



SHENANDOAH
UNIVERSITY

College of Arts & Sciences

COLLEGE OF ARTS & SCIENCES



2024 Undergraduate Programs

ESSENTIAL ^{★ ★} SKILLS FOR EVERY CAREER

As you study in the Arts & Sciences,

you'll develop not only subject-level knowledge, but also the versatile skill sets needed for today's continuously evolving workplace. You'll follow your **interests and curiosity**, propelling yourself into new areas of understanding and success. You'll learn how to **listen thoroughly** and **learn quickly**, consider issues from **multiple perspectives**, solve problems big and small, grow as a public speaker and writer and work well on

your own and as part of a team. You will be prepared for anything! "The humanities education really prepares you for that in a way other disciplines don't. The value of critical thinking and communicating is something you use day in and day out," said Reddit co-founder Alexis Ohanian, in the Observer, November 2018.



A DEGREE IN ARTS & SCIENCES

MAJORS

- Biochemistry
- Biology*
- Chemistry*
- Computer Science
- Conservation Science and Management
- Criminology & Criminal Justice
- Cybersecurity
- Data Science & Applied Mathematics
- Engineering
 - ◇ Computer Engineering
 - ◇ Engineering Physics
 - ◇ Simulation Engineering
 - ◇ Software Engineering
- English*
- Environmental Studies
- Environmental & Sustainability Studies
- Exercise Science
- Film Production
- Global Studies
- History*
- Information Technology
- Interdisciplinary Studies
- Kinesiology Recreation
- Mathematics*
- Media & Communication
- Political Science
- Psychology
- Public Health
- Religion
- Sociology
- Spanish
- University Studies
- Virtual Reality Design

*indicates programs eligible for teacher licensure

MINORS

- African American & Global Black Studies
- Artificial Intelligence
- Biology
- Chemistry
- Coaching
- Computer Science
- Criminology
- Cybersecurity
- Data Science
- English
- Environmental Studies
- Environmental & Sustainability Studies
- Film Production
- French
- Game Design & Development
- Gender & Women's Studies

- Geography
- Global Studies
- Health Communication
- History
- Information Technology
- Law & Legal Systems
- Mathematics
- Outdoor Leadership & Education
- Physics
- Physiology
- Political Science
- Professional & Popular Writing
- Psychology
- Public Health
- Public Relations
- Religion
- Sociology
- Spanish
- Virtual Reality Design

TEACHER EDUCATION

- **Elementary Education (K-6)**
- **Elementary Education, Special Education**
- **Health & Physical Education (K-12)**
- **Middle School Education (6-8)***
 - ◇ English
 - ◇ History/Social Sciences
 - ◇ Mathematics
 - ◇ Sciences
- **Middle School Education, Special Education**
- **Secondary Education (6-12)***
 - ◇ Biology
 - ◇ Chemistry
 - ◇ English
 - ◇ History
 - ◇ Health & Physical Education
 - ◇ Math
 - ◇ Special Education

CERTIFICATE PROGRAMS

- Civil War Era Studies
- Coaching
- Faith Seeking Justice: Christian Leadership
- Health Humanities
- History & Documentary Film
- History & Immersive Technology
- IT/Cybersecurity Technician
- Pre-Health Professional
- Public History
- Religious Leadership & Diversity
- Virtual Reality Design

EXAMINE: SOCIAL SCIENCES

The social sciences examine societal norms and cultures. You'll study human issues through local and global lenses, realizing that relationships within communities or populations start locally but can affect regions and communities around the globe.



MAJORS

- Criminology & Criminal Justice
- Global Studies
- Interdisciplinary Studies
- Kinesiology Recreation
- Political Science
- Psychology
- Public Health
- Sociology

MINORS

- Coaching
- Criminology
- Gender & Women's Studies
- Global Studies
- Law & Legal Systems
- Outdoor Leadership & Education
- Political Science
- Psychology
- Public Health
- Sociology

COLLABORATION

Collaborating across disciplines creates skills that students need for professional success. Recently, three Arts & Sciences departments received a grant to pay students to intern at the Winchester Senior Center.

Public health students led programs to improve nutrition and healthy eating while **exercise science** students worked to improve strength, balance and flexibility; and **psychology** students led programs to decrease loneliness.

CERTIFICATES

- Coaching

“What I liked most about studying public health was learning the skills and knowledge to prevent disease and to help a collective group of people. I added on my public health major because I wanted to pursue a career in epidemiology. Studying public health during a pandemic gave me a lot of perspective and valuable experiences. I had the privilege of being able to see how our vaccination center worked and to volunteer there at the check-in desk.”

