Mississippi State University
Boilerplate Information for Papers, Proposals, and Presentations

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Below are general summaries of various aspects of Mississippi State University. Other information about Mississippi State and its Colleges and Schools can be found on the MSU website at https://www.msstate.edu.

The following information about Mississippi State University is derived from the latest MSU Fact Book (https://ir.msstate.edu/research/factbook_pocket21.pdf) as well as the website.

1. GENERAL INFORMATION ABOUT MSU

HISTORY. Mississippi State University is a land-grant institution that was established in 1878 in Starkville, MS, and received its first students in 1880. Initially created through the 1862 Morrill Act as the Agricultural and Mechanical College of the State of Mississippi (renamed Mississippi State University in 1957), Mississippi State was tasked with providing training in "agriculture, horticulture, and the mechanical arts . . . without excluding other scientific and classical studies, including military tactics." Since its acquisition, MSU has continued to grow and evolve while retaining the university's core commitment to learning, research, and service. In 1888, the Agricultural Experiment Station was established through the Hatch Act of 1887. In 1914, the Smith-Lever Act called for "instruction in practical agriculture and home economics to persons, not attendant or resident," leading to a statewide effort that established extension offices in every county. In 1917, the Smith-Hughes Act supported the training of teachers in vocational education. In 1926, MSU gained accreditation from the Southern Association of Colleges and Schools. Since then, MSU has grown to include the Agricultural Experiment Station (1887), College of Engineering (1902), College of Agriculture (1903), School of Industrial Pedagogy (1909), School of General Science (1911), College of Business and Industry (1915), Mississippi Agricultural Extension Service (1915), and Division of Continuing Education (1919), Office of Graduate Studies (1936), doctoral degree programs (1951), School of Forest Resources (1954), College of Arts and Sciences (1956), College of Architecture (1973), College of Veterinary Medicine (1977), and the School of Accountancy (1979).

ACADEMICS. Mississippi State University currently comprises the following academic units: College of Agriculture and Life Sciences, including the School of Human Sciences; College of Architecture, Art and Design; College of Arts and Sciences; College of Business, including the Adkerson School of Accountancy; College of Education; Bagley College of Engineering, including the Swalm School of Chemical Engineering; College of Forest Resources; Office of the Graduate School, and College of Veterinary Medicine.

MSU also includes extension service centers and institutes: Advanced Spatial Technologies in Agriculture, Center for Continuing Education, Center for Government and Community Development, The Crosby Arboretum, Extension Center for Technology Outreach, Franklin Furniture Institute, Geosystems Research Institute, Mississippi Horse Park, Agricenter & Fairgrounds, Mississippi Water Resources Research Institute, Southern Rural Development Center, Social Science Research Center, and the Thad Cochran Warmwater Aquaculture Center. MSU's research and extension centers comprise the following: Central Mississippi Research & Extension Center (Brown Loam Branch Experiment Station, Coastal Plain Branch Experiment Station, Truck Crops Branch Experiment Station), Coastal Mississippi Research & Extension Center (Beaumont Horticulture Unit, Center for Urban Rural Interface Studies, Crosby Arboretum, Experimental Seafood Processing Lab, Grand Bay National Estuarine Research

Reserve, McNeil Research Unit, South Mississippi Branch Experiment Station, White Sands Research Unit), Delta Mississippi Research & Extension Center (Delta Branch Experiment Station, Thad Cochran National Warmwater Aquaculture Center), and North Mississippi Research & Extension Center (North Mississippi Branch Experiment Station, Northeast Mississippi Branch Experiment Station (Agronomy Unit, Horticulture Research & Education Unit) Pontotoc Ridge – Flatwoods Branch Station, Prairie Research Unit).

