



Education

Maryland's higher education institutions offer comprehensive training and research programs to support businesses across a wide range of industries. More than 50 accredited two- and four-year colleges and universities in the state serve over 335,000 students, together with Maryland campuses of several out-of-state institutions.

Educational attainment in Maryland remains above the national average. Among residents 25 years of age or older:

- 43.7 percent of state's population has bachelor's degrees or higher, placing Maryland fourth among the states and considerably above the national average of 36.2 percent. Maryland has consistently ranked among the top states in this measure of educational attainment.
- 21.3 percent have graduate or professional degrees, ranking second among the states.

Outstanding resources include 12 institutions of the University System of Maryland (USM), as well as multiple private Universities including the Johns Hopkins University, with particular strengths in information sciences and biotechnology. Educational links to business include the USM Institute for Bioscience and Biotechnology Research, the Maryland Technology Enterprise Institute at College Park, and the Johns Hopkins University Applied Physics Laboratory. In addition, 21 of the state's higher education institutions, the sixth most among the states, are designated by the National Security Agency and Department of Homeland Security as National Centers of Academic Excellence in Cyber Defense, Cyber Operations, and/or Cyber Research.

Maryland's sixteen community colleges operate a network of 30 campuses and numerous learning centers throughout the state. Continuing education and workforce training are offered through each college.

As a base for its outstanding higher education system, Maryland's K-12 school systems offer quality primary and secondary education.

- Maryland is nationally recognized, ranking fourth for best early education systems and for high schools that place in the top 25%
- Maryland high school seniors rank seventh in the nation for success on Advanced Placement (AP) exams and fifth for participation.
- In addition to excellent public schools, a variety of private and parochial schools are available in most communities.

Higher Education

An important source of ideas, skills, and continuing educational opportunities, Maryland is one of the country's key research centers. The state continues to enhance the relationship between universities and industry. Maryland's higher education institutions contribute to an advanced and technically proficient human resources environment where leading firms find a high concentration of doctoral scientists. Compared to other U.S. states, Maryland holds rankings in the following fields for employed doctoral scientists as a percentage of the workforce:

- Fourth in biological sciences and health
- Fifth physical sciences
- Sixth in computer and information science, mathematics and statistics, and social sciences
- Eighth in sociology
- Ninth in psychology

More than 335,000 students currently attend accredited colleges and universities in the state, while thousands more attend schools in Maryland operated by out-of-state institutions. In addition to traditional campuses, nine regional higher education centers throughout the state offer degrees locally through partnerships between Maryland colleges and universities, as well as some out-of-state institutions. The University of Maryland Global Campus, part of the University System of Maryland, is one of the largest

online public university in the nation, serving over 60,000 students offering 35 Bachelors programs and 68 Masters and Graduate certifications and Doctoral degrees. Post-graduate education is a special strength of the Baltimore-Washington region, where opportunities are available for advanced work in nearly all disciplines. More information is available at mhec.maryland.gov.

A steady interchange of ideas and information exists between the universities and nearby centers of scientific learning and activity.

Educational links to business include:

- The USM Institute for Bioscience and Biotechnology Research
- The Maryland Technology Enterprise Institute at College Park
- The Fraunhofer Center for Experimental Software Engineering at the University of Maryland
- The UMBC Center for Cybersecurity
- The Johns Hopkins University Applied Physics Laboratory
- The Johns Hopkins University Information Security Institute
- University of Maryland School of Medicine Center for Vaccine Development

Degrees Awarded by Maryland Colleges and Universities – 2023-2024

Major Program	Bachelor's	Master's	Doctorates
Agriculture/Animal/Plant/Veterinary Science and Related Fields	151	16	50
Architecture and Related Services	162	59	2
Biological and Biomedical Sciences	2,202	1,608	255
Business, Mgmt, Marketing, and Related	5,414	4,545	64
Computer and Information Sciences	6,618	2,807	165
Engineering	1,521	1,745	287
Health	2,851	2,027	1,220
Mathematics and Statistics	390	472	49
Physical Sciences	373	267	130
All Others	13,787	8,235	1,062
Total	33,469	21,781	3,284

Source: Maryland Higher Education Commission.

The University System of Maryland

The University System of Maryland (USM) is the one of the nation's largest university systems. With an enrollment of over 165,000 students worldwide, USM comprises 12 institutions, three regional higher education centers, and a number of major research institutes.

