FORGING MISSISSIPPI’S FUTURE
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COMMUNITY OUTREACH

PROGRAMS

Any qualified student currently enrolled at Mississippi University for Women can apply for Nancy Yates Fellowships that provide opportunities for high-impact experiences. Named for alumna Nancy Yates, the selective fellowship program provides funding for exciting opportunities in community engagement, research and internships. Through this valuable hands-on experience, the Yates Fellows hone leadership skills that will serve them well long after graduation.

With many areas throughout Mississippi viewed as food deserts, more than a thousand motorists from various communities line up to receive fresh fruits and vegetables during Jackson State University's annual fall and spring Crop Drop. The drive-up event is sponsored by the university's Center for Community Engagement. With surplus food distributed by area farmers, JSU has partnered with organizations such as the Society of St. Andrew, Continental Tires and the People's Advocacy Institute. In addition to sweet potatoes and watermelons, the center has recently distributed non-perishable food, bottled water, hand sanitizers and many other items with help from dozens of mostly student volunteers. Faculty, staff, city and state leaders, community members and organizations also assist.

The Bachelor of Social Work at Delta State University provides students with professional knowledge, values and skills for generalist social work practice by creating an environment that offers value-oriented learning that emphasizes self-assessment, service to community, self-determination, social justice and respect for diversity. Delta State's BSW curriculum is designed to educate and develop a professional social worker who, consistent with the values and ethics of the social work profession, can provide direct services to individuals, advance human rights and advocate for social and economic justice.

The Mississippi State University (MSU) Center for Community-Engaged Learning works to integrate community engagement with university teaching and learning strategies. The center works with faculty to facilitate partnerships that benefit community partners and fulfill academic course goals. The center's vision is to advance and support all faculty, staff, students and extension agents in making connections between and finding value in the creation of engaged scholarship that connects research, service and learning in the community, state, region, nation and beyond.

RESEARCH

The University of Mississippi Medical Center (UMMC) and its partner institutions, Tougaloo College, Jackson State University and the Mississippi Department of Health, together operate the Jackson Heart Study, the nation's largest long-term study of cardiovascular and related diseases in African Americans.

The Fred Carl Jr. Small Town Center, founded in 1979 and housed in MSU’s College of Architecture, Art and Design, serves as an advocate of meaningful planning and design services to small communities throughout Mississippi.

Comprised of architects, planners and students, the research that is conducted provides solutions to problems faced by communities across the nation. The Small Town Center’s outreach efforts run a wide gamut from community engagement and visioning, grant writing, project feasibility studies, master planning, downtown revitalizations, small town research, design education seminars and workshops, to bike and pedestrian infrastructure planning and development.
**POINTS OF PRIDE**

**Delta State University**'s Center for Community and Economic Development (CCED) was established in Aug. 1994 to address major development issues facing the region. Since 2010, The University of Southern Mississippi (USM) has held the prestigious Carnegie Community Engagement Classification for engaging community partners, building on community assets, and addressing a wide array of community challenges. During the pilot of the University of Mississippi's community partnership program M Partner, a variety of outreach efforts designed to improve life in communities in Mississippi reached an estimated 8,000 individuals in three M Partner communities of Charleston, Lexington and New Albany.

**STUDENT HIGHLIGHT - KAITLYN GEORGE**

Hometown: Ridgeland, Miss.  
Major: Nursing  
Classification: Sophomore

Why I chose Mississippi University for Women  
When I started looking at colleges my junior year of high school, I had a checklist. I wanted something small, affordable, close to home and that had a good program for my major. At MUW, I was initially attracted to the 13-to-1 student teacher ratio. I thrive on guidance, constructive criticism and the connections made with advisers. After scheduling and completing a tour of The W, I immediately fell in love with the campus. It had everything I wanted, and things I didn't realize I needed. The W has opened me up to so many opportunities and has pushed me way out of my comfort zone. I feel like, for the first time in my life, I can make a difference.

Why I chose nursing  
My goal in life is to open a private practice in Mississippi as a nurse practitioner. I want to focus myself on helping children who have mental disorders. I had an incredible opportunity over this past summer through the Ina E. Gordy Honors College to work with a nonprofit. During this internship, I worked with children 5 to 8 years old. Seeing an improvement in my children over the course of the summer is something I will never forget. I learned more about myself in that summer than I had in my entire life. Teaching and shaping the minds of youth is a feeling unmatched.

What I plan to do after graduation  
The W's nursing program is one of the best in the state, and I want to return to get my master's degree. The W has opened my eyes to so many possibilities, and I love this little school with my whole heart.
ENTREPRENEURSHIP

PROGRAMS

The Women’s Business Center (WBC) at Alcorn State University began in October 2020 and provides outreach services to the rural, underserved communities of Southwest Mississippi and portions of Northeast Louisiana. The Center directs its efforts, with the U.S. Small Business Administration’s (SBA) assistance, to address a broad spectrum of economic needs for 11 Mississippi counties — Adams, Amite, Claiborne, Franklin, Jefferson, Lawrence, Lincoln, Pike, Walthall, Warren and Wilkinson; and three Louisiana Parishes — Concordia, Madison and Tensas. The activities of the WBC at Alcorn are designed to improve the quality of life for the residents of these counties and parishes; to provide education, counseling and resources; to provide training opportunities related to traditional business and ecommerce; and to create peer network groups.

DELTA STATE UNIVERSITY

The Master of Business Administration (MBA) and Integrated MBA (iMBA) programs at Delta State University provide a broad understanding of business fundamentals required of business organizations and entrepreneurial ventures. The curriculum enables students to build upon the foundation of business concepts in the areas of financial reporting, analysis and markets; domestic and global economic environments in organizations; creation and distribution of goods and services; and human behavior in organizations.

