulb went on for Dariotis. “We have a huge events business that touches every sector of the industry,” she said.

Shortly after that evening, Dariotis got a green light from her colleagues and presented the idea to DeVivo, who responded enthusiastically. In December of 2022, an agreement was signed to form the Vaughn College Purposeful Partnership, which Aviation Week Network states is intended to “foster a more diverse pipeline of employment and exposure to the aerospace, aviation and defense industry ... (and) to encourage and support students in attending our events that can enhance their learning outside of the classroom and help to develop their future careers through networking and

exposure to our industry.”

Under this evergreen agreement (it is automatically renewed each year unless either party wants to cancel), as many as 20 Vaughn students can attend [Maintenance, Repair and Overhaul \(MRO\) exhibitions](#), and a maximum of eight students can attend any of the Aero-Engines, Advanced Air Mobility, Aerospace & Defense (A&D) Programs, A&D Manufacturing and Aerospace Information Technology events.

Eligible Vaughn students come from the four main areas of study: engineering and technology, management, aviation and aviation maintenance. Students in all areas, except aviation maintenance, are expected to prepare a report on what they learned and with whom they connected. Aviation maintenance students will go as a team to participate in a maintenance skills competition. Ideally, all students attending the events will be considered for internships and possible employment.

“For us, it’s about giving back to the industry and fostering a future workforce,” said Dariotis. “The demand for talent in so many industry sectors, like MRO, is tremendous, and we want young people to see the opportunities in aviation, aerospace and defense, and make their decision to go there. This shared objective is a great foundation for a partnership between Aviation Week Network and Vaughn College.”

SCHOLARSHIPS: EVEN MORE ACCESSIBLE

Vaughn students are facing two dramatically contrasting realities right now: On the one hand, demand for graduates has soared; on the other hand, the impact of inflation has increased the already steep barrier of affordability faced by the student population. With 90% of our students receiving some form of financial assistance, Vaughn has stepped up to provide new services and resources that students today need to overcome financial obstacles and make attending college possible.

Vaughn's recently launched Scholarship Universe platform is an exciting new tool that greatly expands scholarship opportunities for new and current students. For the first time, students can access a single portal to see not only Vaughn's donor-funded scholarships, but also some 14,500+ national and international scholarships available to all college students. These scholarships stem from big corporations to organizations as varied as the local chapters of the Lion's Club International and NAACP, and by filling out a profile, students can see all of the scholarships they are eligible for—in one place. Before having access to this tool, students had to pursue each opportunity on their own. Now, they have access to one portal to get started.

DeSalvo reported that Vaughn's donor-funded scholarships—which are resourced by individuals and corporations directly to the college—have doubled since 2019 and now total more than \$160,000 annually.

Several new scholarships were added in the last six months; including an endowed scholarship of \$50,000 established by Trustee Emeritus Thomas J. and Trisha McKee in memory of his daughter Michelle Ann McKee-Weltens, and a \$1,000 scholarship from Vaughn Alumni Samantha and Devon Mitchell '01. Samantha was the first African American female to receive the Bessie Coleman Award, and who now is ready to give back. "She wants to help another Black female get to the finish line," said DeSalvo. (See sidebar)

Founder of Black Women in Aviation Gives Scholarship to Her Alma Mater

Samantha Mitchell '01, who was the first female maintenance technician at John F. Kennedy (JFK) International Airport, gives credit where it is due. "Vaughn promotes the guarantee of a job," she said, "and when I graduated, I got my first job at Air Jamaica at JFK, and my second job at Boeing through Vaughn. And my husband, Devon, also a Vaughn alum, got his first job at Sikorsky through Vaughn's industry relations."



Now, with more than 25 years of experience in the aviation industry, Mitchell has become a transformative professional speaker and the founder of Black Women in Aviation, a nonprofit organization dedicated to encouraging and advancing Black women in all aviation and aerospace fields and interests.

Earlier this year, Mitchell reached out to President DeVivo with the idea of establishing a scholarship award for a black female student in aviation. "When I started at Vaughn, I received a \$1,000 scholarship, which felt like a million dollars," she said. "When I graduated, I was the female with the highest GPA, and I was the first recipient of the [Bessie Coleman Award](#)—and I didn't even know who she was until I got that award! Now I want to pay it forward with a scholarship that shares the legacy of Bessie Coleman and recognizes her contribution."

The new scholarship from Black Women in Aviation will be called the Bessie Coleman First Generation Aviator Scholarship, and will consist of two components: a cash award of \$1,000 as well as mentorship and coaching from Black Women in Aviation. The first recipient of the scholarship will be coached by Mitchell herself. "I want this scholarship to provide not only money, but a support system and a community to help these young women safely navigate to success."

Donors and scholarship recipients join faculty and staff at the scholarship luncheon.



ACADEMIC PROGRAMMING: EVEN MORE TARGETED



At the heart of Vaughn's value is the quality of the education being offered and the value it brings to students and their families. Vaughn's focus creates special challenges and opportunities.

Technology is changing at warp speed. Drones and advanced air mobility, artificial intelligence and cybersecurity—technologies that were hardly known a decade ago now require a workforce pipeline and offer exciting careers to people with in-demand skill sets. This is the dynamic space where a Vaughn education puts graduates on a track to a lifetime of opportunity, and where the institution is constantly striving to ensure that the quality of the academic programming across all three major areas of study—engineering, management and aviation—evolves to keep pace and teach the skills that employers want and that students need to succeed.

To meet this challenge, according to Dr. Paul LaVergne, vice president of academic affairs, it helps to be a nimble institution with strong industry ties and a frequently updated strategic plan.

“Our size is perfect if you want to implement change—it makes us responsive and flexible,” said LaVergne. “A great example was when the board of trustees and Dr. DeVivo created the ad hoc strategic planning committees during COVID—and we identified cybersecurity, drones and computer science as academic programs we needed immediately, and were able to implement quickly. Our strategic plan, a living, breathing document, is one of the pillars of our continuous

improvement process. We never take our eyes off the value we bring to our students.”

LaVergne cites new programming from degree programs to certificates, badges and new labs, that expand Vaughn's unique combination of technical training and high-quality master's, bachelor's and associate degree programs. For example, the fast-growing engineering department has added several new certificates, including a Computer-Aided Design for Additive and Subtractive Manufacturing Certificate and an Uncrewed Aerial Systems Design, Application and Operation Certificate. In the management department, the new Supply Chain Management Certificate responds to the growing demand for skilled professionals in a key component of global commerce that came to the forefront of public consciousness during the COVID-19 crisis.

Over the past two years, the aviation department under interim Department Chair Ron Ruggeri has gone through a restructuring to streamline the programs and help students launch their aviation careers with greater efficiency and more credentials valued by the industry. For instance, the Safety Management Systems Certificate can now be taken in whole or in part, depending on whether a student wants the full certification to meet their degree requirements or a more limited badge to use as a “microcredential” at any time in their career.

These credentials are highlighted by the career services staff who see great value in the new credentialing options when counseling current and former students. “These programs help students build their tool kits in the changing world of employment,” Daniels said. “You can't just earn a degree and expect to be successful for 40 years without keeping up with the new technologies. Our certifications not only help our current students, they also help students who are coming back for a second degree or for another certification that will boost their employment and salary.”

Aviation Department Streamlines and Enhances Programs

It is now taking an average of 350 days for a Vaughn student to get a private pilot's license, compared to an average of 615 days a few years ago. And to get an instrument license now takes an average of 278 days instead of 367. The difference is not caused by a change in the license requirements. What has changed is the preparation and support students in the aircraft operations (flight) program receive.

• **Tracking Student Progress** Students receive specific timelines and objectives for their flight school hours, making sure they book them eight weeks in advance. With clear objectives and information, students can graduate sooner.

• **Mandatory Classes Add Value** The aviation department also reviewed the program's 27 credits of elective courses and replaced

them with mandatory classes tied directly to the students' career objectives, and to optimize possible career paths. “Crew resource management—what happens on the flight deck—is one of the most important classes, and it wasn't mandatory until now,” said Ruggeri. “Flight review classes are another example. Now, these classes, taught by captains who fly the line every day, are mandatory for students in their junior and senior year so they are prepped and drilled with the right questions for their interviews.”

