He shoots... he scores!

Civil Engineering Technology major scores high on and off the court

Story and video by Keith Pierce

Last month, Aaron Carver played on college basketball’s biggest stage. Tomorrow, he may be able to build it. The Civil Engineering Technology major, with a minor in Engineering Management, has a GPA of 3.47 and recently earned one of only five spots on the 2019 InTouch Credit Union Conference USA Men’s Basketball All-Academic Team.

“Aaron is a star on the court and in the classroom. As his academic advisor, I got to know Aaron on a personal level and rapidly learned that he is very down-to-earth and humble,” says Nestor Escobales, senior lecturer and Civil Engineering Technology program director. “He’s an excellent role model whose hard work ethic and persistent attitude exemplify what it means to be a Monarch. We are very proud of him."

Carver, who grew up going to ODU games and always wanted to be a Monarch, was one of four Monarchs to start every game this past season.

The Elizabeth City, N.C.-native is a C-USA Commissioner’s Honor Roll and Commissioner’s Medal recipient. He was named to the National Association of Basketball Coaches (NABC) Honors Court in 2017-18 and has been a member of the Student-Athlete Advisory Committee (SAAC) for two years. He also received Old Dominion University’s Paul Webb award, given to the player who best represents the university both on and off the court.

“Aaron is a wonderful example of what a student-athlete should be,” said Jeff Jones, Old Dominion University men’s basketball coach. “He possesses great character and an extremely strong work ethic that will allow him to be successful in any endeavor he chooses.”

A busy athletic schedule didn’t stop Carver from choosing one of the hardest academic majors.

“I’ve always liked math and I like problem solving, so I kind of put the two together,” he said.

“I also wanted to know how structures and bridges were built, so I knew civil engineering was for me. My end goal is to be a site manager for different projects.”

Carver is the son of former Monarch basketball standout and Hall of Famer Anthony “AC” Carver, the school’s fifth all-time scorer with 1,958 career points and 755 career rebounds from 1986-90. His brother, Trey, plays basketball at Hampton University, while his sister, Mauri, plays volleyball at University of Maryland Eastern Shore.

“Ever since I saw my dad’s name in the Ted (Ted Constant Convocation Center), I always dreamed of being able to play here,” Carver recalled. “When I was younger, it seemed so far-fetched for me to think I could live up to what he accomplished because he had such an outstanding career here. What he was able to achieve was really special.”

Carver also credits Coach Jones for much of his success.

“Coach Jones blessed me with this opportunity to attend ODU. Without him I would not be in this position,” he said. “I appreciate everything he has done and does for me. He’s a great coach and great person!”

Carver helped ODU clinch its first NCAA tournament bid since 2011. Though the Monarchs fell to Purdue in the first round, Carver came home from the tournament grateful for the opportunity and eager to push on for next season.

“Now that we know what it feels like, we can use that as motivation to go a little harder and be a little bit more dedicated to win again and go back to the NCAA tournament,” he said.

Hear more from Aaron
tinyurl.com/Carver-CET19

ODU
Batten College of Engineering & Technology
More than 100 current and future female engineering students turned out for the second annual Women Excelling in Engineering (WE2) event. Hosted last month by the Batten College of Engineering and Technology, the event aims to inspire female engineers with the message that, despite the fact that women are still underrepresented in the engineering field, they can be among the growing number of women making a significant impact in STEM fields.

Designed for current and admitted female engineering students, the event provided opportunities for students to learn from successful female ODU alums and industry leaders, explore engineering pathways and careers through engaging panel discussions, acquire valuable advice for choosing the right academic path and discover how leadership skills can help build future success.

In an opening session message, Schwanzetta Williams, director of talent acquisition at Smithfield Foods, addressed this year’s theme: “Engineering: a Bridge to Many Destinations,” by sharing her professional journey as an industrial engineer.

“Believe in yourself and be willing to take a step back,” said Williams. “To manage my career proactively, I had to make changes when it was necessary, even when the change was hard. I would not be where I am now had I not made those tough choices.”

Concurrent panel discussions provided the current and future female engineering students with opportunities to interact with industry professionals. One panel, led by professional engineers, gave students perspective on the many diverse career options afforded to engineers, as well as industry advice on how choose a direction in the field. A second panel, led by an anesthesiologist, a pediatric surgeon, a law student and an MBA professional demonstrated how students may actually leverage their undergraduate engineering education as a bridge to other professions, such as medicine, law, education and more. A student-led panel gave insider advice on how to navigate their undergraduate journey.

Attendees came together after the separate panel discussions for an encouraging dialogue moderated by Stephanie Adams, dean of the Batten College of Engineering and Technology. Williams, along with Katie Ingersoll, factory director at Unilever, a consumer goods company representing more than 400 brands, discussed the role leadership plays in advancing in engineering careers.

“We need to see ourselves in the effective leaders we admire, but also have others see us as authentic,” Ingersoll said. “When you work in industry, it’s not about ‘I,’ it’s about the team.”

Dean Adams, who is also president-elect of the American Society of Engineering Education (ASEE), gave a powerful keynote addressing how women are engineering the bridge to the future.

“This event is important because even with the growing number of initiatives out there to inspire girls to enter STEM fields, we’re still a long way off from being equally represented,” Adams said. “So we’re not planning to let up.”

One hundred percent of those who responded to an event survey indicated that the experience was helpful and that they would recommend it to other aspiring female engineering students.

