

## 2022-23 ANNUAL REPORT

# CENTER FOR BUSINESS ANALYTICS

IN THE PAMPLIN COLLEGE OF BUSINESS







## CENTER FOR BUSINESS ANALYTICS

*Educating students, accelerating careers,  
and advancing research at Virginia Tech.*

The [Center for Business Analytics](#) (CBA) is proud to publish this annual report which summarizes an incredible year. The impact of CBA continues to grow with the addition of a new Living Learning Community focused on analytics, a growing alumni base that is receiving significant recognition, and a master's degree program that continues to produce graduates that are in high demand by the leading companies in numerous domains.

Our students in the MSBA-BA ([Master of Science in Business Administration with a concentration in Business Analytics](#)) come from a wide variety of undergraduate majors and possess strong problem-solving and communication skills. They are formed into teams consisting of 4-5 students that tackle real-world, complex problems from our corporate sponsors. Throughout the 9-month capstone project the student teams meet with their corporate sponsors, faculty advisors, and CBA staff to create solutions to these challenging problems. The program culminates in the delivery and briefing of the solution to the corporate sponsors at their location. This experience produces graduates who are ready to work on Day 1 and possess skills far ahead of their peers.

Academic Year 23-24 promises to be another banner year with our largest number of students (48) and capstone sponsors (11) ever. It is a privilege to serve Virginia Tech, our students and our capstone sponsors. Please reach out to us if you have any questions or would like to learn more about the CBA. We can be reached at [vtcba@vt.edu](mailto:vtcba@vt.edu). Follow us on social media accounts [@cba\\_vt](#).

A handwritten signature in black ink that reads 'Jay'.

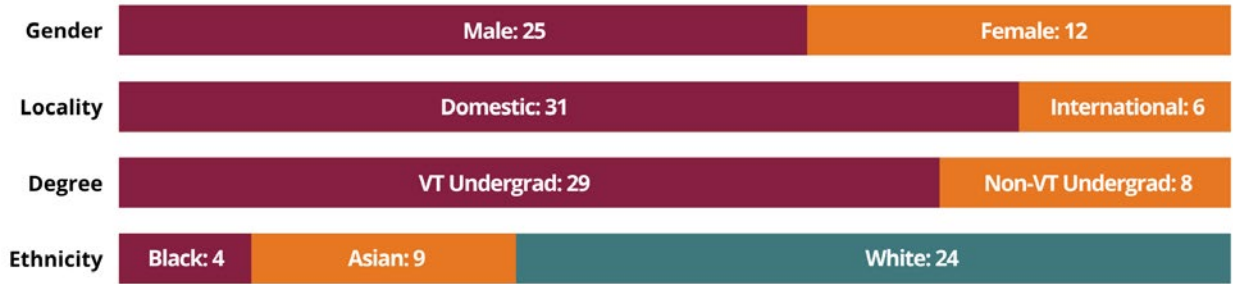
Jay Winkeler  
Executive Director, Center for Business Analytics