Adding Air Traffic I and II as mandatory classes has also opened more career paths for students. Vaughn is a Collegiate Training Initiative (CTI) institution recognized by the Federal Aviation Administration, and by completing the two air traffic courses, along

THE FUTURE: MAKING IT WORK TOGETHER

“When students reach our campus, they have already faced challenges, often as first-generation students coming from under-resourced and underrepresented communities,” said DeVivo. “Our promise is to help students understand how to fund their education, guarantee their employment and provide them with a transformative educational experience—that gets every faculty and staff member excited to be at Vaughn. We share in every student’s success and are eager to see them have a terrific life of their own making. This is the real measure of an investment well made.”

with weather and flight training, students can take the FAA’s air traffic controller (ATC) exam on a priority basis. “Just by adding those two courses, students can choose the air traffic controller path or the pilot path,” said Ruggeri, “and it’s great cross-training to have pilots with controller training, and visa versa.”

• **RATP Credits Now Built into Aircraft Operations Degree** Students who graduate with Vaughn’s aircraft operations degree will have the 60 FAA-approved credits required for the FAA’s Restricted Airline Transport Pilot Certificate (RATP), which reduces the flight time required for a commercial pilot’s license from 1500 hours to 1000 hours. Vaughn sought and received approval to add the RATP credit courses, and as a result, Vaughn graduates not only have their Aviation Accreditation Board International-accredited aircraft operations degree and air traffic certification approved for the FAA fast track, they also have their RATP certification for 1000 hours.



AIR TRAFFIC CONTROLLER SHORTAGE IN THE SPOTLIGHT

Throughout this past summer and into the fall, the shortage of air traffic controllers has been the subject of the media and Congress as travelers and airlines have been affected.

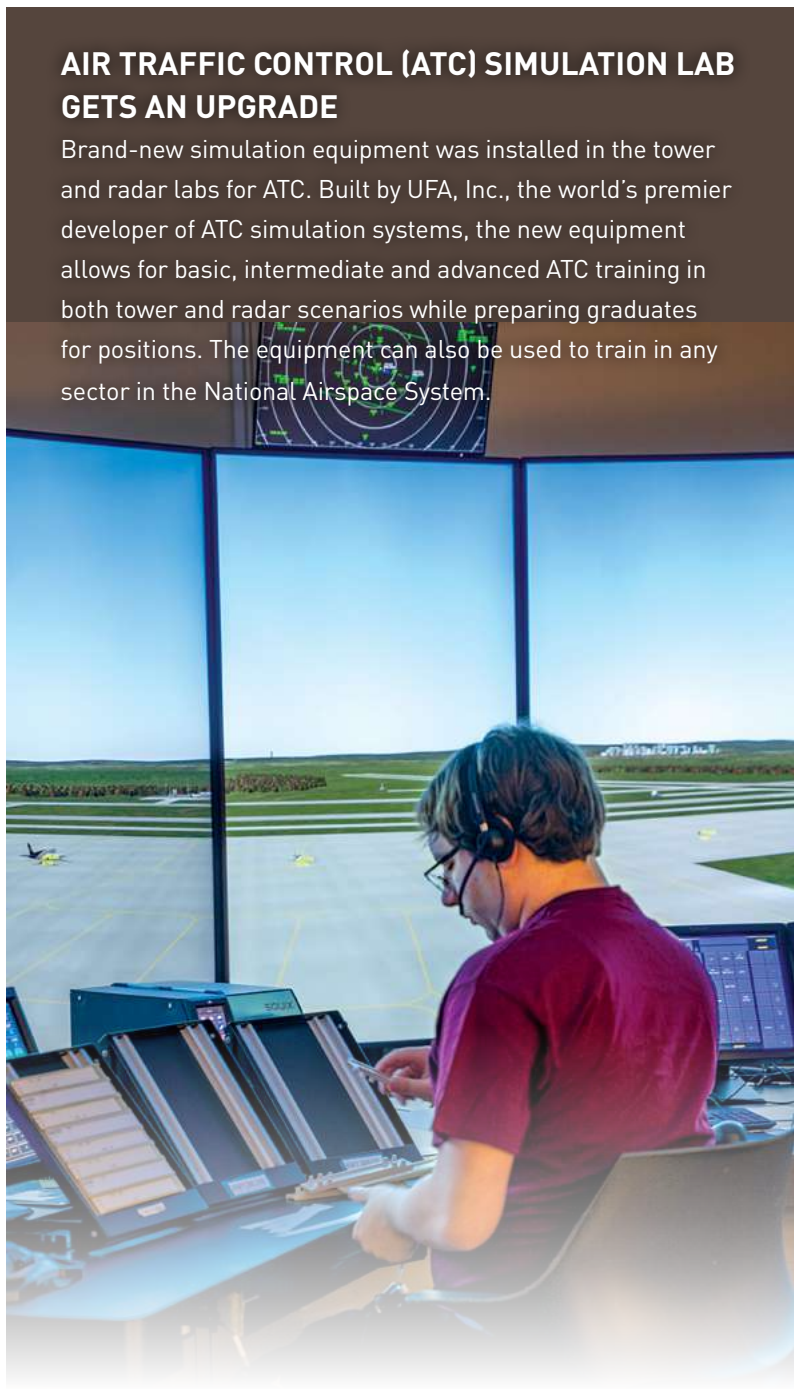
In fact, the shortage—which is attributed to a wave of retirements and the lack of capacity to train new controllers, due to the pandemic—has required a 10% reduction in the number of flights in the New York metropolitan region. Throughout the summer, Vaughn was able to [garner publicity](#) about the education and training we offer to help solve the issue of travel delays. Vaughn has been an Air Traffic-Collegiate Training Initiative (AT-CTI) partner since 1997 and was one of the original 13 institutions to be included in the program. Students who complete a prescribed set of courses and graduate with either an associate or a bachelor's degree in one of the program's 11 areas can qualify for a recommendation to the Federal Aviation Administration (FAA).

AS A RESULT OF NEW SIMULATION EQUIPMENT INSTALLED THIS PAST SPRING AND THE NEED TO SOLVE THE ACUTE SHORTAGE IN OUR REGION, THE COLLEGE STANDS READY TO ASSIST THE FAA IN PROVIDING TRAINING TO NEW AND EXISTING CONTROLLERS WAITING TO BE TRAINED IN THE LOCAL SECTORS.

Recent Vaughn Gala Honoree and Airlines for America President and Chief Executive Officer Nicholas Calio talked about Vaughn's capabilities in his speech at the U.S. Chamber of Commerce Global Aerospace Summit when he suggested that the FAA allow schools [in the AT-CTI program] to be used in a greater capacity to ease the shortage.

AIR TRAFFIC CONTROL (ATC) SIMULATION LAB GETS AN UPGRADE

Brand-new simulation equipment was installed in the tower and radar labs for ATC. Built by UFA, Inc., the world's premier developer of ATC simulation systems, the new equipment allows for basic, intermediate and advanced ATC training in both tower and radar scenarios while preparing graduates for positions. The equipment can also be used to train in any sector in the National Airspace System.



FEDERAL AVIATION ADMINISTRATION ANNOUNCES ACTION TO ADDRESS SAFETY REVIEW TEAM'S AIR TRAFFIC CONTROL RECOMMENDATIONS

VAUGHN COLLEGE IS POISED TO ASSIST

On Friday, November 17 the [Federal Aviation Administration \(FAA\) announced that it would take immediate action to enhance air traffic controller training and safety](#) following the release of the National Airspace System Safety Review Team report. As the FAA continuously looks for ways to improve they noted that providing additional support to colleges and universities in the Air Traffic-Collegiate Training Initiative (AT-CTI) Program is one suggestion that can be adopted immediately.

The FAA noted that they will work with AT-CTI programs to ensure that graduates from these programs have the necessary skills to begin on-the-job training at a facility, bypassing the previous requirement to attend the FAA Air Traffic Controller Academy before being assigned. Vaughn is one of 13 original colleges in the AT-CTI program and is poised to continue supporting the FAA in training new air traffic controllers.

MEDIA COVERS THE SHORTAGE

As the travel season has rebounded with record number of passengers once again taking to the air, many news outlets are covering the air traffic controller shortage, how it is affecting travel and safety, and asking what the FAA plans to do to address the problem. On December 2, 2023, the New York Time ran a front-page article on the topic to which President DeVivo responded.

NEW YORK TIMES LETTER TO THE EDITOR

To the Editor:

Re “Control Tower Vacancies Compromising Air Safety” (front page, Dec. 3):

I read with alarm your article describing in sometimes harrowing terms the continuing shortage of air traffic controllers across the country — a problem felt acutely in New York, where it has resulted in flight delays. There has recently been a major hopeful development that could ease this problem, but many questions have yet to be answered.