Additional MSU supplementary units includes the following: Center for Distance Education, Shackouls Honors College, Advanced Research Projects Laboratory, Center for Safety and Health, Center for Science, Mathematics and Technology, Electron Microscope Center, Portera High Performance Computing Center, Institute for Digital Biology, Institute for Neurocognitive Science and Technology, Forest and Wildlife Research Center, Sustainable Energy Research Center, Mississippi State Chemical Laboratory, Research and Curriculum Unit, Center for Education and Training Technology, GeoResources Institute, Life Sciences and Biotechnology Institute, Carl Small Town Center, Design Research and Informatics Laboratory, Educational Design Institute, Jackson Community Design Center, Gulf Coast Community Design Studio, Biological and Physical Sciences Resources Institute, Center for Computational Sciences, Cobb Institute of Archaeology, Institute for the Humanities, John C. Stennis Institute of Government, Center for Educational Partnerships, Early Childhood Institute, Rehabilitation Research and Training Center on Blindness and Low Vision, Mississippi Writing/Thinking Institute, Martin Center for Technology and Disability, Center for Advanced Vehicular Systems, Center for Computer Security Research, Center for DoD Programming Environment and Training, Computational Simulation and Design Center, Institute for Clean Energy Technology, High Voltage Laboratory, Raspet Flight Laboratory, Mississippi Agricultural and Forestry Experiment Station, and the branches of the Mitchell Memorial Library. Mississippi State University also operates an off-campus degree-granting center in Meridian, a program center at the Stennis Space Center in Hancock County, and the engineering college offers a Master of Science degree in Vicksburg.

MSU offers approximately 180 degrees which include 15 master's degrees in 58 programs, an educational specialist degree, doctoral degrees in 35 programs, and 6 certificates. In the 2020-2021 academic year, MSU conferred 5,510 degrees. Mississippi State University is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award bachelor, masters, specialist, and doctorate degrees.

STUDENTS. Approximately 23,086 students were enrolled as of Fall 2021. Full-time undergraduate students, graduate students, and professional students totaled 18,830, and part-time undergraduate, graduate students, and professional students totaled 4,256. Further breakdown of students enrolled (race, ethnicity, gender, college, etc.) can be found in the latest MSU Fact Book beginning on page 7 (https://www.ir.msstate.edu/research/factbook_pocket21.pdf).

FACULTY. The total instructional faculty for Fall 2021 was 1,066. PhDs and professional degrees were held by 1,036 of the total full-time instructional faculty, and master's and specialists degrees were held by 329 members. Further breakdown of faculty statistics (race, ethnicity, gender, college, etc.) can be found in the latest MSU Fact Book starting on page 7 (https://www.ir.msstate.edu/research/factbook_pocket21.pdf) or on the Office of Institutional Research and Effectiveness Common Data Set 2021-22 (https://www.ir.msstate.edu/CDS/cds2021_2022.pdf).

FACILITIES. MSU's campus occupies Starkville, MS, spanning 4,200 acres, including the campus, farms, pastures, woodlands, and the experiment station. The net investment in buildings and grounds is approximately $450 million. Furthermore, agricultural research is accomplished on the MAFES Plant Science Farm of approximately 560 acres, 10 greenhouses and more than 40 other structures, as well as the MAFES Animal Sciences Farm of 1,650 acres and 52 structures.

DIVERSITY. Mississippi State is strongly committed to enhancing diversity at all university levels and has made major strides in recruiting and successfully graduating students belonging to historically underrepresented groups (i.e., ethnicity, race, religion, differently abled, etc.). The University's objectives pertaining to student diversity are to provide meaningful educational experiences and interactions among a diverse undergraduate and graduate student body. To this end, Mississippi State supports a university environment that values diversity and promotes intercultural growth for students by providing targeted programming and training which allows undergraduate and graduate students opportunities to develop intercultural skills and maturity and a wide array of diversity-related services and programs to better serve underrepresented populations.

As of Fall 2021, of the 23,086 students enrolled, 16,530 are White, 3,866 are Black/African American, 741 are Asian, 911 are Hispanic, 524 are multi-racial, 19 are Native Hawaiian or Other Pacific Islander, and 371 are other/not reported. Recognized for its commitment to outstanding diversity and inclusion efforts, Mississippi State is a recipient of the Higher Education Excellence in Diversity Award. In addition to inter-school initiatives, Mississippi State also seeks to improve the education of underrepresented groups outside of the university. For example, in a unique collaboration between MSU and the Starkville Oktibbeha School District, the Partnership Middle School at MSU improves education across the state and country by serving as a center for research in curriculum, teaching, and learning to address real-world education problems with a focus on the specific challenges of rural schools.

MSU is also committed to providing exceptional education and additional support to students with disabilities. For example, MSU's T.K. Martin Center for Technology and Disability, which has received numerous grant awards for its work in ensuring that persons with disabilities benefit

from technological solutions and advances in the field of assistive technology, is removing barriers for clients with mobility, hearing, visual, communication and cognitive impairments. Furthermore, MSU's National Research and Training Center on Blindness and Low Vision is the nation's only federally funded center focused on employment outcomes for people with blindness or low vision. Additionally, Mississippi State's Autism and Developmental Disabilities Clinic is using virtual reality to simulate real-world experiences aimed at improving communication skills in children with autism.

