New Data Science Degree Prepares You for a Booming Job Market

Data scientists study everything—from which rollercoaster ride has the greatest fun factor, to why the Patagonia clothing company created fabrics that reduce the ecological footprint, to why facial recognition software could be unethical.

Data science combines the tools and techniques for acquiring information and preparing it for analysis that can help uncover cause and effect, predict outcomes, and communicate insights to different audiences. The field of data science requires people with creativity, curiosity, training in scientific methods, and journalism/storytelling—in addition to math and statistics.

Because data science is one of the 15 fastest growing careers, creating 11.5 million jobs, Montgomery College created a new data science degree curriculum to prepare students for this dynamic field.

Professor Rachel Saidi, program coordinator, says, “Data science is transdisciplinary, as it crosses all disciplines. It’s useful for everyone because we are both consumers and producers of data. I think everyone should learn a little bit about data and data science.”

Data science is now transforming industries such as health care, energy, and transportation. If you are pursuing a degree in liberal arts, business, finance, science, health sciences, social sciences, or education, data science skills will give you an edge over other candidates competing in today’s job market. In addition to pursuing a data science degree at a four-year institution, you can apply data science coursework/credentials to many other college majors.

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The associate of science in data science will roll out in spring 2023. In addition to this associate’s degree program, students will also earn a data science certificate. And next fall, high school students in the Early College program can participate in this data science cohort.

Montgomery college has articulation agreements with four-year institutions including Coppin State University (A.S. in data science to B.S. in data science) and University of Maryland, College Park (A.A. in general studies-STEM plus data science certificate to B.S. in information systems).

According to Glassdoor, data scientist salaries in Washington, D.C., across all industries are about $122,000 per year. Data skills double the job prospects for liberal arts graduates and add a $12,000 premium, on average, to starting salaries, according to The Chronicle of Higher Education.

For more information on this program, visit montgomerycolleg.edu/datascience.
Get Ahead of the Class
Early College's Elementary Education/Special Education Prepares Teachers Faster

“I’ll never forget Miss Jones from Fairland Elementary School,” says Jordan Jefferson. “She was the first teacher who looked like me. She was so enthusiastic about her job. And she encouraged all of us to go to college. Even though I was only in third grade, the lessons she instilled in me were so powerful.”

Jefferson, a 17-year-old from Bethesda-Chevy Chase (B-CC) HS, says Miss Jones’s impression was so profound, it drove her to pursue the Early College program in elementary education/special education. When she graduates from MC in spring 2023, along with a high school diploma, she will earn an associate of arts in teaching. She will transfer to a four-year school to complete her teaching degree.

“Jordan is going to be a great teacher,” says Professor Debra Poese, director of elementary and secondary teacher education partnerships at the College. “She’s really got a heart for it—and she already does a lot of work with kids as a counselor at an after-school program. She’s exactly the kind of student we want to recruit from MCPS and place in a classroom someday.”

Students in the Early College program in elementary education/special education pursue coursework toward teacher certification in Maryland. They fulfill their general education requirements and complete a core of professional education coursework required for the first two years of teacher preparation, which includes participating in fieldwork experiences.

“Last year I did fieldwork at Fields Road Elementary School,” says Jefferson. The teacher gave me a lot of responsibility. I did small group work and read to the students. I got to see firsthand the impact teachers have on kids—and it’s really fun.”

While she would not describe the workload of college as fun, Jefferson says she rose to the challenge. She believes she will thrive at the next level. “I want to go to an HBCU [Historically Black College or University], but I understand the College has transfer agreements with Towson University,” she says. The A.A.T. can transfer to any related four-year education program; however, there are specific transfer agreements with elementary education/special education programs at all Maryland public and private universities, including Towson University at the Universities at Shady Grove.

“When I do go to a four-year school, I’ll have reaped so many benefits from this program,” she says. “I, well, my parents, saved a lot of money on the first two years of my education. And I got to interact with like-minded students and mentors through the Educators Rising chapter and the CREATE (Culturally Responsive Educators Aspiring for Teaching Excellence) Program.” In CREATE, students receive one-on-one advising, study sessions, monthly teacher talks, and leadership training.

Jefferson said her involvement in CREATE prompted her to form Sister-Sister, a mentorship club for African American students just entering B-CC. “Growing up in Bethesda, I didn’t see a lot of people who looked like me,” she says. “I really want to be a role model and make a difference in another student’s life.”

For more information on the Early College program in elementary education/special education, visit montgomerycollege.edu/dep.

Is broadcasting in your future?

Take a class from Dr. Tiffany Thames Copeland, professor of media arts, who teaches dual enrollment students among many others. She received a Fulbright U.S. Scholar Program award in Communications for the 2022-2023 academic year from the U.S. Department of State and the Fulbright Foreign Scholarship Board. She traveled to Ghana to engage in cutting-edge research and expand her professional networks. Fulbrighters often continue research collaborations started abroad, laying the groundwork for forging future partnerships between institutions and nations.

In the classroom, she insists her students create a website to market themselves to future employers, demonstrating they are “social media ready.” She teaches her students how to upload audio files and how to use and contribute to popular audio hosting sites.

Dr. Thames Copeland is also director of the student-run radio station, WMCR. Under her leadership, WMCR overhauled its streaming capabilities and got top-of-the-line scheduling and automation.

As a Smithsonian Faculty Fellow, she studied social justice. Dr. Thames Copeland recently published a book, We Are Not Scared to Die: Julius Malema and the New Movement for African Liberation.
Recognition Ceremony
Salutes 265 Dual Enrollment Graduates

Montgomery County Public Schools (MCPS) and Montgomery College (MC) honored 265 students—the largest class ever—of dual enrollment graduates at a Recognition Ceremony held May 23 at the Universities at Shady Grove.