Research institutes aligned with one or more institutions within USM include:

- The Institute of Marine and Environmental Technology (IMET)
- The Institute for Bioscience and Biotechnology Research (IBBR)
- Medical Biotechnology Center
- The Institute of Fluorescence (IOF)
- Quantum Technology Center

The University of Maryland, College Park (UMCP), home of the Glenn L. Martin Wind Tunnel and the nationally ranked Clark School of Engineering, is the USM's flagship campus. It serves as a resource for linking the R&D expertise of the entire University System to both new and established Maryland businesses. The Fraunhofer Center for Experimental Software Engineering at UMCP is a unique partnership with Fraunhofer Gesellschaft, Europe's largest and most renowned organization for applied technological research and development, and provides businesses ways to better manage, predict, improve, and evaluate their software efforts.

The University of Maryland is a hub for quantum research and development. Over 200 quantum scientists and engineers are working to develop applications using quantum physics to usher in a new era of technology. The University produces over 200 quantum publications annually, is the number two public institution in quantum physics nationally and has a faculty member with a Nobel laureate in quantum physics.

The University is also home to

- Mid-Atlantic Quantum Alliance (MQA)
- Quantum Technology Center (QTC)
- Joint Quantum Institute (JQI) – a research partnership between UMD and NIST and supported by the Laboratory for Physical Sciences
- Joint Center for Quantum Information and Computer Science (QCI) – a collaboration with NIST
- Condensed Matter Theory Center (CMTC)
- Quantum Materials Center (QMC)
- LPS Qubit Collaboratory (LQC) – a national Quantum Information Science research center hosted at the National Security Agency's Laboratory for Physical Sciences
- National Quantum Laboratory (Q-Lab) – a partnership between IonQ, Inc. and UMD
- NSF Quantum Leap Challenge Institute for Robust Quantum Simulation – brings together computer scientists, engineers and physicists from five academic institutions and the federal government
- Maryland Quantum-Thermodynamics Hub

The University of Maryland, Baltimore County (UMBC) is home to a research park and three incubators, as well as the Center for Information Security and Assurance. UMBC is ranked as the nation's 14th most innovative university by *U.S. News and World Report*, and is ranked 15th best for the quality of its undergraduate teaching. Recently, UMBC has created the Quantum Information Group with research focused on Quantum computing, Quantum entanglement, and Ultralow-power nonlinear optics.

USM's eight business schools are supplemented by a complete range of additional programs and services for businesses at all of its institutions. Services include technology transfer, business incubators, and small-business development.

The Johns Hopkins University

The Johns Hopkins University was America's first graduate school and continues to be an international leader in medicine, basic sciences, and international affairs. A recent survey by *U.S. News* placed Johns Hopkins 6th overall among top national universities. Additionally, 5th in Biocomputing/Bioinformatics/Biotechnology, and 10th in most innovative schools. Major research components include:

- The Johns Hopkins Applied Physics Lab (APL), noted for its contributions to the applied sciences in a variety of fields, with its official mission to enhance national security and other human needs through the application of science and technology.
- The Johns Hopkins Information Security Institute (ISI), which is the University's focal point for research and education in information security, assurance, and privacy, with input from academia, industry, and government.
- The Space Telescope Science Institute (STScI), which works with NASA to manage the Hubble Space Telescope and develop other space observational instruments.

Johns Hopkins ranks first among U.S. universities in research and development expenditures, totaling \$3.8 billion in FY 2023, with a first-place ranking also in federally funded research (\$3.3 billion). The University's graduate programs in biological sciences, medicine, and engineering are among the best in the U.S. In addition to its public health program, Hopkins' biomedical engineering program, a joint venture of its engineering and medical schools, were ranked top in the nation.

Maryland's Community and Two-Year Colleges and Career Preparation

Maryland nourishes the development of students and workers through community colleges, two-year private colleges, career schools, apprenticeship programs, and continuing education opportunities. These include:

- 16 community colleges with diverse post-secondary options in all regions of the state.
- More than 130 private career schools.
- Programs that develop trade skills through apprenticeships with sponsoring employers.
- Workforce training and continuing education through courses geared to working adults.