“I learned that to have a successful career as a female engineer, you have to put yourself out there and find your voice,” wrote one student participant. “You cannot be afraid to be yourself.”
Roughly two-thirds of the workforce at BBG Incorporated, a Chesapeake, Virginia-based engineering firm specializing in electronic design and manufacturing, are graduates of Old Dominion University with degrees in electrical engineering – including its founders, President Jimmy Black, and Vice President Joseph Gander. Offering complete hardware and software design and development services, BBG has developed products for the commercial and military sector in both the domestic and foreign marketplace.

“I recruit from ODU partly because I’m on the dean’s advisory board and I’ve been connected with the research foundation and I know ODU has a good program,” said Black, ODU Class of 1980. “There’s pride in it for me that there will be ODU alumni here. I want the camaraderie in-house of ODU.”

Old Dominion established the foundation that I needed to develop and design the circuit boards and it also gave me lots of opportunities for networking,” David Wommack, ODU Class of 2000, a BBG design engineer/production manager. “Having that internship opportunity gave me an opportunity to see the theoretical side and how it applies to the real world side. The interactions at Old Dominion were just absolutely necessary for building that foundation.”

Here more from BBG associates in this brief video: https://tinyurl.com/BBG-ODU

The modeling and simulation engineering curriculum is based on a solid foundation in mathematics and basic science. Core program content includes a thorough introduction to key concepts from computer science, the major modeling and simulation paradigms, computer visualization, analysis methods, and simulation software design. The new concentrations allow students to focus on particular areas of interest:

- **Gaming** – the study of game development using concepts learned in the MSVE curriculum, as well as creating game dialogue and understanding gaming ethics.
- **Transportation** – the development of models and simulations in support of traffic engineering, a civil engineering discipline.
- **Cybersecurity** – the basics of cybersecurity and how to model and simulate systems to study their vulnerability.
- **Digital Manufacturing & Industrial Systems** – modeling and simulation of manufacturing systems, including robotics, are introduced in addition to exploring design decisions in digital manufacturing systems.
- **Advanced Simulation Techniques** – Students learn advanced simulation concepts such as parallel and distributed simulation and artificial intelligence. In addition, computational skills are expanded.

“The feedback from students has been very positive already,” McKenzie said. “Some found out about them before we even advertised them, so we’re looking forward to seeing more students take advantage of them this fall.”

Learn more at: odu.edu/msve

---

As business, manufacturing, health care, transportation and defense organizations face the growing need for modeling and simulation engineers, the Department of Modeling, Simulation & Visualization Engineering (MSVE) at Old Dominion University answers the call. With the launch of new concentrations within the Bachelor of Science in Modeling and Simulation Engineering degree, beginning this fall students may choose to focus their studies by obtaining one of the following concentrations: gaming, transportation, cybersecurity, digital manufacturing and industrial systems, or advanced simulation techniques.

“We are very excited about our new concentrations,” said Rick McKenzie, professor and chair of the Department of Modeling, Simulation & Visualization Engineering. “We wanted to accentuate the various application areas of modeling and simulation and thought that this would be the perfect way to do so. Now, students will know about our focus on gaming, transportation, cybersecurity, etc.”

**Story and video by Keith Pierce**

**MSVE launches new concentrations**

By Courtney Hill, Advisor and program manager, MSVE

---

**Electrical engineers at BBG, Inc. take pride in their ODU heritage**

The modeling and simulation engineering curriculum is based on a solid foundation in mathematics and basic science. Core program content includes a thorough introduction to key concepts from computer science, the major modeling and simulation paradigms, computer visualization, analysis methods, and simulation software design. The new concentrations allow students to focus on particular areas of interest:

- **Gaming** – the study of game development using concepts learned in the MSVE curriculum, as well as creating game dialogue and understanding gaming ethics.
- **Transportation** – the development of models and simulations in support of traffic engineering, a civil engineering discipline.
- **Cybersecurity** – the basics of cybersecurity and how to model and simulate systems to study their vulnerability.
- **Digital Manufacturing & Industrial Systems** – modeling and simulation of manufacturing systems, including robotics, are introduced in addition to exploring design decisions in digital manufacturing systems.
- **Advanced Simulation Techniques** – Students learn advanced simulation concepts such as parallel and distributed simulation and artificial intelligence. In addition, computational skills are expanded.

“The feedback from students has been very positive already,” McKenzie said. “Some found out about them before we even advertised them, so we’re looking forward to seeing more students take advantage of them this fall.”

Learn more at: odu.edu/msve
Old Dominion University professor Vishnu Lakdawala recently received the National Association of Clean Water Agencies’ (NACWA) annual National Environmental Achievement Award for Local Public Service at the organization’s winter meeting in Albuquerque, N.M.

Lakdawala is an associate professor of electrical and computer engineering in the Batten College of Engineering and Technology. Appointed by the past five governors, he has represented Virginia Beach as commissioner of the Hampton Roads Sanitation District (HRSD) since 2002. Lakdawala has also served as the chairman of the HRSD Commission for seven years.

“This is indeed a wonderful recognition and I proudly share it with my colleagues,” Lakdawala said. “I have to sincerely thank the Department of Electrical and Computer Engineering, the Batten College of Engineering and Technology, and Old Dominion University for providing a home to me over the years and allowing me to provide the local service to HRSD.”

The National Environmental Achievement Award Program recognizes individuals and NACWA member agencies that have made outstanding contributions to environmental protection and the clean-water community.

NACWA is recognized as a national leader in legislative, regulatory and legal advocacy on clean-water issues, as well as a top technical resource for water management, sustainability and ecosystem protection interests.