# MSBA-BA COHORT 7

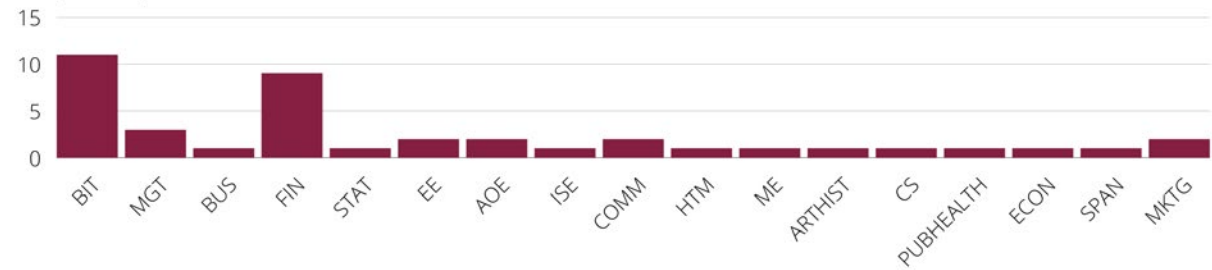


In August of 2022, our 7th MSBA-BA cohort joined us in Blacksburg for orientation. Representing 17 different majors and arriving from 8 different universities at home and abroad, Cohort 7's diversity of background and experience proved an asset over the course of the capstone process. Their journey through the program was characterized by a strong sense of camaraderie and teamwork, which we know from experience translates into an enduring professional network.

## Cohort 7 Demographic Data



### Majors Represented:





## Cohort 7 Corporate Sponsors



In total, Jay Winkeler and other members of the CBA faculty/staff traveled 2,338 miles over 17 days to facilitate Cohort 7's final presentations to their clients. Without exception, the presentations were met with positive feedback by sponsoring companies.



## Cohort 7 Employment Data

**\$81,000**

MEDIAN SALARY

**\$7,500**

MEDIAN SIGN-ON BONUS

**94%\***

EMPLOYED 6 MONTHS POST-GRAD

Industries range from consulting and defense contracting to the healthcare and entertainment sectors.

*\*Please note: 6 months post-graduation will elapse in February, 2024. This report was published in January, 2024. This statistic is subject to change.*

## Cohort 7 Student Athletes

Cohort 7 included 5 student athletes competing in Track & Field, Softball, and Baseball. Several of these students received awards and recognition from the Atlantic Coast Conference during their time in the MSBA-BA program.

## Who Hired Cohort 7



## Cohort 7 Public Presentation Day

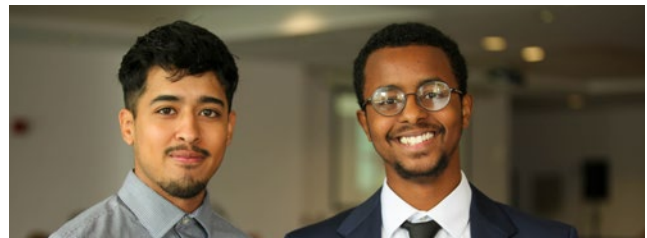
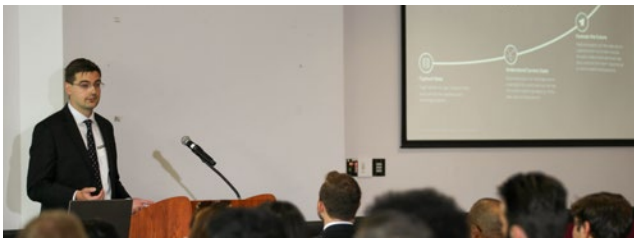
Public Presentation Day for Cohort 7 was held on Wednesday, June 21, 2023 at the University Club of Virginia Tech. Students delivered the public versions of their final presentations, received certificates marking their completion of the MSBA-BA program, and enjoyed a video recapping the year.



# IMPACT OF THE CBA



The inaugural [Day for Data symposium](#), held on Sept. 9, 2022 and hosted by the Center for Business Analytics, connected nearly 150 students, faculty, and industry professionals in an exploration of the modern applications of data analytics in the corporate setting. Featuring 5 industry subject matter experts leading sessions on a variety of business analytics-related topics, a panel of MSBA-BA alumni, networking opportunities, and more, the event was lauded as a success by attendees and sponsors alike.



Boman Raskin, Cohort 7 MSBA-BA student and attendee said about the event, *“I took away valuable information that will lead me to develop relevant useful skills throughout this school year in my graduate level classes. These skills will help me excel in the work world.”*

## Virginia Tech Giving Day 2023

During the 2023 Virginia Tech Giving Day on February 15 & 16, the Center for Business Analytics came in 9th place in the Pamplin College of Business with 105 donors! 2023 represents a 13% increase in individual donors from the previous year, and unlocked \$4,000 in funds for the CBA, in addition to the nearly \$8,000 raised for the Center.