– Abigail Pilcher '21

B.S. Biology & B.S. Public Health
Psychology minor | Graduate studies in Public
Health at Yale University



“In this past year, I have had the opportunity to participate in ride-alongs with several different police departments around the state, one of which was the Winchester Police Department. The experiences have been eye opening, and it has been inspiring to watch the officers do what they are trained to do best. In doing the ride-alongs, they have prepared me for what’s to come in the future of my professional career.”

– Vance Martin '23

Criminology & Criminal Justice major
Entrepreneurship minor



EMPOWER: TEACHER EDUCATION

Great teachers change lives. They guide curiosity, nurture creativity and spark inventive thinking. They, too, are curious, creative and inventive in how they approach subject-matter instruction and the unique worlds presented inside their classrooms.

As a Shenandoah education student,

you'll gain teaching and assessment skills that will allow you to be an effective instructor who works within a positive learning environment to help every student succeed.

TEACHER EDUCATION

- Elementary Education (K-6)
- Elementary Education, Special Education (K-6)
- Health & Physical Education K-12
- Middle School Education (6-8)
 - ◇ English
 - ◇ History/Social Sciences
 - ◇ Mathematics
 - ◇ Sciences
- Middle School Education, Special Education (6-8)
- Secondary (High School) Education (6-12)
 - ◇ Biology
 - ◇ Chemistry
 - ◇ English
 - ◇ History
 - ◇ Health & Physical Education
 - ◇ Math
- Secondary (High School) Education, Special Education (6-12)



“The education program at SU helped me acquire hands-on experience and the proper tools necessary to best meet the needs of my students in all school settings. The education professors are passionate and are ready to help whenever possible, which aided me throughout my academic career. They helped me strengthen my skill set and confidence, which was a plus during my job search. I felt ready in all of my interviews, and landed the position of my dreams in my hometown!”

– Katherine Hernandez Ramos '23
B.Ed. Elementary Education (PK-6)



For more than 30 years, acclaimed children’s authors and illustrators have shared stories about their work at ***Shenandoah’s annual Children’s Literature Conference***. Presenters have included two-time Newbery Medal-winner Lois Lowry, the first National Ambassador for Young People’s Literature Jon Scieszka, Newbery Medal winners Kwame Alexander, Avi and Patricia MacLachlan, and Caldecott Medal winners Kevin Henkes, Peter Brown and David Wiesner.



CONNECT: HUMANITIES

The humanities are devoted to understanding how people try to make sense of the world intellectually, morally, spiritually and artistically. You'll grow as a reflective and critical thinker as you consider big ideas, the ways people have documented those ideas and their relation to the human experience and how people develop and perpetuate beliefs and cultural practices.

MAJORS


- English*
- Film Production
- Global Studies
- History*
- Interdisciplinary Studies
- Media & Communication
- Political Science
- Religion
- Spanish

MINORS

- African American & Black Global Studies
- English
- Film Production
- French

CERTIFICATES

- Civil War Era Studies
- Faith Seeking Justice: Christian Leadership
- Health Humanities
- History & Documentary Film
- History & Immersive Technology
- Pre-health Professional
- Public History
- Religious Leadership & Diversity
- Gender & Women's Studies
- Global Studies
- Health Communication
- History
- Law & Legal Systems
- Professional & Popular Writing
- Public Relations
- Religion
- Spanish



“Shenandoah’s film production major puts students at work with professionals in the industry, while also giving them the artistic freedom to take on their own ventures. My experience at Shenandoah felt like a bullet train, it went by so fast! If you know where to look, there’s gonna be a lot coming to you.”

**– Andrés “Andy” Espinoza ’23
B.A. Film Studies
Public Relations minor**



“Dr. Eric Leonard once told me, ‘In Global Studies, the whole world is your lab.’ My favorite part about being in the Global Studies program is that there is no limit to what I can learn, study, and strive to understand. This world is so big, and all of it is worth paying attention to, every nation, tongue, culture, village, and people. I look forward to pursuing that in my humanitarian work.”

**– Elora Smith ’23
B.S. Biology & B.S. Global Studies
Religion & Political Science minors**



EXPLORE: NATURAL SCIENCES

The natural sciences are devoted to studying the natural world through applied science and scientific methodology to examine reality, steward our planet's natural resources or improve the human condition. Students prepare for careers in product development, research, education, biotechnology and the health professions.