JSU JACKSON STATE UNIVERSITY

The JSU Center for Innovation, Entrepreneurship and Economic Development (CIEED) leverages the best of JSU’s STEM, business and entrepreneurial capabilities, as well as collaborative potential in addressing some of society’s most pressing problems (via university industry partnerships). The CIEED takes advantage of expertise co-location and facilitates the intersection of widely disparate learning and idea generation; a place for constant learning, common vision, as well as creativity and innovation. The CIEED pairs entrepreneurs, designers and businesses with subject matter experts. The elements of research, education, and corporate partnership will be uniquely interwoven to drive creativity and innovation, while accelerating technology transfer.

entreprenuership and economic development. Primarily, the CIEED supports the innovative activities of JSU faculty, staff and students, and extends such capabilities to the Mississippi community and other industry partners.

RESEARCH

The Bachelor of Science (BS) in Culinary Arts program from the Culinary Arts Institute at The W is one of the few programs of its kind in the Southeast United States. The four-year program combines the top-ranked liberal arts education The W is renowned for with the latest culinary techniques taught by acclaimed chef-instructors.

MSU’s Center for Entrepreneurship and Outreach helps entrepreneurs launch new companies, grow existing businesses, build relationships and connections to seed funding, and master the skills needed to assess markets and operate a business. In 2019, the E-Center partnered with MSU’s School of Human Sciences to open the Idea Shop, a 2,000-square-foot facility in downtown Starkville that includes a publicly available makerspace and a retail product
accelerator. MSU was recognized as an inaugural Best Maker School in Higher Education by Make: magazine and Newsweek in 2021. The university’s Office of Technology Management works with researchers across campus to facilitate the transition of MSU-owned intellectual property to the marketplace, generating economic activity in the state and helping faculty gain equity in startups based on their research activity.

At the University of Mississippi, the Catalyzing Entrepreneurship and Economic Development (CEED) Initiative of the McLean Institute for Public Service and Community Engagement works with students and faculty to build partnerships with Mississippi communities to address social problems and identify actionable solutions. The CEED Initiative is open to students from any major on campus to compete for scholarships and graduate fellowships. CEED Innovation Scholars and Fellows research a social problem in Mississippi and provide solutions in partnership with a community organization. Since 2014, CEED has provided scholarships for over 70 undergraduate and graduate students and supported the research of 10 faculty members. Funded with support from the Robert M. Hearin Support Foundation, CEED partnerships increase entrepreneurship and promote economic development in rural Mississippi communities.

As a land-grant university, Mississippi State’s Mississippi Agricultural and Forestry Experiment Station and Extension Service provide cutting-edge research and community-based education to increase profitability for farmers and ranchers, food safety and efficiency for processors, a safe and nutritious food supply for families, and prosperity for communities across Mississippi.

Delta State’s Master of Business Administration (MBA) program was named among the nation’s best in the 2021 rankings of online MBA programs released by FORTUNE.

Why I chose Alcorn State University
I chose Alcorn State because I wanted to have a great experience and connect with people from various cultural and ethnic backgrounds.

Why I chose computer science
I came from a community where most people did not attend college. I wanted to show them that I could become someone whose love for computers and programming could achieve great things.

What I plan to do after graduation
I plan to attend graduate school to obtain either a master’s or PhD in computer science.
LEADERSHIP DEVELOPMENT

PROGRAMS

**Mississippi State University**

MSU’s Department of Educational Leadership is preparing leaders at all levels of education in Mississippi and beyond. The department offers programs in school administration, community college leadership, higher education leadership and teacher leadership. The department prepares highly effective professionals to become leaders, scholars, administrators and teachers in global educational environments. It provides rigorous and responsive educational programs that focus on research, teaching and service.

**Alcorn State University**

Inspired by Alcorn’s mission to “prepare well-rounded future leaders of high character,” the Hiram Rhodes Revels Institute for Ethical Leadership is dedicated to developing ethical leadership for every sphere of influence. Based on Alcorn’s first President Hiram Revels’ religious, political and educational leadership, the Institute provides reflection, research and recommendations for bringing spirituality, ethics and leadership together to address critical issues confronting rural and urban communities throughout our state and region. The Revels Institute benefits students, faculty and community partners by cultivating lifelong ethical learning and leadership, relevant interdisciplinary research and instruction, and institution-based social innovation.

**Jackson State University**

The Executive Ph.D. Program (EPhD) in Urban Higher Education at Jackson State University prepares students to assume senior leadership roles in post-secondary institutions and other organizations whose primary endeavors relate to or impact the operations of institutions of higher learning. The program engages participants in the analysis of different facets of operations and management of post-secondary institutions and in the development of solutions to potential or existing challenges facing urban and metropolitan institutions.

Students are trained to study higher education institutions from a transdisciplinary perspective and to appreciate the role and impact of these institutions as engines of social and economic change in urban and metropolitan venues.

**The W**

The W offers opportunities for all students to hone their natural leadership qualities. The university prides itself on developing strong leaders, ready for the career of their choosing. The W Leadership Program is a rich and challenging leadership program. The program teaches students the commitment, knowledge and values that will enable them to blaze new trails in their chosen paths.

**The University of Southern Mississippi**

The University of Southern Mississippi’s School of Leadership, housed within the College of Business and Economic Development and based at the USM Gulf Park campus in Long Beach, focuses on the fields of business and professional studies. Undergraduate and graduate programs in the fields of accounting, business administration, management, marketing, applied technology, industrial engineering technology, logistics, trade and transportation, and human capital development are all housed within USM’s School of Leadership.