In mid-November, the Federal Aviation Agency announced plans to create a model to allow higher education institutions that focus on aviation to provide training now available at its academy in Oklahoma City, so their graduates can go straight to working at air traffic facilities. They would still need to pass the necessary tests. This could ease the bottleneck, though it obviously raises questions of its own. But the F.A.A. has yet to release details of how this direct hiring proposal would work, so aviation educators play a waiting game.

Despite the frightening stories of overworked air traffic controllers in the story, these are fascinating and well-compensated jobs when well managed. They require smarts and concentration and are never dull. And they allow kids from financially challenged backgrounds to join the middle class and stay there for the rest of their lives. (At my college, students can't wait to get into the virtual air traffic room to bring in passenger jets, guide them around the field and virtually send them back aloft.)

What a double win this creative move by the F.A.A. could be — an opportunity to close the wealth gap for those who have not traditionally had access, and faster relief for current controllers who want to get back to loving their careers, and need new colleagues to do so.

Sharon DeVivo
Queens

COMPUTER SCIENCE

VAUGHN'S [COMPUTER SCIENCE BACHELOR'S DEGREE](#): A DIRECT PATH TO A HIGH-PAYING, FUTUREPROOF CAREER

As technology advances at a record pace, the demand for computer science professionals is skyrocketing and the job market continues to offer high-paying, in-demand career opportunities.

Vaughn recognized this need and developed a new [bachelor of computer science degree](#). As the latest addition to the College's impressive array of engineering degree programs, it is designed to ensure graduates will possess the necessary knowledge and skills to be valuable assets in the computer science industry, which is regularly noted as one of the top-paying engineering careers.

This comprehensive curriculum encompasses all aspects of computer science so students graduate feeling confident and ready to start their careers. The degree also includes opportunities for hands-on experience and internships to ensure students not only understand the theory of the field but can also apply it to real-world situations that happen in the field every day.

Through the program, students will gain a solid foundation in mathematics and design systems and explore advanced topics such as data science and artificial intelligence (AI) in order to master the fundamentals of programming, gain expertise in computer algorithms, develop networking and system security skills, tackle complex challenges, and design systems to meet specific criteria.

Since nearly every business uses technology, it is therefore no surprise that computer science professionals are needed in almost every facet of industry to develop software and hardware, design computer systems, and manage databases that are secure in the face of increasingly advanced hackers.

"The unprecedented demand for graduates in the fields of computer science and information technology

makes Vaughn's computer science degree one of the most valuable investments for a student's future," said Dr. Miguel Bustamante, assistant professor in the engineering department at Vaughn. Dr. Mohammed Benalla, assistant professor of engineering and technology, added, "Because our curriculum requires participation in undergraduate research and internships, students acquire valuable hands-on experience and industry knowledge that they need to succeed in the field."

Graduates with a computer science degree pursue careers as software developers, computer systems engineers, computer hardware engineers, data warehousing specialists, database administrators, systems analysts, game developers and web developers, among others. The tech, health care, automotive and real estate industries are benefiting from computer science professionals like never before as technology continues to advance and evolve.

According to the US Bureau of Labor Statistics, careers that are related to computer and information technology are projected to grow at a faster rate than all other occupations over the next decade. The 2022 median annual wage for computer network architects with a bachelor's degree was \$126,900, and the median annual wage for database administrators with a bachelor's degree was \$112,120.





SUPPLY CHAIN MANAGEMENT

VAUGHN'S NEW [SUPPLY CHAIN MANAGEMENT](#) CERTIFICATE PREPARES STUDENTS FOR HIGH-PAYING CAREERS IN THE FIELD

Until a few years ago, most of us took it for granted that our everyday goods would be on the shelves when we needed them. The pandemic changed that. Today, companies are recognizing the critical role that supply chains play in our everyday lives. This has created a high demand for supply chain professionals across all industries.

In response to a growing need to provide employment-ready students for the workplace, Vaughn College developed a [certificate program in Supply Chain Management \(SCM\)](#) that has been approved by the New York State Department of Education (NYSED).

Dr. Peter Canellis, PhD, PE, associate professor in the management department at Vaughn and SCM professor, shared the wide range of benefits the program offers to individuals who are seeking careers or career advancement in the field.

WHAT IS SUPPLY CHAIN MANAGEMENT?

From a global perspective, supply chain management relates to the flow of goods and services—from beginning with raw materials to delivering a final product. Supply chain management careers encompass diverse opportunities with various paths that allow individuals to seek out their own niche, based on their interest and skills.

Canellis explained that the main driver for supply chain talent is the demand for goods and services that has exploded on a global basis due to an increasing number of the world's population entering the middle class. Some of the opportunities one can pursue include sourcing and procurement, logistics, inventory management, demand forecasting and purchasing. Examples of companies hiring for these positions may include manufacturers, airlines and ocean-going freight carriers, trucking companies, railroads, freight forwarders, terminal operators and government agencies.

WHAT ARE THE BENEFITS OF PURSUING A CERTIFICATE DEGREE IN SCM?

Pursuing a certificate in SCM can be highly rewarding—and profitable. This is an intriguing field where interested individuals will learn how the worldwide economy works—and then some.

Supply chain management is in high demand because it is required by every company that either makes products for business or consumer use, provides intermediate inputs to those products or supports their distribution.

The US Bureau of Labor Statistics projects employment in this field to grow 18% over the next decade, which is much faster than average for all other occupations. This high demand is creating a pathway of opportunity to help companies reduce costs, improve customer satisfaction and enhance competitiveness. And cargo growth is expected to more than double over the next 20 years.

Vaughn's SCM certificate is intended not only for students but also for industry professionals who are looking to advance their careers. The program equips students with the knowledge and skills that will advance their career while also providing understanding of how to navigate the job market.

The SCM certificate program is a four-course series that runs for five weeks and is structured for possible completion within six months. The badging on students' transcripts is a unique benefit that Vaughn provides and is seen as early recognition and documentation of students' achievements that they can reference when seeking employment. Additionally, career services provides support by finding and preparing students for career opportunities. For students who do well in the certificate program, there is a guaranteed informational employment interview with one of several Vaughn partners.

The Association for Supply Chain Management (ASCM) 2023 annual survey lists salaries ranging from \$65,000 entry-level to \$98,000 and higher for mid-level jobs in the US.

\$3 MILLION GRANT AWARD TO SUPPORT HISPANIC AVIATION MAINTENANCE STUDENTS

THE US DEPARTMENT OF EDUCATION HAS AWARDED VAUGHN A \$3 MILLION GRANT OVER THE NEXT FIVE YEARS TO RECRUIT AND RETAIN STUDENTS WHO PURSUE CAREERS IN AVIATION MAINTENANCE.

Several long-term outcomes are planned over the course of the grant including increasing the current enrollment in the aviation maintenance program; increasing the percentage of remain enrolled in the aviation maintenance pathway; increasing the percentage of Hispanic first-time, full-time degree-seeking undergraduate students graduating with an aviation maintenance degree within two years (associate of occupational science/associate of applied science) and four years (bachelor of science) by 10%; increasing the number of STEM students who enroll in and complete an industry-based internship by 20% and engaging at least 200 students per year in career-focused grant events. Finally, during the grant period we will work to increase the number of regional, state and national





“THE GRANT WILL ALLOW US TO ADD MULTIPLE TRAINING AIDS, MOCKUP BOARDS, ENGINES AND AIRCRAFT THAT WILL GREATLY ENHANCE OUR STUDENTS THEORETICAL AND PRACTICAL EXPERIENCES IN THE CLASSROOM LEADING TO SUCCESS IN THEIR CAREERS.”

—DOMENIC PROSCIA VICE PRESIDENT OF TRAINING

industry partners offering internships and/or cooperative education to Vaughn students.

“The grant will allow us to add multiple training aids, mockup boards, engines and aircraft that will greatly enhance our students theoretical and practical experiences in the classroom leading to success in their careers,” said Vice President of Training Domenic Proscia. “It also allows us to refine our teaching methods to meet the needs of constantly changing industry requirements.” In September 2022, the Federal Aviation Administration revised the requirements for the Part 147 aviation maintenance training program nationwide and Vaughn is using this grant to respond to those changes.

The grant also allows the institution to add several key personnel such as curriculum specialists to oversee lesson plans, a tutor that provides additional support to ensure that students are ready for the federal examinations, an internship coordinator who will develop new relationships with industry partners, as well as admissions and advisement specialists to assist students as they enter the program and provide mentorship as they pursue their educational and career pathway.