MSU's diversity strategic plan reflects the University's interest in preserving and increasing the number of diverse faculty linked to its intellectual mission to provide the best possible education for all students. Faculty diversity is educationally relevant because it motivates students to incorporate different considerations, sensibilities, and lines of reasoning, which augment their analytical abilities. MSU's faculty and staff represent many different racial and ethnic backgrounds, gender and gender identities, sexual orientations, national origins, religious backgrounds, socioeconomic backgrounds, persons with disabilities, and those with current or past military service. The university has multiple initiatives and activities to help foster increased diversity and equitable treatment for all and is studying and putting into action the needed transformations. View the full plan here: https://www.oidi.msstate.edu/files/DiversityStrategicPlan.pdf and additional diversity facts here https://www.oidi.msstate.edu/sites/www.oidi.msstate.edu/files/2020%20postcard.pdf.

More on Diversity, Equity, and Inclusion can be found on page 28.

RESEARCH. MSU is among only 2.7% of universities in the U.S. that hold the Carnegie Foundation R1-Very High Research Activity designation. This category represents the highest level of research activity for doctorate-granting universities in the U.S. The Carnegie classification has been the leading framework for recognizing and describing institutional diversity in U.S. higher education for the past four decades. The very high research activity designation further confirms that MSU is competing with the nation's top universities. Furthermore, The National Science Foundation ranks Mississippi State among the nation's Top 100 research institutions and The Magnolia State's leading research university, and Mississippi State ranks No. 6 in the world for the impact of its entrepreneurship research initiatives. MSU's research expenditures totaled nearly $241 million in FY 2017, accounting for more than half of the total research and development expenditures reported by all Mississippi institutions. This research activity is playing an ever-increasing role in Mississippi's overall economic development efforts. MSU is a recognized leader in a number of disciplines and is well known for innovative partnerships, real-world impact, and offering undergraduate and graduate students unique research opportunities.

Mississippi State focuses on research spanning various (but equally important) fields. For instance, MSU is on the cutting edge of research and integration into the nation's airspace,

serving as the national lead university for the FAA's Center of Excellence for Unmanned Aircraft Systems and as the FAA's UAS Safety Research Facility, and MSU leads the Department of Homeland Security's Common UAS Test Site. In fact, MSU was among the few universities that NASA turned to when the space shuttle flight with former senator John Glenn faced serious challenges on re-entry. After a steel plate protecting the drag chute on the spacecraft dislodged during launch, MSU researchers condensed a three-month simulation of the event into two days to ensure a safe return.

MSU is also recognized as a top 10 Military Friendly School by VIQTORY. MSU supports the Department of Defense's mission by developing a high-performance computing-based environment for next-generation ground vehicles, and MSU researchers are setting the pace in their pursuit of antidotes for nerve agents that pose risk to military and civilian populations. As one of a select group of universities designated as Land, Sea, and Space-Grant institutions, MSU holds a unique and desirable position that allows them to aid Military needs. Recognized nationally for its leadership in cybersecurity, MSU is one of only a few schools in the U.S. to hold all three of the National Security Agency's centers of academic excellence credentials: CAE Cyber Defense, CAE Cyber Research, and CAE Cyber Operations. Additionally, MSU leads the NSA-sponsored national CAE Cyber Operations Community of Practice.

MSU is also in the foreground of medical-based research, with MSU research teams uncovering breakthroughs in the treatment and prevention of CHARGE syndrome, a genetic condition that leads to a host of life-threatening birth defects, while also providing crucial support resources for parents and helping physicians around the globe gain awareness so symptoms can be detected and addressed earlier. MSU researchers are also pursuing ways to stop and reverse vascular calcification, a buildup in blood vessels that can lead to a heart attack or stroke.