**Delta State University**

Delta State University’s Division of Teacher Education, Leadership and Research (TELR) prepares leaders for educational administration and supervision in public or independent school settings. Specifically, the master’s and education specialist in educational administration and supervision programs produce graduates who are instructional leaders and change agents who act with integrity, focus on continuous improvement, and engage the larger community.
RESEARCH

The University of Mississippi’s Summer Undergraduate Research Group Grants program develops undergraduate students as future scholars through paid, mentored, summer research projects. Over 8-10 weeks, each student receives training and guidance from UM faculty, interacts with a student cohort and conducts an investigative or creative project. Projects often lead to student (co)authored scholarly products, such as academic conference presentations or manuscript submissions to peer reviewed journals. For their part, the faculty develop valuable experience in running a summer research training program whose primary purpose is to develop students as future researchers—experience these faculty can parlay into externally funded grants to fund future student cohorts. Over 50 UM undergraduate students have completed summer research experiences since the program’s inception in 2018.

POINTS OF PRIDE

Our College of Agriculture degree programs prepare students to become leaders in Mississippi’s number-one industry—agriculture. In particular, our Poultry Science graduates are in high demand; every graduate has at least one job offer upon graduation, many more than one.

With seven schools – Medicine, Nursing, Dentistry, Health Related Professions, Graduate Studies, Population Health and Pharmacy – UMMC has more than 3,000 students enrolled.

STUDENT HIGHLIGHT - JAYLIN R. SMITH

Hometown: Greenwood, Miss.
Major: Mass Communications (Concentration: Broadcasting and Speech)
Classification: Senior

Why I chose Mississippi Valley State University
I chose Mississippi Valley State University because I wanted a family experience out of my four-year experience. I wanted to attend an institution that treated me like I was more than a student ID number. I wanted to attend a place where I was loved, uplifted, challenged and encouraged. I have received that and so much more at Mississippi Valley State University.

Why I chose mass communications and speech communications
I chose mass communications and speech communications because I have always found power in words and messages.

Having the opportunity to matriculate in a program that cultivates me to be a better speaker, listener and scholar has made my experience unforgettable.

What I plan to do after graduation
After college, I plan on attending a graduate school in Mississippi to continue experiencing the Southern culture that has raised me. I love Mississippi despite its past. I believe that keeping talented, passionate scholars in Mississippi is the attitude of advocacy needed for constant growth in our ever-evolving society.
Delta State University is the only state university in Mississippi that offers a Bachelor of Science in environmental science. Environmental science is an interdisciplinary and integrated science that embraces biological, chemical and physical aspects of the environment and their effect on organisms. Recent graduates work for assorted federal and state government agencies and private industries, including Mississippi Department of Energy Quality, the U.S. Department of Agriculture, the U.S. Geological Survey, Center of Toxicology and Environmental Health and more.

The undergraduate major in forestry at MSU is a science-based program leading to a Bachelor of Science degree. The forestry major provides a hands-on, experiential learning environment, equipping students with the skills and knowledge to manage renewable natural resources. Graduates are qualified to become a Registered Forester after successfully completing the exam of the Board of Registration for Foresters in Mississippi. Graduates are also qualified to become Society of American Forester Certified Foresters by successfully completing an exam. This major is accredited by the Society of American Foresters, and MSU is the only university in Mississippi offering this four-year degree.

Mississippi Valley State (MVSU) is also impacting STEM education by hosting an annual Women in Science and Technology (WIST) Conference each spring. The WIST organization is a student-led organization comprised of undergraduate female students majoring in STEM disciplines, designed to promote women in science and technology. These students are committed and devoted to making a difference in the scientific community. The goal of the annual conference is to show middle and high school females that science, technology, engineering and mathematics (STEM) careers are exciting, attainable and rewarding and increase the awareness of STEM disciplines and MVSU.

The state’s first and only Transcatheter Valve Center is both saving lives and restoring quality of life for University of Mississippi Medical Center patients whose aortic valve has narrowed, restricting blood flow and putting them at risk of heart failure or sudden death. UMMC recently earned Center accreditation from the American College of Cardiology. The distinction speaks volumes for the Medical Center’s transcatheter aortic valve replacement (TAVR) program. The Medical Center performed its first TAVR in 2014 and its 100th in 2018. The procedure helps patients of all ages, but gives those over 70 the added benefit of it being minimally invasive.

Jackson State University received a Department of Homeland Security Scientific Leadership Award totaling $470,000. Funds are being used for a collaborative interdisciplinary effort to integrate Emergency Management technology and meteorology in the College of Science, Engineering and Technology (CSET). The award will help form a partnership with Copiah-Lincoln Community College (Co-Lin), which is expected to serve as a pipeline for student recruitment from two-year to four-year degrees in Homeland Security-related fields.

The Air Force Research Lab (AFRL) awarded a $6.3 million contract to USM and Florida State University to study multifunctional composites to meet the aerospace application needs of the U.S. Air Force and Department of Defense. Researchers from the USM School of Polymer Science and Engineering will partner with the High-Performance Materials Institute associated with the FAMU-FSU College of Engineering (the joint engineering educational and research institution for Florida A&M and Florida State universities), to study, design and test large, lightweight sample panels capable of scale-up manufacturing to provide multifunctional performance for aerospace applications.

As the largest among North American universities, MSU’s high-voltage laboratory supports industry and utility needs while providing a state-of-the-art learning facility for students. In addition to serving as an education...
and research center, the lab tests and evaluates new high-voltage products, equipment and materials for a range of industries. It also offers seminars for students and faculty, short courses for engineers, graduate assistantships for high-voltage research, and support for undergraduate research. It’s even been used to recreate lightning strikes and other electrical phenomena for the Strange Evidence series on the Science Channel and the Weather Channel.