The students completed both their MCPS high school diploma and an MC associate’s degree in one of four dual enrollment programs: Early College, JumpStart, Middle College, and the new Pathways in Network and Information Technology (P-TECH).

Dr. Genevieve Floyd, supervisor of career and postsecondary partnerships at MCPS, served as mistress of ceremonies for the event, which included remarks from then-Interim (now permanent) School Superintendent Dr. Monifa McKnight and Dr. Jermaine Williams, MC president, as well as other MCPS and MC administrators.

Some of the laudable accomplishments of these dual enrollment graduates included

- 49 MC Phi Theta Kappa National Honor Society (3.5 GPA or higher) inductees
- 63 MC Dr. Harry Harden Academic Excellence Award winners (3.5 GPA or higher)
- Three MC Excellence in Equity Award winners

Notable individual achievements included Eliazer “Elle” Montemayor, a 16-year-old Walter Johnson HS JumpStart student, recognized as the youngest-ever dual enrollment graduate. She is attending Massachusetts Institute of Technology (MIT). Jordan Lee, a P-TECH graduate from Clarksburg HS, won the President’s Gold Award for earning 900 student service learning hours. He is a Virginia Tech student. Elizabeth Salguero-Romero (Northwood HS/Middle College) earned 100 college credits—the most ever. She is currently a College Park Scholar at the University of Maryland. And Eliza Rizzo’s (Middle College) 4.88 GPA is the highest ever recorded by a Northwood HS student. She is enrolled in the University of Maryland’s Honors Program.

Left: Jimmy Garcia (P-TECH, far left), and his twin brother, Kevin, (business, second from right) pose with their parents and MC Trustee Mr. Omar Lazo (far right). Both Garcia brothers are at University of Maryland this fall.

Right: Northwood HS Middle College students celebrate their accomplishments.

DID YOU KNOW?

He’s Got an X-Ray Vision

At 19 years old, Terrell Wright ’22 is the youngest registered radiologic (x-ray) technologist in Maryland. Wright (Northwest HS), an Early College radiologic (x-ray) technology cohort graduate, passed his American Registry of Radiologic Technologists certification on the first try. Now at Towson University studying allied health, Wright wants to continue an interventional radiologist. He will start a job in the Diagnostic Radiology Department at Johns Hopkins Hospital in October.

igniTe Hub

This brand-new facility on the Rockville Campus provides a physical and virtual space where students, lifelong learners, faculty, local business owners, and community members can grow their technology and coding skills, learn to create apps, collaborate to solve problems, and create or improve existing products and services.

Made possible through a partnership with Montgomery County government, MC, MCPS, the Montgomery County Economic Development Corporation (MCEDC), and Apple, igniTe hub features learning pods, state-of-the-art Apple technology, and instructional classes on technology skills such as app coding and design. The hub space and its programming will equip community members with the knowledge and skills to succeed in the 21st century.

The igniTe Hub is an extension of the Montgomery Can Code program, formed in 2019 to offer local middle school students an enriching and educational summer camp experience to learn computer coding.
November
- Sign up for the SAT test by Nov. 3; test will be administered Dec. 3.
- Sign up for the ACT test by Nov. 4; test will be administered Dec. 10.
- Deadline for completing Early College and Middle College (MC2) and Virtual Middle College is Nov. 4.
- Ensure that your school has submitted your transcripts and letters of recommendation.
- Finish completing college applications and essays.
- Submit applications for early admissions programs. Consider applying online. (Be aware that many colleges charge an application fee.)
- Register for a free Paying for College Forum, Saturday, Nov. 5, from 9 a.m. to 2 p.m., on the Rockville Campus. The event is in person with a virtual viewing option. You can get help to find resources and programs to make college more affordable—and to complete the FAFSA and MSFAA. For information, email recruitevents@montgomerycollege.edu.

December
- Visit the FAFSA website, apply for Federal Student Aid PIN (personal identification number) at pin.ed.gov, which will allow you to electronically apply for your federal student aid and access your U.S. Department of Education record each year.
- Start researching summer internships and jobs related to your career interests.
- Watch for early admissions notices.
- Develop a college application resume to highlight your activities, achievements, etc.
- Organize scholarships, certificates, articles, etc., to illustrate your achievements—and create a portfolio to display them.

January
- Sign up for the ACT test by Jan. 6; test will be administered Feb. 11.
- Complete any applications not already due.
- Encourage your parents to gather their tax documents early—tax information is required to complete the FAFSA.

February
- Sign up for the SAT test by Feb. 10; test will be administered March 11.
- File the free FAFSA now—some colleges have a February deadline. FAFSA.ed.gov

March
- March 1 is the state FAFSA deadline. List at least one Maryland college on the FAFSA.
- March 1 is the priority deadline for fall 2020 financial aid at Montgomery College.
- Sign up for the ACT test by March 10; test will be administered April 15.
- Submit tax forms to college financial aid offices, if they are requested.
- If considering Montgomery College, prepare for fall registration.
- Decision letters from colleges begin to arrive.
- Visit colleges again if you are undecided about which one to choose.
- To transfer from a community college to a Maryland four-year college, you can use ARTSYS to help plan your coursework—artweb.USMD.edu

April
- Sign up for the SAT test by April 7; test will be administered May 6.
- Compare your offers of admission and financial aid; discuss them with family and counselors.
- Research housing choices and meal plans at colleges.