To learn more or become an industry partner contact Vice President of Training Domenic Proscia at domenic.proscia@vaughn.edu.

► INTERNSHIPS



◀ ARAYANA KHELAWAN '24 MECHANICAL ENGINEERING MOHAMED YOUSSEF '24 MECHATRONIC ENGINEERING

Engineering students Arayana Khelawan '24 and Mohamed Youssef '24 spent the summer interning at Boeing's airplane assembly facility in Everett, Washington where they had the opportunity to shadow [Vaughn Alumnus Ed Clark '91, vice president and general manager of the 737 program](#). Khelawan worked with Boeing as a liaison engineer on the KC-46. Her role involved troubleshooting the KC-46, making strategic decisions that would benefit the aircraft and communicating with industry professionals about decisions.

Youssef worked in the mechanical and hydraulic systems division where his responsibilities included conducting simulation tests under diverse conditions for various aircraft models, addressing service engineers' and testing teams' needs while providing valuable insights into system design concepts and qualifications. "My fulfilling summer at Boeing has equipped me with invaluable experience that will undoubtedly shape my future in the aerospace industry," said Youssef.

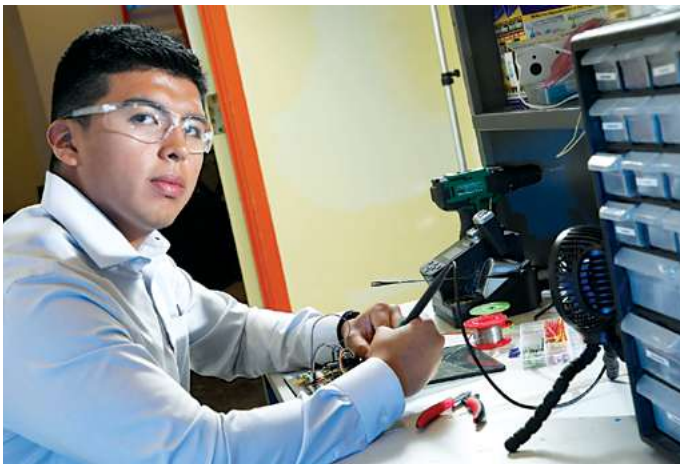
► RACHEL CHIN '24 AIRPORT MANAGEMENT

Airport management major Rachel Chin '24 interned with JetBlue as part of their JET Summer Internship program with the airports (BlueCity) support and crew member experience team at their headquarters in Long Island City. Chin learned the behind-the-scenes details of how JetBlue supports its airport and ground operation crew members. She assisted the team with JetBlue's airports temporary duty assignment program, audited the airports transfer list and created a proposal to develop an incentive for their future temporary duty assignment taskforce. Chin's favorite part of the internship was working on a group project with three other interns to propose and develop a cost-saving or revenue-generating idea presented to Robin Hayes, chief executive officer of JetBlue, and the senior leadership team.



◀ DANIEL GARCIA '24 MECHATRONIC ENGINEERING

Daniel Garcia '24, mechatronic engineering major, spent his summer conducting research at Cornell University, where he worked in Dr. Farrell Helbling's Laboratory on bio-inspired microrobots, specifically a robotic bee, and in Dr. Robert Shepherd's organic robotics lab where Garcia worked with Dr. Ofek Peretz and other post-docs developing a wave energy harvesting device. He also helped develop an underwater system to test and optimize the soft actuators and other components of the project.





◀ **HUZAIFA NAVEED '24**
MECHATRONIC ENGINEERING

Mechatronic engineering major Huzaifa Naveed '24 travelled to Huntsville, Alabama to work as a test engineering intern for Boeing. Working on the STEM engineering team and supporting the PAC-3 program allowed him to gain invaluable knowledge during the summer months. The internship provided Naveed with new insights into engineering opportunities.

**VAUGHN ASSISTS STUDENTS
IN OBTAINING EXCITING
INTERNSHIPS AT COMPANIES
SUCH AS BOEING,
HONEYWELL AND JETBLUE.**



◀ **AISLING O'SULLIVAN '24**
MECHANICAL ENGINEERING

Aisling O'Sullivan '24, mechanical engineering major, interned as a systems engineer with the Department of Defense in New Jersey where she gained exposure to the defense industry to help her decide on future career paths after graduating. O'Sullivan worked on improving gunner protection kits to achieve greater elevation of weapons as well as overhead cover and learned the prototyping process to optimize systems using virtual and real models.



◀ **MATTHAN MBANEFO '25**
MECHATRONIC ENGINEERING

Matthan Mbanedo '25 mechatronic engineering major interned at Honeywell in Indiana as part of the early engineering career rotational program. He worked closely with engineers who designed products which are then assembled at the Honeywell plant. Mbanedo created standard works and implemented various skills to help the plant work more efficiently. While interning with Honey, Mbanedo learned about a certification called the Lean 6 Sigma Green Belt, which he is now in the process of earning.

PHILIP BREDU '22

Alumnus

[Vaughn graduate Philip Bredu '22](#) credits the value of internships and how his passion for engineering and the sciences helped him land his current position as a test engineer at Georgia Power.

Born and raised in Ghana, Bredu and his brother moved to the United States as teenagers to join their father, who was living in New York. At the age of 18, Bredu enrolled at Bronx Community College, where he started taking courses in science, technology, engineering and mathematics. “Throughout my high school years in Ghana, I always gravitated toward math and physics,” he said. “It never scared me away. I knew it was something I could do.” Then Bredu received an email about a scholarship offered at Vaughn College. “I was intrigued about what I read and wanted to learn more about the College and its engineering programs.”

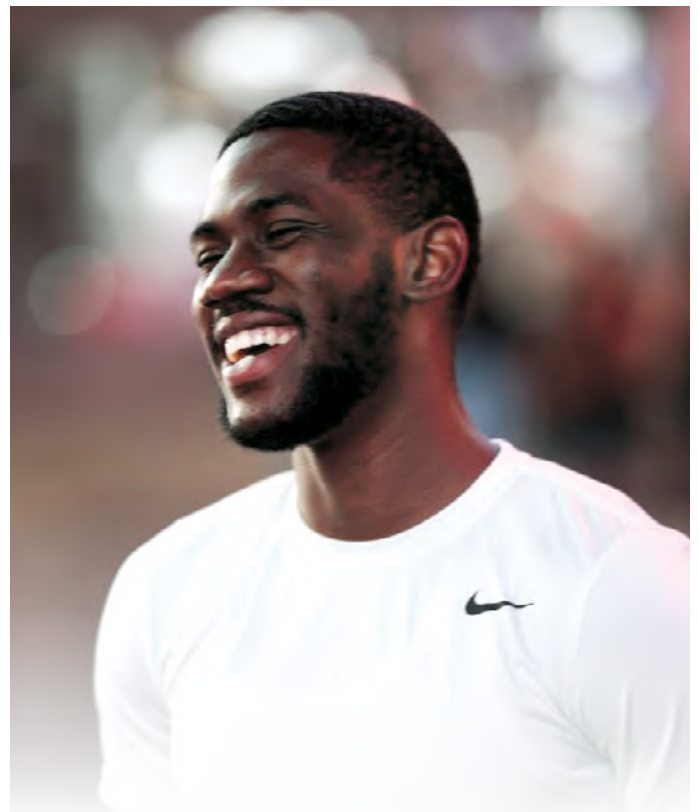
Excited about his future, Bredu knew that Vaughn would be the perfect place to pursue his dream. “I transferred to Vaughn and enrolled in the mechanical engineering program,” he said. “Being at Vaughn offered me the hands-on learning experience I wanted. From financial aid and career support to expert professors and incredible industry connections, landing my internship at Georgia Power was easy.”

Bredu is the perfect example of how an internship can literally “power” your ability to land the job of your dreams. Bredu attended a career fair at Vaughn where he learned that he could use his engineering degree to work at a power company. Later, Vaughn sponsored a trip for him to attend the National Society of Black Engineers conference, where he met with representatives from Georgia Power. “I was invited to the hospitality suite at the conference, where I met the supervisor at Georgia Power. After speaking with him for a short time, I was offered an internship!” Bredu said the experience was life changing as it helped him realize that working in the power industry was something he could do.