POINTS OF PRIDE

The University of Mississippi’s $175 million, 202,000-square-foot Jim and Thomas Duff Center for Science and Technology Innovation will be the largest single construction project in the history of the Oxford campus and will be transformational as one of the nation’s leading student-centered learning environments for STEM education.

Close to 50 percent of Alcorn State University students are in STEM-related majors.

STUDENT HIGHLIGHT - ZACHARY CHASE AHMAD

Hometown: Richton, Miss.  
Major: Polymer Science and Engineering, Minor in Chemistry  
Classification: Senior

Why I chose The University of Southern Mississippi
Both of my parents, along with my younger sister, suffer from inherited health conditions that left them disabled. After learning about the undergraduate program in polymer science and engineering at USM (one of the few undergraduate polymer science programs in the nation), I enrolled so that I could contribute to wearable medical devices that might make an impact in the lives of my family.

Why I chose polymer science and engineering
I wanted to become involved in research as early as possible, and polymer science and engineering at The University of Southern Mississippi offered me that opportunity in my freshman year of undergrad. When Dr. Xiaodan Gu (a professor of polymer physics) gave a guest lecture in my freshman polymer science class, he discussed flexible polymeric materials that could improve the quality of life for people like my family members by blending seamlessly with human skin and detecting hidden health conditions. I quickly joined his lab, and my passion for research was ignited!

What I plan to do after graduation
After graduation, I plan to earn a PhD in chemical engineering or materials science so that I can make a tangible impact in the lives of future generations through material innovation. After completing my PhD, I will pursue a post-doctoral position at a university, which will further my goal of becoming a research professor and principal investigator in the field of organic polymer electronics.
The mission of the Southwest Mississippi Center for Culture and Learning at Alcorn State University is to celebrate culture, creativity and community. The Center serves as a resource for identifying and communicating the rich history, vibrant culture and cherished traditions of the region. Through community outreach, hands-on and online learning opportunities, lectures, public forums, exhibitions, and celebrations the Center is a significant part of the region's cultural landscape.

MSU's Department of Art is home to the largest studio art program in the state of Mississippi, with concentrations in fine arts, graphic design and photography. The Bachelor of Fine Arts degree is earned after successful completion of an intensive, four-year program that provides the student with a series of in-depth studio experiences leading to a thesis/senior presentation balanced by studies in humanities, communication, mathematics and sciences.

Delta State's Digital Media Arts program, which offers the only animation degree in the state, provides a foundation for students seeking to develop careers in the rapidly growing areas of motion graphics, sound design, video production and animation through a multidisciplinary approach. The program produces digital media artists and professionals ready to create, develop, produce and promote professional quality digital content on industry standard software and hardware. With grounding in both theory and technique, graduates are prepared for jobs such as videographer, video editor, sound designer and motion graphics designer.

The Music Therapy program at The W was established in 2002 as the first program at a public university in Mississippi to educate music therapists. The mission of The W's Music Therapy program is to provide holistic and clinically based music therapy education with an emphasis on individual student exploration and growth.

For more than three decades, the Encyclopedia of Southern Culture (University of North Carolina Press, 1989), developed by scholars in the Center for the Study of Southern Culture at the University of Mississippi, has fostered a deeper understanding of the South. The original volume and its update, the New Encyclopedia of Southern Culture (24 vols., University of North Carolina Press, 2006–13) are models of scholarly, authoritative, inclusive, thorough and well-written encyclopedias.

The Encyclopedia of Southern Culture was "the first attempt ever," notes U.S. News & World Report, "to describe every aspect of a region's life and thought, the impact of its history and policies, its music and literature, its manners and myths, even the iced tea that washes down its catfish and cornbread."
The Fine Arts Department was recognized for its influence and contribution to the arts with the Contributions to the Arts Award during the Sixth Annual Museum of the Mississippi Delta’s Leadership and Philanthropy Gala.

The Kathy and Joe Sanderson Tower at Children’s of Mississippi features artwork that aids in the healing of patients at the state’s only children’s hospital and comforts their families. The works of art, which include digital prints, paintings, sculptures, and photographs, in the Sanderson Tower were chosen by a committee representing key stakeholders in the project, including experts in art, design and medicine. The committee sought and went over proposals from Mississippi artists for areas including the pediatric and neonatal intensive care floors, clinic waiting rooms, the chapel and the lobby.

Jackson State University has one of the largest graphic design programs in the country and is one of only four HBCUs with an accredited program in art.

The University of Southern Mississippi is one of only 39 institutions in the nation accredited in theatre, art and design, dance and music, and USM’s College of Arts and Sciences is a leader in the creative arts.

Why I chose Jackson State University
After attending a community college with little diversity, I wanted to be around students and professionals who looked like me. I have always been passionate about the arts but never really was able to find my cultural identity until I got to JSU. And besides, who wouldn’t want to attend the greatest HBCU there is? I knew that JSU would not just educate me academically, but would educate me socially and culturally. I haven’t been disappointed.

Why I chose theatre
It all started with a mother who was determined to help me develop every part of who I am, so she enrolled me in a summer camp when I was eight years old, and it was from there that I knew I wanted to be an actor. From that early age, I wanted to learn everything I could about theatre.

Even before I got to JSU, I had heard about MADDRAMA. On my first day on campus, I went looking for Dr. Henderson (artistic director of MADDRAMA), and when I found him, I said, "I am here. Mold me into the star I am destined to be." We hit the ground running, and I haven’t slowed down since.

What I plan to do after graduation
I am an example of how theatre can change the life of a small-town kid. I want to use my training to expose more young people to the power of the arts. In addition to acting, I also have my own videography company, LKA Films, which has afforded me the opportunity to work with Coach Primetime himself, Deion Sanders, and Barstool Sports. I want to develop projects that allow local artists to showcase their skills, whether on camera or behind the camera.