MAJORS

- Biochemistry
- Biology†
- Chemistry†
- Conservation Science and Management
- Environmental and Sustainability Studies
- Environmental Studies
- Exercise Science
- Interdisciplinary Studies

MINORS

- Biology
- Chemistry
- Environmental and Sustainability Studies
- Environmental Studies
- Geography
- Physics
- Physiology

CERTIFICATES

- Coaching
- Health Communication
- Pre-Health Professional

†indicates
programs eligible
for teacher
licensure

“The Summer Research program was valuable to me because it allowed me to work in a lab setting outside of classes and work one-on-one with Dr. Ca to try and accomplish a goal. The skills I developed from research, will assist me in graduate school and potentially in my career in research.”

– Kyle Albert '20 | B.S. Math - Physics minor | B.S. Chemistry - Biology minor

“The chemistry program has given me the critical thinking skills that are needed to be successful in graduate school and as a pharmacist. It has allowed me to gain a necessary understanding of information that will be further developed and challenged in pharmacy school.”

– Madison Meyers '24
Chemistry Major,
Biology Minor



PATHWAYS TO A GRADUATE HEALTH PROFESSION

We offer multiple academic pathways to our graduate health professions programs.

- Doctor of Occupational Therapy
- Doctor of Pharmacy
- Doctor of Physical Therapy
- Master of Science in Athletic Training
- Master of Science in Occupational Therapy
- Master of Science in Physician Assistant Studies
- Master of Public Health
- Master of Science in Speech-Language Pathology

Our pre-health pathways guide students to graduate programs across the country. su.edu/academics/pre-health-program



A group of four students are gathered around a table, working on a project. One student is wearing a NASA t-shirt. They are using various materials, including what looks like LEGO bricks and some printed images. The background shows a typical classroom or workshop setting with other people and equipment.

LEAD: APPLIED TECHNOLOGY

Learn to become a leader in one of the world's largest and fastest-growing industries in our Division of Applied Technology. Government, businesses, health care and nonprofits all require applied technology skills for everyday operations. At Shenandoah, you'll take a humanistic approach to using technology, learning how to keep the needs of the human beings who use and benefit from the technology foremost in your mind. In these programs, you can choose to learn how to create cutting-edge immersive experiences, apply cybersecurity skills to keep systems safe, analyze data to make intelligent decisions and use a variety of technologies to solve real-world problems.

MAJORS

- Computer Science
- Cybersecurity
- Data Science & Applied Mathematics
- Engineering
 - ◊ Computer Engineering
 - ◊ Engineering Physics
 - ◊ Simulation Engineering
 - ◊ Software Engineering
- Information Technology
- Mathematics
- Virtual Reality Design

MINORS

- Artificial Intelligence
- Computer Science
- Cybersecurity
- Data Science
- Game Design and Development
- Information Technology
- Mathematics
- Virtual Reality Design

CERTIFICATES

- IT/Cybersecurity Technician
- Virtual Reality Design

su.edu/applied-technology

“I love math and solving problems in mathematical equations. I also like to collect and work with data. In an environmental science end-of-year Honors project, I was able to incorporate both data analysis as well as computer code into the cause of ocean temperature change. If you like math or solving problems or mysteries, you would like this major.”

– Mark Isabelle '24

**Data Science and Applied Mathematics
major | Computer Science minor**



“Engage in cutting-edge, creative and competitive learning and research in our technology programs, where hands-on learning meets state-of-the-art resources.”

**–Mohammad Obeid,
Ph.D., Associate Professor
& Director of Augmented
Reality/Virtual Reality
(BS) and Co-Director,
Shenandoah Center for
Immersive Learning (SCiL)**

ACCOMPLISHED, CARING FACULTY



Imagine participating in interesting conversations led by engaging professors who've already done what you dream of doing. You'll be in small classes — the average class size is approximately 12 students — with professors who know your name, care about your success and provide invaluable advice as you pursue your academic and career goals.



Our faculty members are virtual reality innovators, seasoned educators, communicators, researchers, filmmakers and experts across the breadth of the arts and sciences, respected for both their expertise and mentoring ability. Their wealth of experience informs their teaching and provides you, as a student, with the benefits of multiple perspectives.