During the internship, Bredu valued the ability to work both in the office and in the field. “The hybrid schedule enabled me to learn so many different aspects of energy management. This is a dynamic career that will hold my interest for the long term.” After the internship, Bredu was offered a permanent position at Georgia Power. In 2022, he graduated from Vaughn with a bachelor’s degree

in mechanical engineering and was ready to start his career as a test engineer. “Moving to Georgia by myself and leaving my family was a challenging time for me,” he said. “It was a total lifestyle change from living in New York, but I’m adjusting. I love my job.”

In discussing his current position Bredu notes, “You never stop learning. This job teaches you the importance of being a good listener and asking questions.” The power industry is not always top of mind when thinking about a career after obtaining a degree from Vaughn, but Bredu would definitely recommend it. “There’s always something new and exciting to learn about,” he explained. “Today’s customers are interested in solar, wind and sustainable energy. Working as a test engineer is a dream come true for me. It’s a diversified job that requires different skills. If you’re looking for a hands-on, intense and exciting career, becoming a test engineer is the job for you. You’ll never be bored.”



SPECIAL APPEAL FOR THE STUDENT EXPERIENCE FUND

VAUGHN COLLEGE STUDENTS RECEIVE MORE THAN JUST AN EDUCATION—they receive opportunities to network with professionals, hone their academic and professional skills and prepare for the futureproof careers of tomorrow.

The Student Experience Fund supports student attendance at professional conferences to present research and to represent student club chapters of professional organizations at their annual meetings. Through this exposure, many leave with internship and employment offers before graduation. Students also attend networking events, employer webinars and career fairs through this fund's support.



MAKE YOUR GIFT TODAY

www.vaughn.edu/give-a-gift. For more information contact

Stephen DeSalvo, chief development officer at stephen.desalvo@vaughn.edu or 718.429.6600 extension 353.

SURAIYA NAWAZ '24

Student

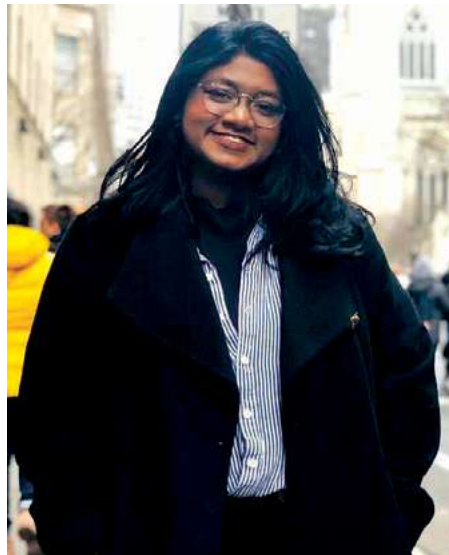
[Mechatronic engineering major, Suraiya Nawaz '24](#), has secured three internships so far while attending Vaughn at Whirlpool, Tesla and the Port Authority of New York and New Jersey. These opportunities are giving her the chance to experience what a career in a variety of industries might be like and set her up for future success.

Nawaz never considered engineering as a career until she attended a career fair at her high school. It was there she said she discovered Vaughn and all the engineering degree programs the College had to offer. After speaking to the representatives at the Vaughn booth, Nawaz learned the College was very close to home. After doing additional research, she decided Vaughn would be an excellent fit for her. Nawaz chose to major in mechatronic engineering since the field is a combination of three engineering disciplines: mechanical, electrical and computer.

As a rising senior, Nawaz stated that being active on campus in the many clubs and organizations at Vaughn proved instrumental in helping nurture her leadership skills as she embraced the field of engineering. When she was a freshman, she joined the Society of Women in Engineering and held several roles over the years—including her current role as secretary of the chapter. “I wanted to connect with other women in the field,” she explained. “Joining clubs not only helps give you a better understanding of the industry but is also a great way to break out of your comfort zone.” Feeding her interest in engineering, Nawaz joined Vaughn’s Mars Rover Club, where she gained hands-on experience in the construction of rovers and participated in national competitions. “I’m grateful to Vaughn for the opportunity to participate in these invigorating competitions,” she said. “Vaughn supports its students by covering all of the financial expenses to attend the competitions, so we can gain the real-life experience necessary to succeed in the field.”

Through Nawaz’s selection as a recipient of the four-year full-tuition LaGuardia Redevelopment Opportunity Scholarship—which is sponsored in partnership with the Port Authority of New York and New Jersey (PANYNJ)—Nawaz was afforded several internship opportunities, which she considers steppingstones to her most recent internship at the Whirlpool Corporation. “My first internship was working at Terminal B at LaGuardia, where I assisted with inspections and safety work. After that, I had the pleasure of working at the

Border Authority Aviation Headquarters at the Walton Center, where I worked every day helping with the Wi-Fi service at John F. Kennedy International Airport. It was an amazing feeling knowing my work at these internships made a difference,” she said proudly. “Internships are no longer about filing and getting coffee. They are an opportunity to work on real projects that contribute to the life of the organization and help the company save money by fixing problems.”



In addition to the two PANYNJ internships, Nawaz landed another at Tesla, where she discovered a connection with automation. “I really loved working there. I even worked with a robot! I can see myself working in automation in the future.” She said the tasks at her internship at Whirlpool align with more traditional manufacturing. “I was placed on a big project in the welding department,” she said. “I contributed to conversations with the team. It was a big responsibility.”

As a woman of color in pursuit of an engineering career, Nawaz is optimistic about her future. “I felt nervous and a bit hesitant my first month there,” she admitted. “The field is still very male dominated. But my manager was female, and that made all the difference. I felt comfortable going to her with questions, which made it easy to hit the ground running. I never felt like I would be treated differently or not receive opportunities because of my gender.”

Although Nawaz is leaning toward pursuing a career in automation, she still hasn’t given up on her hope of one day working in the aerospace industry.

“Today’s technical advancements are ever-changing... I believe robotics will be a big part of the future. I hope my dream job falls somewhere in the middle.”

▶ AWARDS



KEN STAUFFER '83

[The Institute of Electrical and Electronics Engineers \(IEEE\) Technical Activities Board \(TAB\) Hall of Honor](#) Selection Committee recently nominated Vaughn alumnus, board of trustees member and former chair Ken Stauffer '83, to the 2023 Hall of Honor. This award is presented to those who have made one or more contributions to IEEE technical activities. Stauffer attended the November 2023 TAB meeting in Boston to accept the award.

The TAB Hall of Honor recognizes those persons, living or deceased, who have made one or more major contribution(s) to IEEE Technical Activities. Contributions include

the creation, development, or advancement of the technical objectives of IEEE. Objectives include the advancement of the theory and practice of electrical, electronics, communications and computer engineering, as well as computer science, the allied branches of engineering, and the related arts, sciences, technologies and their application for the benefit of IEEE members worldwide, and for the general public.

After graduating from the College in 1983, Stauffer began his career at AT&T Bell Laboratories in Holmdel, New Jersey, and has since held several high-ranking positions throughout his professional career. In January 2003, he co-founded Technology Assurance Labs and then co-founded Cypress Equipment two years later. Stauffer served as chief executive officer for both companies for 15 years.

Stauffer joined Vaughn's Board of Trustees in 2014 and served as the chair for several years. Additionally, he has brought his entrepreneurial expertise to Vaughn's community by teaching workshops on the subject for aspiring entrepreneurs.

LORETTA ALKALAY

Loretta Alkalay, aviation attorney and [Vaughn College adjunct professor](#), was selected by Women and Drones for the 2023 Women in Emerging Aviation Technologies Hall of Fame Award. Alkalay holds a Federal Aviation Administration remote pilot certificate with an sUAS rating and also serves as a regulatory consultant, specializing in issues related to compliance with federal aviation regulations, including drone rules.

[The Hall of Fame Award](#) inductees were honored at the 7th Annual Women in Emerging Aviation Technologies Awards ceremony at the Smithsonian Air and Space Museum in Washington D.C. on Wednesday, October 25, 2023. The award recognizes highly experienced and accomplished businesswomen who represent a cross-section of professionals in uncrewed aerial systems (UAS) and advanced air mobility (AAM) industry-enabling career fields. Since 2017, Women and Drones has recognized the trailblazers, innovators, mentors, and business leaders who are making significant contributions to the UAS/AAM industry, including inspiring innovations and solutions, positively shaping the public perceptions of UAS/AAM technology, and empowering more

women to enter the industry, as well as advocating for more inclusive practices in STEM and aviation. The individual awards are designed to acknowledge and inspire women who are driving change and leading the emerging aviation industry closer to achieving gender parity. The corporate awards acknowledge organizations that have, in their pursuit of excellence, created a culture of inclusiveness where women are engaged in key roles and leadership positions of the organization.