MSU is also recognized for its efforts in environmental work, with the National Science Foundation ranking MSU in the nation's top 5% for agriculture and natural resources – a position it has held for over two decades. As the home of the Feed the Future Innovation Lab for Fish, funded by USAID, Mississippi State is leveraging its proven expertise to improve nutrition, food security, and livelihoods in developing countries by supporting the sustainable development of aquaculture and fisheries. Furthermore, as a recognized Tree Campus USA for seven consecutive years, Mississippi State annually plants 80-100 new trees on the nearly 1,500 maintained acres of its Starkville campus, and to further its positive impact on the environment, Mississippi State researchers are studying wetland restoration efforts along the Gulf of Mexico to evaluate effective marsh terrace designs that will maximize coastal restoration, sustainability, and ecosystem productivity.

MISSION. Mississippi State University is a public, land-grant university whose mission is to provide access and opportunity to students from all sectors of the state's diverse population, as well as from other states and countries, and to offer excellent programs of teaching, research, and

service. Enhancing its historic strengths in agriculture, natural resources, engineering, mathematics, and natural and physical sciences, Mississippi State offers a comprehensive range of undergraduate and graduate programs; these include architecture, the fine arts, business, education, the humanities, the social and behavioral sciences, and veterinary medicine. The university embraces its role as a major contributor to the economic development of the state through targeted research and the transfer of ideas and technology to the public, supported by faculty and staff relationships with industry, community organizations, and government entities. Building on its land-grant tradition, Mississippi State strategically extends its resources and expertise throughout the entire state for the benefit of Mississippi's citizens, offering access for working and place-bound adult learners through its Meridian Campus, Extension, and distance learning programs. Mississippi State is committed to its tradition of instilling among its students and alumni ideals of diversity, citizenship, leadership, and service. See page 4 of the Fact Book. (https://www.ir.msstate.edu/research/factbook_pocket21.pdf).

STRATEGIC PLAN. MSU's Plan's Goals and Initiatives were framed by the overarching goal of MSU to "inspire success in all students by advancing learning and development through student engagement and our commitment to excellence and innovation." We plan to achieve this through 4 Goals, each with its own set of Initiatives, outlined in the Strategic Plan. https://www.saffairs.msstate.edu/strategic-plan/.

GRADUATE RESEARCH. Mississippi State offers internationally recognized graduate programs at the master's, specialist, and doctoral levels. In 2021, 4,502 graduate-level students were enrolled across all colleges, schools, and institutes. Graduate students are supported in various ways by their home departments and colleges, as well as by the Graduate School that partners with graduate students, faculty, administrators, and staff to identify and expand upon best practices for graduate and professional programs and relies on the latest data and context for graduate programs nationwide to support initiatives for prospective and current students that cross-program and college boundaries. Through Graduate College, students can receive University Assistantships that provide them with the opportunity to work directly with faculty and staff mentors on research or career-related projects. See more on the types of assistantships here: https://www.grad.msstate.edu/funding-tuition/assistantships/types-of-assistantships .

Students across different fields get unique hands-on experience that is not offered at other universities. For example, MSU College of Veterinary Medicine students gain markedly more surgical experience than the national average. Additionally, veterinary students at Mississippi State are able to gain rare experiences helping to rescue and rehabilitate vulnerable marine animals as part of a unique partnership between the College of Veterinary Medicine and the Institute for Marine Mammal Studies in Gulfport, Mississippi.

With a mission to strengthen and grow MSU's graduate programs, the Graduate School helps in academic matters, advice on university-wide degree requirements, information on the availability

of financial assistance, including assistantships, fellowships, and scholarships, as well as approval for theses and dissertations. See more on the graduate school here: https://www.grad.msstate.edu/.

UNDERGRADUATE RESEARCH. MSU's Office of Undergraduate Research allows students to develop new skills and gives them the opportunity to apply what they already know to new issues that interest them. Through this program, students learn what sort of creative work a scholar in their field does. It also allows them to meet others with similar interests, gain confidence, and immerse themselves in the intellectual environment at MSU. Students from all majors and at any level can work in research labs, serve as editors, build business plans, and engage in many other types of research-related opportunities. Additionally, undergraduate students and alumni can pursue funding opportunities for tuition and fees, summer research experiences, study abroad, and graduate school through scholarships and fellowships.

The Honors Thesis Proposal provides an opportunity for students to develop a topic or project and demonstrate the results of scholarship and research in an appropriate format. The thesis is one of the culminating achievements of an Honor Scholar's undergraduate career. Read more about the Honors Thesis here: https://www.honors.msstate.edu/curriculum/honors-thesis/ Undergraduate research and creative discovery offers interactive research skills workshops intended to introduce students to the research enterprise as an initial step toward building competent undergraduate researchers at Mississippi State University. View types of workshops offered here: https://www.urcd.msstate.edu/research.