Maryland Colleges and Universities

College / University	Main Campus Location (County)	2023 Total Enrollment
<i>University System of Maryland</i>		
Bowie State University	Prince George's	6,408
Coppin State University	Baltimore City	2,101
Frostburg State University	Allegany	4,075
Salisbury University	Wicomico	7,029
Towson University	Baltimore	19,527
University of Baltimore	Baltimore City	3,101
University of Maryland, Baltimore	Baltimore City	6,667
University of Maryland, Baltimore County	Baltimore	14,148
University of Maryland Center for Environmental Science	Dorchester	NA ¹
University of Maryland, College Park	Prince George's	40,813
University of Maryland Eastern Shore	Somerset	2,840
University of Maryland Global Campus	Prince George's	60,084
<i>Other 4-Year Public Institutions</i>		
Morgan State University	Baltimore City	9,808
St. Mary's College of Maryland	St. Mary's	1,610
Uniformed Services University of the Health Sciences	Montgomery	NA
United States Naval Academy	Anne Arundel	4,465 ²
<i>4-Year Independent Institutions</i>		
Bais HaMedrash and Mesivta of Baltimore	Baltimore	91
Capitol Technology University	Prince George's	925
Collegium Sanctorum Angelorum	Washington	8
Goucher College	Baltimore	1,501
Hood College	Frederick	2,078
The Johns Hopkins University	Baltimore City	30,363
Lincoln Technical Institute	Howard	828
Loyola University Maryland	Baltimore City	5,107
Maryland Institute, College of Art	Baltimore City	1,862
Maryland University of Integrative Health	Howard	646
McDaniel College	Carroll	2,908
Mount Saint Mary's University	Frederick	2,499

College / University	Main Campus Location (County)	2023 Total Enrollment
Ner Israel Rabbinical College	Baltimore	452
Notre Dame of Maryland University	Baltimore City	1,836
SANS Technology Institute	Montgomery	478
St. John's College	Anne Arundel	472
St. Mary's Seminary and University	Baltimore City	172
Stevenson University	Baltimore	3,507
Washington Adventist University	Montgomery	695
Washington College	Kent	916
Women's Institute of Torah Seminary	Baltimore City	142
Yeshiva College of the Nation's Capital	Montgomery	56
2-Year Public Colleges		
Allegany College of Maryland	Allegany	2,665
Anne Arundel Community College	Anne Arundel	11,158
Baltimore City Community College	Baltimore City	3,939
Carroll Community College	Carroll	3,160
Cecil College	Cecil	1,845
Chesapeake College	Queen Anne's	1,980
College of Southern Maryland	Charles	4,510
Community College of Baltimore County	Baltimore	15,805
Frederick Community College	Frederick	6,796
Garrett College	Garrett	700
Hagerstown Community College	Washington	5,434
Harford Community College	Harford	5,108
Howard Community College	Howard	8,540
Montgomery College	Montgomery	17,780
Prince George's Community College	Prince George's	10,513
Wor-Wic Community College	Wicomico	2,636

¹ Offers post-baccalaureate certificates, and awards graduate degrees jointly with the University of Maryland College Park.

² Per USNews 2023 Best Colleges report.

Source: Maryland Higher Education Commission.

K – 12 Education

Maryland's public school systems offer quality primary and secondary education. Over 890,000 students are enrolled in 1,421 public schools throughout the state, with nearly 61,000 seniors in 2023.

In fact, Maryland's public schools are currently at the forefront nationwide in an ambitious school reform program. Other marks of educational quality:

- According to Quality Counts, Education Week's annual assessment of key indicators of student success, Maryland's K-12 public school system ranks fourth overall, based on three graded categories that include chance for success, school finance, and K-12 achievement.
- According to *U.S. News and World Report*, Maryland places fourth based on the percentage of public high schools ranked in the top 25 percent nationally, with 32.2 percent. Top-ranked schools are those whose students demonstrate outstanding outcomes above expectations in math and reading, pass and participate in college level exams, and graduate in high proportions.
- Maryland ranks seventh nationally in the percentage of high school seniors who scored at the mastery level on Advanced Placement (AP) exams, with 21.7 percent earning a score of 3 or higher in 2023. Maryland also ranks fifth among the states in the percentage of graduates taking AP tests during high school at 42 percent.
- In 2025, WalletHub ranked Maryland as the 3rd most educated state in the nation. It also ranked Maryland 3rd among states with the best school systems.

All school districts in the state offer: kindergarten, special education, adult continuing education, career-technical instruction, vocational rehabilitation, disadvantaged children's programs, gifted and talented children's programs, library and media services, online databases, and public access catalogs.

Private and parochial schools are available in most communities. Nearly 139,000 students attend the state's 1,249 private and parochial schools. More detailed information on these options is found online at marylandpublicschools.org/about/pages/dee/npsa/index.aspx. Private international schools accommodate students in several foreign languages.