STUDENT HIGHLIGHT - LANDON K. ARNOLD
Hometown: Wiggins, Miss.
Major: Theatre
Classification: Senior
INNOVATION AND TECHNOLOGY

PROGRAMS

Mississippi Valley State University Department of Mathematics, Computer and Information Sciences values and promotes excellence in its central mission of teaching. The program encourages and supports creating and nurturing an atmosphere where major and service courses are designed to train mathematicians, computer scientists, and other students to enter careers in business, industry, research and education. The departments offer undergraduate degrees in computer sciences, mathematics and mathematics education. MVSU is also helping to promote STEM education by working with local school districts in underserved communities. In addition, the university unveiled a new state-of-the-art STEM Lab on campus in July to help support the Upward Bound II Program.

The University of Mississippi's Haley Barbour Center for Manufacturing Excellence (CME) offers academic and hands-on courses that teach accountancy, engineering, business, communications and continuous improvement through the lens of manufacturing. CME’s LEED-certified facility includes a 12,000-square-foot manufacturing floor, where students learn the importance of safety in the industrial environment, the value of teamwork, and how to turn their ideas into tangible products. Beyond the classroom, CME immerses students in real-world opportunities with industry partners through internships, co-ops and experiential learning courses. Co-ops or internships have taken place with industry leaders such as ExxonMobil, Tesla, Toyota, Trane and more. Experiential learning courses have been held at ADP Products, Blue Delta Jeans, GE Aviation, Ingalls Shipbuilding, Nissan, Toyota, Viking Range and more.

The School of Ocean Science and Engineering offers one of only 10 ocean engineering degree programs in the nation. This program features interdisciplinary coursework that integrates multiple engineering fields (e.g., mechanical, civil, electrical, computer, environmental).

Each summer, the Bioinformatics Program at Mississippi Valley State University holds a STEM-U-late Institute (Science, Technology, Engineering, Mathematics University – Leveraging Analytical Technologies for Education). The program is designed to allow aspiring students to explore the field of bioinformatics through the integration of mathematics, computer science and molecular biology.

RESEARCH

The University of Mississippi Medical Center recently installed two new robotic computers to transform the step-by-step process of testing samples collected on nasal swabs to determine if a patient has been infected with the COVID-19 virus. While humans must drive the testing to its conclusion, much of the manual work has been automated. The two automated liquid-handling robots work with the specimens and the reagents added to them to detect the COVID-19 virus. When human hands do most of the work, there are more steps in the process, and it takes a lot longer to complete batches of tests. The addition of the robotic computers increased the testing capacity substantially.
A University of Mississippi chemistry professor is exploring novel materials that could unlock a future sunlight-driven energy infrastructure. Supported by a recent National Science Foundation award, Jared Delcamp, UM associate professor of chemistry and biochemistry, is teaming with researchers from Mississippi State University and the University of Alabama to examine how new types of certain materials can be applied to turn the greenhouse gas carbon dioxide into a usable fuel primarily using sunlight. The research involves metal catalysts, or materials that speed up chemical reactions to allow practical access to fuel. Ideally, the exhaust from cars and electric production plants and such carbon dioxide generators could be used directly with a catalyst and sunlight to generate a fuel.

With five quadrillion computations per second, MSU’s Orion system is the nation’s fifth fastest academic supercomputer site. Funded by the National Oceanic and Atmospheric Administration, Orion is the result of a decades-long legacy the university has built for solving real-world problems through advanced technology and ingenuity. For example, NASA conferred with MSU to resolve safety concerns with Sen. John Glenn’s 1998 space mission. When the Navy needed a better submarine, Mississippi State students and faculty aided in the design. Mississippi State has also helped build a better, safer engine cradle for Chevrolet’s Corvette, assisted Homeland Security with cyber strategies, administered supercomputing programs at the Department of Defense, and tracked weather and climate patterns for NOAA.

**POINTS OF PRIDE**

JSU became the nation’s first HBCU to sign a pact to become a protégé in the NASA Shared Services Center program. The academic institution can land major government contracts as a prime contractor and position JSU to assist NASA in the exploration of other planets.

Delta State University’s Bachelor of Applied Science in Geospatial Analysis and Intelligence degree program is the only degree in the state to hold both regional (SASOCS) and professional (U.S. Geospatial Intelligence Foundation) accreditation.

**STUDENT HIGHLIGHT - JACOB BUSH**

**Hometown:** Greenwood, Miss.  
**Major:** Agribusiness  
**Classification:** Sophomore

**Why I chose Mississippi State University-Division of Agriculture, Forestry and Veterinary Medicine**

I knew I wanted to be part of the fourth generation to work our family’s farm, and the business side of agriculture is just as important as the sun-up to sun-down work it takes to farm. I knew the MSU College of Agriculture could help me learn what I needed to know.

**Why I chose agribusiness**

As an agribusiness major, I have the opportunity to learn precision tools in agriculture, plus the economic side of managing the overall operation.

**What I plan to do after graduation**

Farming is knuckle-busting work, but you also need to be business-savvy, knowing which crops to plant, how to market the harvest, and ultimately how to optimize profits. With precision tools and innovations constantly improving, I want to help my family advance the farming operation to grow more with less, contributing to improved environmental sustainability.
As the state’s only public institution offering a Master of Physician Assistant Studies program, MSU-Meridian is positioning students for what U.S. News & World Report calls the nation’s top-ranked career.

MSU-DAFVM students in the College of Food, Nutrition and Health Promotion are becoming leaders in public health and food security, which are two critical areas for Mississippi residents. The Registered Dietician program attracts nutrition graduates around the country to prepare for careers in the food industry and in allied health professions.