2. ENVIRONMENT (summary stats, accolades, awards, etc.)

Mississippi State University (MSU) is a premier research institution. In recognition of its commitment to research, MSU is ranked among the National Science Foundation's top 100 research institutions and is classified as an R1-Very High Research Activity Doctoral University by the Carnegie Foundation. For example, MSU serves as the national lead university for the FAA's Center of Excellence for Unmanned Aircraft Systems and as the FAA's UAS Safety Research Facility, and MSU leads the Department of Homeland Security's Common UAS Test Site. MSU's commitment to research has also been globally recognized, as it ranks No. 6 in the world for the impact of its entrepreneurship research initiatives. MSU offers more than 180 degrees which include 15 master's degrees in 58 programs, an educational specialist degree, doctoral degrees in 35 programs, and 6 certificates through eight college-level units: College of Agriculture and Life Sciences, including the School of Human Sciences; College of Architecture, Art and Design; College of Arts and Sciences; College of Business, including the Adkerson School of Accountancy; College of Education; Bagley College of Engineering, including the Swalm School of Chemical Engineering; College of Forest Resources; Office of the Graduate School, and College of Veterinary Medicine. MSU has a diverse student body, with students

coming from every county in Mississippi, every state in the union, and over 84 other nations. MSU offers educational opportunities for traditional and nontraditional students at both the graduate and undergraduate levels. The University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (SACS) to award bachelor, master, specialist, and doctoral degrees.

MSU was recently ranked in the top 100 for Best Public Schools (U.S. News & World Report, 2022). As such, MSU is committed to the successful education of all students at all levels, especially minority students, which has garnered national recognition, such as the recipient of the Higher Education Excellence in Diversity Award for its efforts to make MSU's campus more diversified. 2023 marks the fourth consecutive year that MSU has been recognized as a top 10 Military Friendly School by VIQTORY, showcasing its veteran inclusion efforts. Additionally, MSU has been recognized for its efforts to keep its campus green, as it has been named a Tree Campus USA for seven consecutive years and is in the nation's top 5% for agriculture and natural resources.

Today, MSU is one of the nation's leading public research universities, solving global challenges across various fields. Researchers at MSU utilize the university's state-of-the-art facilities and work across disciplines to address critical quality of life issues, such as genetic disorders, heart attack prevention, and stroke prevention, among others. MSU is also heavily involved in environmental and agricultural research aimed at improving the environment and boosting food and resource production and quality. MSU is also on the cutting edge of research in multiple engineering fields ranging from innovations in aircraft to terrain vehicles. MSU ranks among the nation's top public universities in the Carnegie Foundation's elite category of Very High Research Activity. This category represents the highest level of research activity for doctorate-granting universities in the U.S.

The total amount of awards received by MSU in FY 2022 was $251 million with research funding accounting for $186M of that. Newly funded projects in FY 2022 includes over $7 million from the National Institutes of Health, $16.8 million from the National Science Foundation, and $5.05 million from the U.S. Department of Education. This continues to reflect a rise in Mississippi State's NIH and NSF funding. Over the past decade (from fiscal year 2011 to fiscal year 2021), research expenditures at MSU have increased by 21.7%. The latest NSF HERD Survey (2021) ranks MSU 88th out of over 655 ranked universities for research expenditures and is one of the fastest growing research institutions in the nation.

Mississippi State currently provides multiple research centers and stations dedicated to research. For example, the Mississippi Agricultural and Forestry Experiment Station's 16 branch locations serve all regions of the state, and its research addresses issues important and relevant to Mississippi farmers, industry, communities, and families. MAFES discoveries improve plant,

animal, and food production systems to enhance commodity production and conserve the environment for the benefit of all people. The Hiram D. Palmertree North Mississippi Research & Extension Center in Verona, the Delta Research and Extension Center in Stoneville, the Frank T. (Butch) Withers Central Mississippi Research and Extension Center in Raymond, and the Coastal Research and Extension Center in Biloxi—serve as hubs for Extension outreach and MAFES research in each region. Each R&E center also has satellite stations where scientists conduct research specific to each region, as well as research that is part of statewide programs, such as the agronomic crop variety trials. This research enables MSU researchers to make recommendations from data based on local soil types, weather patterns, and grower needs.