▶ VAUGHN IN THE NEWS

ABC 7



VAUGHN COLLEGE WAS BUZZING with activity throughout the summer as [news stations](#) across the city visited the College to learn how Vaughn is preparing the next generation of airline pilots, air traffic controllers, aeronautical engineers, airline and airport managers and aviation maintenance professionals. Vaughn's commitment to filling these crucial roles was highlighted in interviews with news stations ABC 7, PIX 11, [NY 1](#), Scripps News, ABC 7 Tiempo, News12 NY and CBS 2.

NY 1

News12NY

PIX 11



CBS 2

Scripps News

ABC 7 Tiempo


QUEENS Chronicle 49° Clear

News Editions Opinion qboro: Arts Photos School News Classifieds About Us Sections Digital Edition Page One Sports

NYPD seeks expanded drone applications

Process would need detailed paperwork and a nonrefundable \$150 permit fee

by Michael Gannon, Senior News Editor Jul 13, 2023



Several print pieces also ran with comments from President DeVivo.

An Op-Ed appeared in the **New York Daily News** discussing the abundant career opportunities available in the aviation industry today, and how the key to solving the aviation workforce shortage is by equipping students with affordable programs and industry connections. DeVivo was also featured in the **New York Daily News** discussing drone laws in New York City and in the [Queens Chronicle](#) where she explained the importance of New York City easing its restrictive drone laws to allow students the ability to practice and fly drones within the confines of the city to explore an emerging career path.

DAILY NEWS


OPINION

Readers sound off on an EV future, NYC's summer jobs program and drone rules



DAILY NEWS The sky's the limit as aviation jobs take off...

The sky's the limit as aviation jobs take off. Look up for career opportunities



PROMOTED STORIES

These Pixar | Bombas Socks Are Giving Us All the Feels

FIVE DYNAMIC ADDITIONS ADD LUSTER TO VAUGHN'S ENGINEERING DEPARTMENT

Assistant professors Oluwaseyi Ajayi, Randolph Archbald, Hagos Kifle, Dae Wook Kim and Ruben Velasquez each have unique expertise making them important additions to Vaughn's faculty. Engineers play a significant role in shaping society and its future, and imparting that knowledge to aspiring students is a shared goal of all five.

OLUWASEYI AJAYI, PhD

Originally from Nigeria, Oluwaseyi Ajayi has a long and impressive academic and professional background. He has always been keenly interested in new ideas and is especially focused on the subjects of cybersecurity and blockchain development—new areas of focus under Vaughn's computer engineering degree. Ajayi believes that all data must be networked together through the internet and that it is critical to remove security concerns if industry is to move forward with new technologies. "Students absolutely love these topics," he notes. "To be one of the 'good guys,' you must be able to think like the bad guys. Artificial intelligence and cybersecurity are at the very foundation of that ability."

After earning his bachelor's degree of technology in physics (summa cum laude) at the Federal University of Technology Akure, Nigeria, Ajayi continued his studies at the University of Manchester in England, earning his master of science degree in communication engineering. Ultimately, Ajayi graduated with a doctor of philosophy in electrical engineering from City College of New York (CCNY) in the United States.

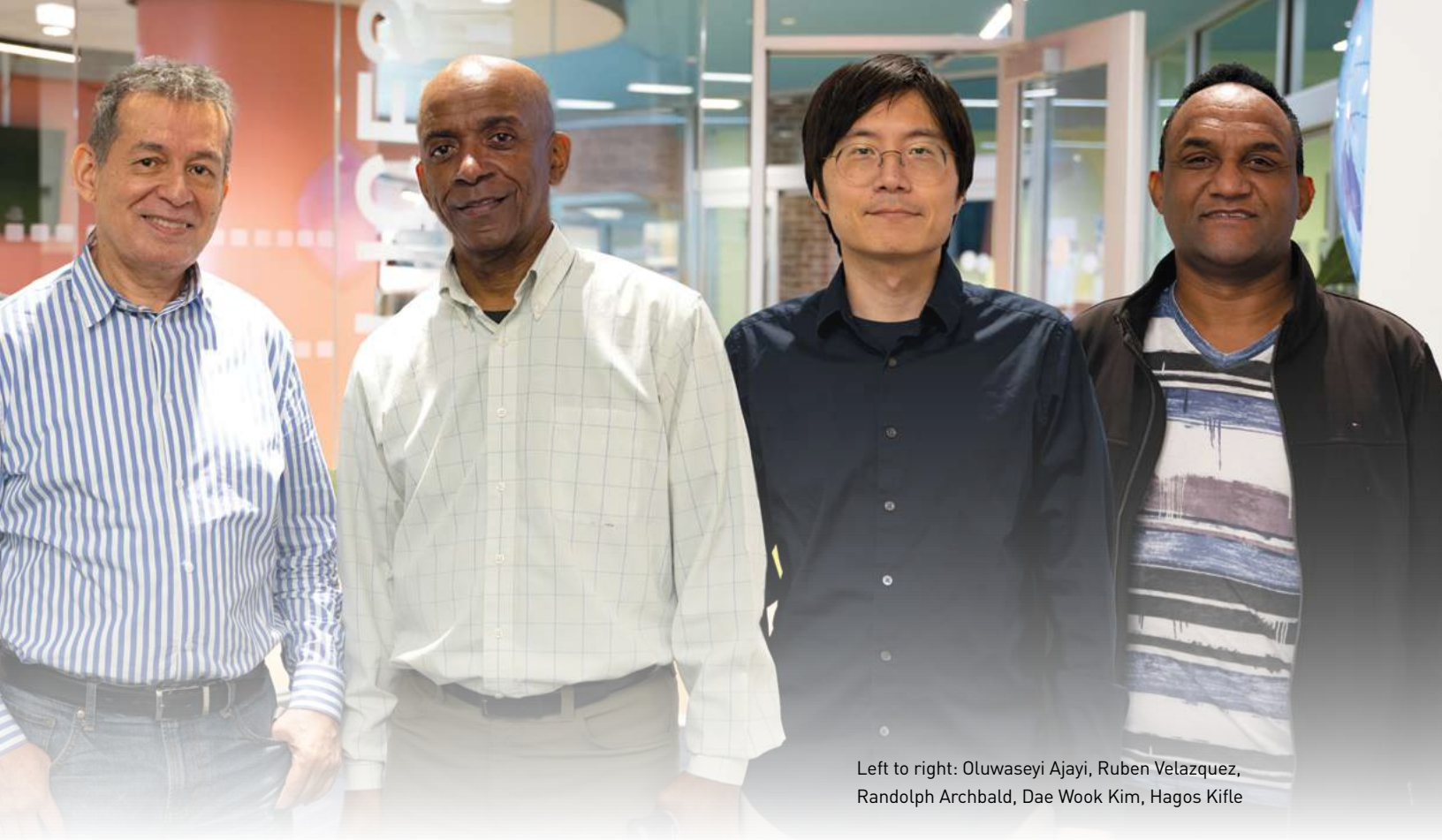
His work trajectory is equally impressive. Ajayi spent more than seven years dedicated to understanding the

power of data as a research coordinator and master's researcher. He helped design, construct and evaluate the performance of transmission channels while delivering secure information. As a natural next step, Ajayi then became both blockchain security engineer and information security engineer at the Center for Information Networking and Telecommunications at CCNY.

Ajayi's goals at Vaughn include making the engineering department indispensable to students by building on what currently exists. He wants to include more hands-on-training to prepare students for successful employment or to start their own businesses.

"We want our students to be indispensable in the marketplace, and blockchain is the future of the world," he says. "We want our students on the cutting edge of the changes to come."





Left to right: Oluwaseyi Ajayi, Ruben Velazquez, Randolph Archbald, Dae Wook Kim, Hagos Kifle

RANDOLPH ARCHBALD, PhD

While Randolph Archbald formally joined Vaughn College as a full-time professor in January 2023, he has worked with Vaughn since 1999 as a part-time professor in arts and sciences. Those many years of teaching confirmed what he felt from the beginning: that Vaughn College offers an underserved community a substantive, personalized education that positions them for future success. Prior to joining the College, Archbald studied physics and got his masters of philosophy from City College of New York.

Archbald has an extensive mathematical background that laid the groundwork for his success in electrical engineering. He knows that students often have “math anxiety” that can inhibit their learning. In fact, he has worked closely with Dr. Young Mee Oh, assistant professor, arts and sciences, to establish a developmental math committee to support students as they move towards their electrical engineering degrees.