The W’s online public health degree was announced as No. 2 nationally in an online ranking. In the 15 Best Online Bachelor’s in Public Health for 2021, besthealthdegrees.com highlighted The W’s online public health degree, affordability and course offerings. Recent events like the COVID-19 pandemic have shined a spotlight on public health, preparing students to serve as public health professionals.

Delta State University offers the only Bachelor of Science in Nursing, Post-Master’s Certification and Doctor of Nursing Practice degree programs in the Mississippi Delta. The DSU Robert E. Smith School of Nursing’s numerous degree offerings regularly rank high for quality, affordability and efficiency. All of Delta State’s nursing programs are accredited by the Commission on Collegiate Nursing Education.

The University of Southern Mississippi’s School of Speech and Hearing Sciences consists of audiology, education of the deaf, and speech-language pathology. Academic programs include bachelor’s degrees in education of the deaf and speech pathology and audiology; master’s degrees in education of the deaf and speech-language pathology; as well as a clinical doctorate of audiology. USM’s 11-semester, four-year doctoral program addresses normal and abnormal communication processes, assessment, treatment and prevention over the lifespan. Doctoral program curriculum emphasizes writing skills and a knowledge and application of research techniques. The doctoral program leads to the clinical Doctor of Audiology (Au.D.) and is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association.

The Master of Public Health (MPH) degree at the University of Mississippi prepares future public health professionals for roles in community health, health policy, education and administration. Courses, such as the health equity class, prepare students to work with diverse populations, and applied learning experiences ensure MPH graduates are ready
to join the workforce to promote health and tackle pressing public health issues. The MPH concentration in community health places special emphasis on the application of public health theory and science to the planning, administration and evaluation of community health programs. The MPH degree program includes a practicum experience and prepares graduates for both the Certified in Public Health (CPH) and Certified Health Education Specialist (CHES) exams.

RESEARCH

For 30 years, Base Pair has introduced high school students to scientific research at UMMC. Students from Jackson’s Murrah High School complete coursework in biomedical science and laboratory techniques, then work with faculty in microbiology, pharmacology, neuroscience and other fields. Students learn how to perform experiments, analyze findings, and prepare and present their research.

POINTS OF PRIDE

UMMC is Mississippi’s only academic medical center, serves as the state’s primary safety net hospital, and offers the only Level I trauma center in Mississippi, the only children’s hospital and many complex services – such as organ transplantation – that are available nowhere else in the state. The UMMC Neonatal Intensive Care Unit is one of the nation’s largest and the state’s only Level IV NICU.

In 2018, JSU became the state’s only accredited School of Public Health. Since then, it has worked collaboratively with local, state and federal organizations and agencies to help reduce COVID-19 infections among African Americans ages 18-29 who had been hardest hit by the deadly disease in the central Mississippi counties of Hinds, Madison and Rankin.

STUDENT HIGHLIGHT - MIKAYLA PRACHT

Hometown: Mooreville, Miss.
Major: Medicine
Classification: 3rd Year Medical Student

Why I chose the University of Mississippi Medical Center
I’ve always known I wanted to stay in Mississippi to practice medicine, so I chose the University of Mississippi Medical Center because I knew I would be seeing the diseases and ailments that are unique to Mississippi’s patient population from day one. UMMC also does an amazing job in making sure students are actively involved in all aspects of patient care.

Why I chose medicine
From a young age, I knew I wanted to pursue a career in health care, and I fell in love with the practice of medicine. I want to be a part of the solution in solving the physician shortage in rural Mississippi and make a positive impact on my community’s health.

What I plan to do after graduation
After graduation, I plan to complete residency in a primary care specialty and practice medicine in rural northeast Mississippi.
K-12 EDUCATION

PROGRAMS

DELTA STATE UNIVERSITY

The Elementary Education program at Delta State University is known for creating high-quality educators for the classroom. Students who successfully complete the program will fulfill requirements for K-6 licensure in the state of Mississippi with additional licensure for grades 7-8 and 7-12 available with supplemental endorsements. Through Delta State's clinical model of preparation, graduates are certified and prepared to enter the classroom immediately post-graduation.

JACKSON STATE UNIVERSITY

Get2College Sessions have been held in the College of Business. The team presents ACT preparation sessions to high school students. The purpose of Get2College is to provide best-in-class college planning services to Mississippi families and educators to help students get to college and be successful there.

THE UNIVERSITY OF MISSISSIPPI

The University of Mississippi’s Center for Mathematics and Science Education (CMSE) improves mathematics and science education in Mississippi by building relationships between K-12 and university educators, promoting research-based teaching practices in the classroom, and inspiring young minds to consider career possibilities in STEM fields. CMSE has provided more than 40 graduate students with graduate research fellowships while they completed master's or doctoral degrees in mathematics education, science education, elementary education or mathematics. Eighty-five percent of these graduates reside in Mississippi and are continuing to make an impact in math and science education. The center has also coordinated mathematics content courses for education majors with almost 1,600 pre-service teachers enrolled in these courses.

RESEARCH

A unique collaboration between MSU and the Starkville Oktibbeha School District, the Partnership Middle School at MSU serves as an innovative, state-of-the-art center for research in curriculum, teaching and learning to address real-world education challenges. Opened in August 2020, the school serves every sixth and seventh grade student in the school district.

POINTS OF PRIDE

Thanks to a grant from the Mississippi Professional Educators (MPE). The W's Child and Parent Development Center successfully launched the STEAM in Action with 3Doodlers project for students. The clinic, they provide holistic care through screenings, consultations, wellness visits, sports physicals and behavioral care. The school-based clinic and the School of Nursing received 2021 Governor’s Awards through the Mississippi Association of Partners in Education.