## Jay Ives: Forbes' 30 Under 30

MSBA-BA Cohort 2 alumnus Jay Ives was recognized in 2023 as one of Forbes' 30 Under 30 in the category of Marketing & Advertising. In [an interview with the CBA](#), Jay had this to say about the impact of the MSBA-BA:



*"In the MSBA-BA program, I gained a much deeper understanding of data. More importantly, I learned how to communicate and visualize data in a meaningful way... I quickly found out that this was my secret weapon. After I graduated from the MSBA-BA program, I was flooded with new opportunities."*

## Impact Living-Learning Community



The Center for Business Analytics wrote the proposal for the [Impact Living-Learning Community](#) and participated on the steering committee for the inception and execution of the LLC. The Impact LLC will create a pathway for students entering Virginia Tech as undergraduates to learn more about opportunities within the field of business analytics.

## MSBA-BA Alumni Events Held



In the Spring semester of 2023, we hosted our first two MSBA-BA alumni events. These informal gatherings provided alumni the opportunity to reconnect with each other and catch up with CBA staff.

**Washington, D.C. Event:** 24 attendees

**Blacksburg Event:** 20 attendees

## Undergraduate Research Project

A team of 3 students (one MSBA-BA and two undergraduate Business Information Technology majors) executed a project for Arslan Fleets, a fast-growing car rental company based in Denver, Colorado. They worked with the owner of the company, a Virginia Tech alum, to develop an efficient inspection scheduling model that optimizes resources and minimizes time and cost. The model was successfully implemented.

# UPDATES FROM THE CBA



## Jennifer Havens, Director of the CBA

In early 2023, [the CBA selected Jennifer Havens](#) to serve as the new Director of the Center for Business Analytics. A seasoned entrepreneur, executive leader, and professional coach, Havens carries a breadth of experience spanning industries from health care and biotech to manufacturing and tech startups.

## Faculty Professional Development Funding

For Academic Year 2022-23, \$27,000 was funded for faculty professional development. In Academic Year 2023-24, this figure is projected to be \$33,000.

## Executive Advisory Board Growth

For AY 2022-23, there was a 33% growth in [Executive Advisory Board](#) membership with the addition of 5 new members from industry-leading companies Amazon, IBM, Deloitte, SPAR Group, and HP. This puts the total count at 20.





## Preview of Cohort 8



*MSBA-BA Cohort 8 Group Photo*

**Our 8th Cohort of MSBA-BA students is our largest yet, with 48 students.** The CBA's new location in the Data & Decision Sciences Building enables these students to learn and collaborate in state-of-the-art facilities and classrooms.

## Thank You to Cliff Ragsdale, Father of the MSBA-BA

Professor Cliff Ragsdale announced his retirement this year, marking the culmination of a 33-year career at Virginia Tech. His significant contributions to the field of business analytics include authoring the widely-used textbook "Spreadsheet Modeling and Decision Analysis," which for more than 25 years has educated students in the field.

He is also the founder of the MSBA-BA program, which launched in summer 2016. As said by alumnus Mark Collins, "Dr. Ragsdale has increased the quality of education, the experiential impact for capstone customers, and the long-term professional impact throughout industry wherever his students may go. He always guided his students toward greatness and contributed to the excellent reputation of Virginia Tech." We are profoundly grateful to Cliff for his contributions to the CBA, and wish him all the best in his retirement.