OUR PROFESSORS ENGAGE YOU IN MANY WAYS:

- Providing experiential learning opportunities
- Mentoring
- Getting to know you on a personal level
- Advising research projects
- Connecting current students with alumni in the field
- Advising clubs and organizations
- Networking with professional groups and affiliations
- Attending conferences
- Eating meals together
- Co-authoring publications



THE HONORS PROGRAM

Our Honors Program provides students who excel academically and creatively with opportunities to grow as scholars through rigorous and engaging learning experiences within a cohesive multidisciplinary community. All honors courses complement the SU general education program and the university's dedication to advancement in knowledge, critical thinking and communication. Each course emphasizes the multidisciplinary nature of any career or scholarly activity and provides advanced instruction in communication, reflection and ethical reasoning. Additionally three honors seminars focus on how to make a difference within global and local communities.



su.edu/honors



CONDUCT UNDERGRADUATE RESEARCH

Hundreds of students have presented original research at the **Shenandoah University Research Expo (SURE)**. SURE gives students the opportunity to network, practice presentations for regional and national conferences and vie for prize money. Research and works in progress are presented in a wide variety of forms, including digital media, fine art, audio and video and posters. College of Arts & Sciences students have presented research on mathematics, bluegill sunfish parasites, narcissism, properties of black gum tree bark, fungus affecting American, Chinese and hybrid chestnut trees and much more.



STUDY INTERNATIONALLY

You can earn credit while **traveling the world** to study fascinating topics as part of our **Global Experiential Learning (GEL)** program. Study abroad lasts for a few weeks, a semester or a whole year.



GET INVOLVED

At The Math Enrichment Center and Writing Center

One-on-one mentoring is available to students through the **Math Enrichment Center and Writing Center** so that students graduate with strong communication and problem-solving skills.

In Outdoor Laboratories

The **Shenandoah River Campus at Cool Spring Battlefield** is 195 acres of outdoor classroom and recreational space open to the university community and the general public. The site, which was part of the July 18, 1864, Battle of Cool Spring during the Civil War, serves as a living laboratory for natural sciences, environmental studies and history students.



By Leading On Campus

Acquire new skills with an on-campus job. Develop as a leader within the **Student Government Association**. Express yourself through writing, art, photography and more through the creative writing magazine, **Avalon**. Raise money for cancer research at the annual campus **Relay For Life**. Participate in one or more of the university's 90+ clubs and organizations, such as **Estudiantes Unidos**, **Active Minds** or the **Student Virginia Education Association**.



With Your Classmates

At the **Mosaic Center for Diversity**, students connect within an inclusive space open to all cultures and people. The Mosaic Center embraces all races, sexes, gender identities, gender expressions, religions, ethnic backgrounds, socio-economic classes, sexual orientations, abilities, ages, personal appearances, political affiliations, military affiliations and immigration statuses. Additionally, the **Veteran, Military & Family Resource Center** and the **[Not Just] Women's Center** provide specific educational and support resources on campus.



And As Champion Debaters

The **Shenandoah University Debate Team** is a powerhouse. Our team, which is a past winner of NEDA's crossfire championship, is open to students from all academic programs, with team members majoring in everything from biology and business administration to psychology and nursing.

- Media and communication graduate Rebecca Sims '22, competed in the rapid-fire category, placing second in the nation at the National Educational Debate Association National Debate Tournament.
- Department Chair and Associate Professor of Media and Communication Matt Corr, Ph.D., who coaches the team, won the top paper award for "Debate's Digital Crossroads: Exploring the Possibilities of Virtual Reality for Competitive Debate," in the Argumentation Division of the National Communication Association Conference.

"Studying public health during the pandemic definitely made me feel experienced in the field! I feel like I can apply my skills from classes like Intro to Public Health, Global Health and Epidemiology to better understand the complexities of a pandemic. Public health has become such a popular topic for discussion and study now that more people know what it is."

– Isabella Morello '21 | BS Public Health
Health Communications and Gender & Women's Studies minors

SHENANDOAH'S COLLEGE OF ARTS & SCIENCES

We Put Your Education To Work!

Many students in the arts & sciences pursue double majors and/or minors to create the educational experience that best meets their individual interests and career goals. And, they still graduate in four years!



Contact the Office of Admissions



540-665-4581



540-546-6029



admit@su.edu



su.edu/admissions

1460 University Drive • Winchester, VA 22601

Shenandoah University is an
Equal Opportunity Educational
Institution/Employer. 07/2023



SHENANDOAH
U N I V E R S I T Y

1460 University Drive
Winchester, VA 22601