“I am both old and new,” says Archbald about his long relationship with Vaughn. “I continue to have a real passion for my students and a desire to understand both them and their goals. What makes them tick? What excites them? How can I help transform their academic experience?” That

commitment is a hallmark of his teaching philosophy.

Archbald focuses on electrical engineering technology and avionics. The major components of the electronic engineering technology program teach the fundamentals of electrical engineering. Avionics specifically covers aircraft power and distribution systems, flight control and management systems, electronic flight instruments systems, long-range navigation systems (integrated with avionics systems), and traffic alert and avoidance systems.

“Vaughn is exceptional for students who really want hands-on experience. The class sizes are small and personal, and have an excellent ratio of students to teachers. Everything we do at Vaughn is specifically designed with the goal of ensuring career and job readiness upon graduation.”

HAGOS KIFLE, PhD

According to Hagos Kifle, two of the most exciting things about mathematics are the endless challenges and multitudes of solutions one can find. **“Not knowing is the first step to knowing,” he explains. “My goal as an instructor is to bring everyone along for the exploration.”**

Kifle joined Vaughn as assistant professor of applied mathematics with an impressive background. He got his bachelor of science from the University of Asmara in Eritrea, Africa, and his master of science and doctor of philosophy in applied mathematics and statistics from Stony Brook University, New York. After earning his degrees, Kifle was a lecturer at the Rochester Institute of Technology, New York, and an adjunct professor at Keiser University in Florida, where he taught mathematics and statistics.

According to Kifle, it’s all about the data: how it’s collected, how it’s applied, and how it’s used to validate and support theories and solutions. “Information is the power and the process,” he says.

Kifle finds Vaughn an exciting and unique place to work—one with small class sizes that enable real-time one-on-one teaching and a high level of engagement, and where he can get to know the students individually and help them choose the best path forward in their careers. “Everything I do here is aligned with my background, and I truly feel I can help students fully understand and enjoy mathematics and statistics,” he says.

Inclusivity is a hallmark of Kifle’s teaching approach—he believes that problem-solving should be a team effort, and that the best solutions are often the result of brainstorming and collaboration. He also believes in mastering the basics, so students have a solid analytic foundation regardless of their specialty. Kifle summarizes it simply: “If you miss the basics, you miss the whole thing.”

Using innovation, creativity and a wealth of knowledge, engineering graduates truly impact the world by bringing ideas into reality. By integrating the principles of mathematics and science into their careers, Vaughn’s engineering graduates will have the opportunity to develop solutions to some of the industry’s most pressing issues.

DAE WOOK KIM, PhD

Dae Wook Kim has a long and distinguished academic career filled with honors, awards, respected published works and industry recognition. He graduated from Wright State University, where he worked as a research assistant in the Cyber Security Lab. Kim’s dissertation topic was “Data-Driven Network-Centric Threat Assessment.” Before joining Vaughn, Kim was assistant professor at Eastern Kentucky University and at Governors State University in Illinois. Kim joined Vaughn in 2023 as an assistant professor as the College added a new bachelor of science degree in computer science.

Kim joined Vaughn in 2023 as assistant professor as the College added a new bachelor of science degree in computer science. “This is the right place for me because even though computer science can be challenging, I know that making a small effort every day means students can pursue any career in this field they desire. I want to help them achieve their highest aspirations.”

Computer science professionals are needed in almost every industry to develop software and hardware, design computer systems and manage databases that are secure in the face of increasingly advanced hackers. Kim is especially interested in the field’s application to cybersecurity and artificial intelligence and wants to ensure that graduates have the necessary knowledge and skills to be valuable assets in the computer science industry.

Another defining part of Kim’s teaching philosophy is wanting students to be happy: happy to learn, to speak out in class, to ask questions, to challenge themselves, and, ultimately, with their personal and professional choices. He believes that teachers are instrumental in helping students achieve that happiness.

Kim also shares Vaughn’s belief in the value of hands-on learning. One of his earliest mentors was his uncle, a computer science professor in Korea, who told him that learning by doing is critical to the practical application of data and understanding outcomes. By applying this philosophy to his own teaching, Kim ensures that students not only understand the theory of the field but also apply it to real-world situations that happen every day.

“I wanted to be part of Vaughn because students here are the faculty’s passion,” says Kim. **“There is a true relationship between students and teachers built on support and personalization...that will help guarantee every student’s future success.”**

RUBEN VELAZQUEZ, PhD

Born in Columbia, South America, Ruben Velazquez always loved working with his hands. As a teenager, he was fascinated by all things electrical, and that fascination resulted in a long, successful career in electrical engineering. Velazquez joined Vaughn in 2023 and quickly realized that many Vaughn students share his fascination with engineering and its many applications across industries.

Velazquez just completed teaching a course in cybersecurity that was attended, online or in person, by more than 60 students from around the world. The location and diversity of those students reflect the College's commitment to bringing academic opportunities to all students, whether they are attending online from Africa, South America, or right here in New York. The cybersecurity course focused on three main areas: chat and chatbot security; artificial intelligence; and blockchain security. "Vaughn stands out because its students are passionate about learning," says Velazquez. "They like to explore and are not afraid to ask questions, which makes for a very dynamic environment."

Velazquez earned his doctorate from the City University of New York Graduate Center with a dissertation on terahertz waves. He was one of the first in the world to study these systems and is considered an expert. Velazquez' dissertation was entitled "The Design, Fabrication and Characterization of Integrated Photoconductive Antennas for On-Chip Terahertz Wave Radiation and Detection." Terahertz waves attract a lot of attention due to their unique properties, which are favorable to various applications and many industries, including biologics, pharmaceuticals, security screening, medical science and food and drug control.

While at Vaughn, Velazquez joined the aspiring engineering students who attended the Society of Hispanic Professional Engineers (SHPE) conference in 2023. At the conference, he networked extensively with relevant companies and executives to open new internships and job opportunities for Vaughn's students.

Velazquez says that another reason he is happy to be part of the Vaughn team is the relationship between students and teachers, and the ongoing support both receive from management. He specifically mentions Dr. Sharon B. DeVivo, president and chief executive officer, whose commitment to supporting students while in college and throughout their careers is well known. "Vaughn's ratio of faculty to students is very high, which means we get to know every student as a well-defined individual," Velazquez says. "That means that we as professors can provide the best advice and learning environment possible. It is a unique opportunity to positively impact every student's future."

"VAUGHN STANDS OUT BECAUSE ITS STUDENTS ARE PASSIONATE ABOUT LEARNING. THEY LIKE TO EXPLORE AND ARE NOT AFRAID TO ASK QUESTIONS, WHICH MAKES FOR A VERY DYNAMIC ENVIRONMENT."

—RUBEN VELAZQUEZ, PHD

▶ CAMPUS UPDATES

DASSAULT



◀ The recently retired president of the Dassault Systemes US Foundation USA and now board member for Base 11 Al Bunshaft, and Teniel Jones, president and chief executive officer of Base 11 joined Dr. Hossein Rahemi engineering and technology chair on campus for a visit in early June. [Base 11](#) is a STEM workforce and entrepreneur accelerator. They connect employers, academic institutions, and entrepreneurial opportunities with high-potential, under-resourced students who have shown interest and talent but lack the access and resources needed to realize their greatest potential. Bunshaft is a long-time member of Vaughn's Engineering and Technology Department's Industry Advisory Council. Vaughn President Dr. Sharon B. DeVivo is a member of Base 11's regional advisory board.

MARS ROVER COMPETITION

▶ For the first time, Vaughn's Rover Club travelled to Huntsville, Alabama to participate in [NASA's Human Exploration Rover Challenge \(HERC\)](#). In the competition, students design, develop, build and test human-powered rovers capable of traversing challenging terrain for completion of various mission tasks. Students learn to work effectively in teams, develop project management skills and enhance their critical-thinking abilities while networking with aerospace and system engineers, rocket scientists, aspiring astronauts and fellow HERC team members.



VEXU WORLDS



◀ Vaughn's robotics team VCAT returned from the VEXU Worlds Championship in Dallas after finishing the qualifying matches undefeated with a record of 9-0, which placed them second in the research division. The team went on to receive the Inspire Award, presented to the team which best inspires the judges with their approach to the [VEX robotics program](#).