Mississippi University for Women

Founded 1844 Coeducational since 1892

Since 2015, the School of Nursing at the University of Mississippi Medical Center has operated the Lanier Teen Wellness Clinic at Lanier High School. At the clinic, they provide holistic care through screenings, consultations, wellness visits, sports physicals and behavioral care. The school-based clinic and the School of Nursing received 2021 Governor’s Awards through the Mississippi Association of Partners in Education.

THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER
main goal of the program is to introduce appropriate technology connecting learning into a STEAM (science, technology, engineering, arts and math) project. 3Doodlers is a pen that prints in three dimensions and is an educational technology (EdTech) tool for activating learning through all of the senses. The 3Doodler is offered to W student teachers to use with a technology lesson as a required part of their studies. 100% of graduates from Delta State University's Bachelor of Science in Elementary Education program are certified and eligible to immediately begin teaching in the classroom.

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UMMC's statewide pediatric arm, Children's of Mississippi, includes the Kathy and Joe Sanderson Tower. Opened in November 2020, the tower houses 88 private neonatal intensive care rooms, 32 private pediatric intensive care rooms, a dozen state-of-the-art surgical suites, a pediatric imaging center and a multidisciplinary outpatient specialty clinic.

The National Board of Professional Teaching Standards ranks three Mississippi universities among the top 30 in the country for producing National Board Certified Teachers. The University of Southern Mississippi ranks 12th, Mississippi State University ranks 15th, and the University of Mississippi ranks 27th. Since 1994, when the credential was first offered, 1,073 USM graduates, 1,011 Mississippi State graduates, and 730 University of Mississippi graduates have attained the highest credential in the teaching profession.

Why I chose Delta State University
I chose to attend Delta State University because I absolutely fell in love with the campus during my tour. The small student-to-teacher ratio really stood out to me as well. At Delta State, students are more than just numbers in a classroom—our professors know our names, our strengths and weaknesses, and they genuinely want to help us be successful. This special place in the Delta has really become my home over the last few years, and I couldn’t be more grateful for the opportunities Delta State has provided me. We always say, “Join in. Stand out” here at DSU, and students have every opportunity to do just that!

Why I chose elementary education
My mother was a teacher at New Hope Elementary School in Columbus, so while I was growing up, I got to watch her do what she loved. I would pretend to grade her papers, write on the white boards, and basically be a little teacher. Remembering how much she loved teaching and how much I enjoyed being right there with her made me want to pursue a degree in education. I have such a passion for teaching children, and I can’t wait to be in my own classroom one day.

What I plan to do after graduation
After I graduate, I plan on pursuing my master’s degree in elementary education and staying in Mississippi to begin my teaching career. I am very interested in many school districts across the state, and I can’t wait to see where this profession leads me!
**UNIVERSITY-INDUSTRY COLLABORATION**

**PROGRAMS**

**DELTA STATE UNIVERSITY**

Offering the state university system’s only undergraduate and graduate aviation programs, Delta State University’s Department of Commercial Aviation offers a Bachelor of Commercial Aviation (BCA) in flight operations and aviation management and a Master of Commercial Aviation (MCA). Students are prepared for a variety of opportunities in the aviation industry, including the airlines, aircraft manufacturing, airport management, air traffic control, military aviation and logistics.

**JACKSON STATE UNIVERSITY**

Jackson State University was awarded a $469,000 interdisciplinary grant from the Department of Homeland Security to prepare underrepresented undergraduate minority students to successfully enter graduate programs or careers in emergency management and/or disaster preparedness with a STEM emphasis. The Homeland initiative is called the Community Resilience Engaging Advanced Training and Education (C.R.E.A.T.E.). It involves fields that include computer science and meteorology and atmospheric science. There are also non-STEM fields – psychology and media/communication. As a result of the grant, C.R.E.A.T.E. completed five weather preparedness videos with help from JSU’s Journalism and Media Studies, which conducted interviews of those in the community who have been impacted by weather disasters. The visuals are used to better assist in developing more effective and efficient notifications.

**RESEARCH**

The University of Southern Mississippi-led Gulf Blue innovation initiative is bringing “Big Ideas Out of the Blue” and positioning the Mississippi Gulf Coast as a global leader in ocean and maritime technologies. The Gulf Blue initiative pools the knowledge of research scientists, federal agencies, industry partners and entrepreneurs to further develop the Gulf Coast region into a global leader in blue technology.

**Mississippi Valley State University**

FedEx Logistics Inc., a subsidiary of FedEx Corp. (NYSE: FDX), has a program designed to offer employment opportunities at Historically Black Colleges and Universities (HBCUs). The company collaborated with Mississippi Valley State University to provide professional opportunities for students and build a pipeline of talent to support its industry-leading customs brokerage operations. FedEx Logistics has a satellite office on the MVSU campus in Itta Bena, staffed with qualified students. Students have access to part-time employment while in school, with the potential for full-time employment upon graduation.

**Madison County residents now have convenient access to care in multiple specialties through clinics staffed by University of Mississippi Medical Center surgeons and specialists. University Physicians has opened a clinic next to Merit Health Madison, just a short drive off the Nissan Parkway from Interstate 55. University Physicians offers general surgery services at Merit Health Madison in addition to surgery specialties that include adult and pediatric ophthalmology, breast and breast oncology, dental, oculoplastics, oral and maxillofacial, adult and pediatric orthopaedics, pain management, pediatric ENT, plastic surgery, oncology, urogynecology, urology, and dialysis and vascular access.**
Why I chose the University of Mississippi
Being a Mississippian and an Ole Miss fan all my life, I always considered attending the University of Mississippi. After visiting multiple universities across the South, I always felt Ole Miss provided the most welcoming and inclusive recruiting experience. I decided to attend Ole Miss because of the great opportunities the Haley Barbour Center for Manufacturing Excellence (CME) and the School of Engineering had to offer for my personal goals of pursuing a manufacturing career within Mississippi.