# INSIGHTS: A LOOK AHEAD



## *Navigating the Future of Business Analytics Education: A Blend of Technology and Human Insight*

Written by Jennifer Havens, Director of the Center for Business Analytics

*In an era where technology is rapidly transforming the business landscape, higher education in business analytics must evolve. As we prepare the next generation of analysts and decision-makers, it's essential to align educational programs with the technological advancements and market needs of today and tomorrow.*

*This is a preview of what is on the minds of Virginia Tech's Center for Business Analytics team and how we plan to continue partnering with colleagues and stakeholders to deliver a world-class education that molds high-impact business analytics leaders.*

### **Technology Integration**

Advancements in generative artificial intelligence (AI) and toward artificial general intelligence (AGI) and quantum computing are reshaping industries. Our curriculum must integrate these technologies, providing students with the knowledge and skills to leverage them in a business context. This integration is not just about teaching the technical aspects but also about understanding the implications these technologies have on business strategy and decision-making.

### **Sustainable Practices and Digital Transformation**

Sustainability is no longer a choice but a business imperative. Our program emphasizes the role of analytics in driving sustainable practices across industries. Furthermore, the digital transformation journey of businesses is at its core. We aim to equip students with the ability to analyze and interpret data in this digitized world, ensuring they can lead and manage change effectively through telling the story of the data in a professional and influential manner.

### **Adapting to Economic and Technological Shifts**

The global economic landscape is evolving, influenced by technology and new business models. Our curriculum is designed to reflect these changes, ensuring that students are well-versed in understanding and responding to these dynamics. The ability to be tool-agnostic and agile is a guiding principle of our program and will continue to evolve in alignment with industry.

### **Balancing Technical Expertise with Decision Science**

While technical know-how is fundamental, the essence of our program lies in balancing this with decision science and business consulting. This approach ensures that students are not just skilled in data analysis but also in applying these insights to make informed, strategic decisions.



### **Preparing for Automated Analytics**

As analytics increasingly becomes automated, our focus is on preparing students to work alongside and harness the power of these automated systems. This preparation involves understanding the limitations and potentials of automation in analytics. The value of knowing the “how” behind automation remains relevant, which enables them to advise on the right methods and tools for analysis. Knowing this gives them the opportunity to improve efficiency and effectiveness of the business analysis they provide today and in their careers.

### **Increasing Accountability and Competition**

The landscape of higher education in analytics is becoming more competitive, with increased accountability. Our program is designed to stand out, offering a unique blend of practical and theoretical knowledge, setting our students apart in the job market. The CBA and MSBA-BA program have always looked a little different from traditional data and decision science programs, with our heavy focus on professional acumen. We see the need for such a distinction increasing, therefore plan to continue this as a key differentiator.

### **Blending Technical Skills with Power Skills**

In the evolving corporate landscape, “power skills” are increasingly vital for graduates. Coined by Jeff Camm from Wake Forest University, these include the ability to influence, collaborate effectively, prioritize tasks, and interpret data insights compellingly. Such skills, encompassing creativity and problem-solving, are crucial human attributes distinct from machine capabilities.

Additionally, proficiency in engaging with various organizational stakeholders and understanding the ethical dimensions of AI and data analytics is crucial. Our curriculum aims to blend technical prowess with these power skills, focusing on problem-solving, critical thinking, influence, and empathetic leadership.

### **Conclusion**

As we look to the future, our commitment is to continually evolve and adapt our business analytics program. By staying ahead of technological advancements, aligning with market needs, and focusing on a holistic education model, we are preparing our students for a future where they not only survive but thrive in the ever-changing business landscape.



# ACKNOWLEDGMENTS



We extend our deepest gratitude to the corporate partners and sponsors who have generously supported the Center for Business Analytics over the past year. Your commitment to analytics excellence not only fuels the intellectual growth of our students but also invigorates the industry with fresh insights and innovative solutions.

We are also indebted to the remarkable [faculty advisors](#) who have provided unwavering guidance and mentorship: Michelle Seref, Onur Seref, Barbara Fraticelli, Andrew MacKinlay, Greg Kogan, Jeremy Sudweeks, Brad Paye, David Tegarden, and Justin Monday. Your contributions ensure our curriculum remains cutting-edge and our students are well-equipped for the challenges they will face in their careers.