GIRLS IN AVIATION DAY AT AVIATION HIGH SCHOOL

► President Sharon DeVivo played a pivotal role as the keynote speaker, delivering an inspiring address about the abundant opportunities awaiting prospective students at Vaughn College. With a strong track record of 98% of our graduates securing employment, she emphasized the appeal of the aviation industry to women and girls. Vaughn College students actively engaged with attendees at the expo, promoting our institution and establishing personal connections with potential students. Furthermore, Career Services' Chandra Daniels hosted a workshop on resume and interview skills, offering valuable guidance to Aviation High School students looking to enhance their employability.



GIRLS SCOUTS VISIT VAUGHN



◀ This is the second year that Troop 6000, a first-of-its-kind program designed to serve families living in temporary housing in the New York City shelter system, visited the College to learn about aviation and career opportunities. Troop members used a flight simulator to take control of an aircraft and safely land it and explore the world of air traffic control through a simulation, gaining insights into the intricate operations of managing air traffic. The day included a visit to the tower, where the girls witnessed planes taking off from the nearby LaGuardia Airport. The day ended on a sweet note, as the troop enjoyed ice cream and left with Vaughn College blankets and school supplies, including notebooks and backpacks. This special outing left the young scouts with a deeper appreciation for the world of aviation and hopefully inspired them to join this rewarding industry in the future.

FALL 2023 CAREER FAIR

► Vaughn College hosted a well-attended career fair in its hangar, attracting a diverse array of prominent companies, including American Airlines, Delta Tech Ops, JetBlue, Lufthansa Group, Duncan Aviation, U.S. Air Force, Con Edison, Atlas Air, PSA Airlines, the FBI, Endeavor Air, Marotta Controls and many more. The event drew a large turnout of students eager to connect with potential employers, seek advice for their career paths, submit job applications, and explore exciting job opportunities. The event provided an invaluable platform for students to network and engage with industry professionals, opening doors for future careers in aviation and aerospace.



CSTEP COMPUTER ENGINEERING SUMMER PROGRAM



◀ Through the NY state-funded [Collegiate Science and Technology Entry Program \(CSTEP\)](#), Vaughn College introduced students to computer science and engineering, with a focus on cutting-edge technologies like virtual reality, Unreal Engine and 3D drone mapping. This immersive experience empowers participants to explore the dynamic world of technology and sparks their interest in these rewarding careers.

CAMPUS UPDATES

SUMMER UNCREWED AERIAL SYSTEMS HIGH SCHOOL PROGRAM

Vaughn College offered a five-week summer program for high school students interested in exploring the world of drone technology. Through engaging courses in drone law, aerodynamics, coding, FPV drone building, and the diverse sectors of the drone industry, participants are well-prepared to pursue their FAA commercial license (Part 107) and earn college credits. This program opens opportunities in the rapidly evolving field of uncrewed aerial systems to NYC High School students.



JFK RUNWAY RACE



On Sunday, April 30, eight members of the Vaughn College community participated in the [5k Runway Race](#) at John F. Kennedy (JFK) International Airport. Every year JFK opens one of their terminal runways to allow participants the opportunity to complete a three-mile race. This year there were more than 1,500 runners, joggers and walkers. Assistant Director of Athletics and Recreation Jihad Ceaser '14 was the first person from Vaughn College to complete the race with a blazing time of 23:51. Michael Breunig '25 was the first student to complete the race with a time of 38:18. Women Are Warriors were represented by Jewel Fletcher '23 and Shelly Wong '25. Fletcher and Wong both finished the race in under 60 minutes.

CIVIL AIR PATROL AVIATION AND AERONAUTICS BUSINESS ACADEMY PROGRAM

Vaughn College hosted the Aviation and Aeronautics Business Academy for Civil Air Patrol cadets from across the country, revitalizing an event last held in 2015. Cadets were exposed to diverse opportunities within the aviation industry and heard valuable insights from President DeVivo about the potential pathways in aviation. Assistant Director of Marketing Elena Garcia shed light on the promising prospects in the drone industry, broadening the cadets' understanding of these fields.



ALUMNA VISIT DURING HISPANIC HERITAGE MONTH



Evita Garces, the first female vice president of line maintenance at American Airlines was the College's guest speaker who shared her inspirational journey, starting as an airplane maintenance technician and rising through various roles in the aviation industry. Her love for aviation began in her youth, nurtured by her parents, and she pursued her passion by studying at New York City's Aviation High School and the College of Aeronautics, now known as Vaughn College. Her educational journey included earning a master's in business administration from Northwestern University. Garces spoke about the pivotal role of Vaughn College in changing lives by sharing the heartwarming story of a scholarship recipient who, thanks to the College's support, was now working for American Airlines. Her visit left an indelible mark on the students, providing valuable insight and advice to support their goals in the aeronautic industry.

VAUGHN LAUNCHES NEW ADVERTISING CAMPAIGN FEATURING ARTIFICIAL INTELLIGENCE (AI) GENERATED IMAGES

IT'S YOUR FUTURE - LET'S MAKE IT WORK

As a new wave of uses for AI emerge, Vaughn has embraced its use in a new marketing campaign. AI has allowed the College to depict careers that Vaughn students are prepared for that can't be photographed on campus or are still being developed, such as an engineer working on a wind turbine or a graduate managing an electric flight vehicle vertiport (a vertical ariport). AI can also supplement current photography by producing images that show a diverse group of students and professionals working in a variety of fields. Research shows that when students are choosing degree programs, they need to see faces like their own working in those fields to know that achieving their dream job is possible.



“The ability to use AI to enhance our marketing campaign is a true benefit for depicting diversity in careers where our students land,” said President DeVivo. “It is particularly important to show success in technical fields where underrepresented and under resourced individuals are the minority. To highlight student potential and show all that can be achieved is central to our vision ‘to change the world one student at a time with a transformative education that leads to a lifetime of opportunity.’”

“THE ABILITY TO USE AI TO ENHANCE OUR MARKETING CAMPAIGN IS A TRUE BENEFIT FOR DEPICTING DIVERSITY IN CAREERS WHERE OUR STUDENTS LAND.”



NEW MASCOT !

Vaughn College ushered in the fall semester with the debut of its new Phoenix mascot. The mascot was selected by votes from Vaughn community members on their favorite design and represents new beginnings and the spirit of community.

ALUMNA VISIT DURING HISPANIC HERITAGE MONTH



▲ The Third Annual Vaughn Open Golf Outing in support of the George A. Vaughn Jr. family scholarship was held at the North Shore Towers and Country Club in Queens on Tuesday, October 10. The golf outing proceeds will help fund a scholarship to make the dream of an education possible for many of our students. More than \$36,000 was raised and 78 golfers, along with 36 sponsors, were in attendance.

VAUGHN COLLEGE 2023 GALA

HIGHEST AMOUNT OF FUNDS RAISED IN GALA'S HISTORY
IN SUPPORT OF STUDENT OPPORTUNITIES

[Vaughn College honored Nicholas E. Calio, president and chief executive officer of Airlines for America \(A4A\)](#), for his role as a leader and advocate for America's airlines and for his dedication in creating opportunities for the next generation of aviation and aerospace leaders. The eighth annual event was held on Thursday, April 13.

Anne Thompson, national chief environmental affairs correspondent for NBC News, was the emcee for the evening that also highlighted outstanding academic and professional achievements of Vaughn students. A record number of sponsors supported the Gala and more than \$475,000 was raised.

"Vaughn is building the workforce of tomorrow and graduating a highly diverse group of talented students with the knowledge, practical skills and leadership qualities to have an impact today and in the future," said Vaughn College President Dr. Sharon B. DeVivo. "That constant focus on innovation and curriculum development, coupled with our dedication to the lifelong learning of our students, ensures our students are there to meet the incredible industry demand. We are deeply appreciative of A4A's generous sponsorship of Vaughn College and our graduates who aspire to be future industry leaders."

Calio expressed his gratitude at being honored noting, "Vaughn College does an exceptional job of instilling the same message my parents instilled on me," said Calio. "The value of working hard to turn opportunity and dreams into reality."



Above: Honoree Nick Calio; **Left:** Vaughn student ambassadors at the Gala; **Bottom:** Calio with his A4A staff and supporters



SAVE THE DATE

THURSDAY, APRIL 18, 2024 AT 7 P.M.

TWA HOTEL AT JFK INTERNATIONAL AIRPORT



VAUGHN COLLEGE GALA HONORING STANLEY A. DEAL

Executive Vice President, The Boeing Company
President and Chief Executive Officer, Boeing Commercial Airplanes

For more information contact advancement@vaughn.edu