Why I chose mechanical engineering
Although I knew I wanted to be a mechanical engineer since elementary school, I did not know exactly how I wanted to apply that degree in a working environment. My father has worked in manufacturing facilities across central Mississippi, and I remember him discussing some of the needs of Mississippi industry. Learning more about the CME, I realized how their curriculum directly answered the needs of the industry. I also appreciated their mission to prepare students through connecting them with industry partners to encourage internships and co-op experiences. Through those connections, I have been able to work at various companies like ABB, Milwaukee Tool, Raytheon Technologies and Nissan, all while staying in my home state.

What I plan to do after graduation
I have accepted a position in Milwaukee Tool's Operations Development Program (ODP), which was created to train and develop college graduates into future leaders in manufacturing, supply chain, sourcing, quality and distribution areas for the Operations team of Milwaukee Tool. After completing ODP, my goal is to take a position at one of the multiple Milwaukee Tool manufacturing locations across Mississippi.
Delta State University’s Department of Commercial Aviation offers both a concentration and certifications in logistics, exposing students to critical elements and systems which drive logistics decision-making to manage supply and demand. Courses offered within the logistics concentration include transportation operations management, sourcing and contract management and internal supply chain management. Delta State’s continuing education certifications in logistics are accredited by the Association for Supply Chain Management (APICS) and are available to both students and working professionals in the field of logistics and supply chain management.

Mississippi State University recently launched the state’s first Master of Science in data science program, helping to meet the growing demand for data science professionals in industries such as healthcare, public policy, environmental science, business and public relations.

The Department of Biomedical Engineering at the University of Mississippi prepares students for the interdisciplinary world of bioengineering, where technology and medicine meet. Biomedical engineering students choose a track of study in biomolecular engineering, biomedical systems or bioinformatics. Graduates of the program can enter careers in medical device design, biotechnology, pharmaceutical research and sales, biomedical imaging and telemedicine, among others. Biomedical engineering also provides the skills and knowledge needed to pursue a Doctorate of Medicine (MD).

A multidisciplinary team at the University of Mississippi Medical Center recently received two contracts, totaling more than $1 million, to sequence viral genomes to determine where, when and which COVID-19 variants are present in the state. Supported by contracts with the Mississippi State Department of Health and the Centers for Disease Control, the goal is to sequence 3,700 samples from COVID-19 patients in one year.

Mississippi State University’s National Strategic Planning and Analysis Research Center is an internationally recognized multidisciplinary social and data science research center that provides tailored research, analysis and software architecture services with an emphasis on workforce and economic development. The center engages in convergent research and creates customized data and software solutions unique in the country and is home to experts across disciplines, including sociology, economics, statistics, computer science, communication and engineering.

By launching an online archive of approximately five decades of agricultural seed technology research, MSU is ushering in a new era of open data and information sharing that will play an important role in improved global health, safety and food security.
Why I chose Mississippi State University

When I was growing up, I always enjoyed math and focusing on technical things. I decided that engineering would be a good path for me, and I knew Mississippi State University was the right answer because of its reputation for having a well-respected, quality College of Engineering. Plus, it was close enough to home where I could easily visit, but far enough away to push me out of my comfort zone.

Why I chose industrial and systems engineering

I chose to pursue my master’s degree in industrial and systems engineering because it opened the door for me to join MSU’s Athlete Engineering team. I’m the graduate student lead for the report automation taskforce, and we support athletic coaches by creating or automating reports using data from their wearable technology and generally assisting them with their other devices in any way we can. We collaborate with practitioners in an effort to distill the data into insightful and easily digestible visuals. The goal is to inform coaches’ decision-making and decision-making processes by helping them leverage that data into something that is useful and actionable.

What I plan to do after graduation

I hope to work in sports science or data analytics in sports. Dr. Reuben Burch, an assistant professor of industrial and systems engineering who helped create MSU’s Athlete Engineering program, has been such a strong supporter for me, helping me grow in both knowledge and confidence. I’m grateful to him and this program for exposing me to a high-functioning, interdisciplinary team and to a lot of cool technology.
ENROLLMENT AND COMPLETION

76,510 Students Enrolled Fall 2021
19,681 Degrees Earned (AY2021)
88,948 Total Students in System (AY2021)
67.4% Students Who Are Mississippi Residents (AY2021)

MISSISSIPPI RESIDENTS IN UNIVERSITIES (FALL 2021)
56.1% WHITE
36.3% BLACK
7.6% OTHER/UNKNOWN RACE

MISSISSIPPI RESIDENTS IN UNIVERSITIES

INCREASE IN DEGREES CONFERRED (ALL LEVELS SINCE AY2017)
10.8% increase in all degrees
25.9% increase in STEM graduates

DEGREES CONFERRED IN 2021
564 DOCTORAL DEGREES
578 PROFESSIONAL DEGREES
4,697 STEM DEGREES (ALL LEVELS)

ACADEMIC PROGRAMS AND RESEARCH

$606.58 MILLION EXTERNAL RESEARCH FUNDING (AY2020)
2,020 Research Projects Funded (AY2020)
929 Academic Programs Offered (as of December 2021)

FUNDING SOURCES
87.8% FEDERAL
4.3% STATE
7.9% OTHER

Alcorn State University | Delta State University | Jackson State University
Mississippi State University | Mississippi University for Women
Mississippi Valley State University | The University of Mississippi
The University of Southern Mississippi
mississippi.edu