Additionally, The Forest & Wildlife Research Center aims to expand through researching the fundamental and applied knowledge upon which forestry, forest products, and wildlife & fisheries disciplines are based. It aims to assist in conserving, developing, and using the forest, forest products, wildlife, and fisheries resources of Mississippi, the nation, and other countries through research, technology transfer, and other service activities. MSU also possesses a lot of faculty expertise and a growing capacity to study and address issues in environmental and agricultural research. There are also many other research centers and institutions, both on and off campus, that provide exceptional tools and opportunities to further research across multiple fields. View other institutions and centers here: https://www.research.msstate.edu/centers-institutes.

3. ACADEMIC COLLEGES & SCHOOLS

COLLEGE OF AGRICULTURE AND LIFE SCIENCES. Established in 1878 as the Agricultural and Mechanical College of the State of Mississippi, Mississippi State University today continues to excel in its original mission of education, research, and service. The study of agriculture, a founding basis for the institution, was formalized into a college in 1903. The present-day College of Agriculture and Life Science (CALS) presents a broad array of opportunities for the study of life, encompassing 9 schools and departments. Together, they offer 17 majors and 45 concentrations for undergraduates and 18 majors and 41 concentrations for graduate degrees.

The College boasts a learned, experienced faculty of 230, whose common goal is to provide students with the best education possible. Many departments house specialized research centers that have attracted large federal grants and corporate funding. The College is also closely associated with the Mississippi Agricultural and Forestry Experiment Station (MAFES) and the Mississippi State University Extension Service, which both share knowledge and solutions with farmers, businesspeople, and government agencies throughout the state and beyond.

COLLEGE OF ARCHITECTURE, ART, AND DESIGN. The mission of the College of Architecture, Art, and Design is to promote and engage students and faculty in the following: conceptualization, craft, media and technology, history and theory, aesthetics, and ethical issues associated with making artifacts in the world.

COLLEGE OF ARTS AND SCIENCES. The College of Arts & Sciences is grounded in a comprehensive set of educational options encompassing groundbreaking research in an environment that embraces intellectual and creative freedom. We are transforming and empowering local, state, and global communities by engaging new technologies, finding new ways to solve complex problems, and collaborating with scholars and experts in every field. Our college includes more than 5,000 students, 323 full-time faculty members, nine doctoral programs, 14 master's programs, and 27 undergraduate academic majors offered in 14 departments. It is home to the most diverse units for research and scholarly activities, including natural and physical sciences, social and behavioral sciences, and the humanities.

MSU is classified by the Carnegie Classification of Institutions of Higher Education as a "Very High Research Activity" doctoral university, the highest level of research activity in the country. MSU is one of only 146 schools to hold the designation. Departments within the College of Arts & Sciences benefit from the prestigious distinction by recruiting the nation's top researchers and faculty members who bring to our college dedicated teaching and research opportunities for our students.

COLLEGE OF BUSINESS. As the oldest college of business in the State of Mississippi and among the oldest in the SEC, the College of Business at Mississippi State University boasts more than 34,000 alumni from all 50 states and 142 countries. The Mississippi State University College of Business serves the people and businesses of Mississippi and beyond through an enriched learning community. Students are prepared to think, communicate, and collaborate ethically in today's diverse, technology-driven, global business environment. Our college provides a collegial academic atmosphere that nurtures students and encourages faculty to be innovative and to integrate teaching research and service. We seek to advance frontiers of scholarship in the following areas of focus: Family Business and Entrepreneurship (FBE), Governance and Financial Services/Markets (GFS), Information Security and Assurance (ISA), and Distribution and Service Innovation (DSI).

COLLEGE OF EDUCATION. The College of Education is comprised of six academic departments, including Counseling, Educational Psychology, and Foundations; Curriculum, Instruction, and Special Education; Music; Instructional Systems and Workforce Development; Educational Leadership; and Kinesiology; in addition are two teacher candidate preparation programs offered jointly with the College of Agriculture and Life Sciences-Agricultural and Extension Education and Family and Consumer Sciences. These academic departments are augmented by one primary research unit, the National Research and Training Center on

Blindness and Low Vision - which as of 2023 serves about 40 low-vision learners - and three service units, the Center for Educational Partnerships, the T.K. Martin Center for Technology and Disability, and the Office of Clinical/Field-Based Instruction, Licensure, and Outreach, which are coordinated through the Office of the Dean.

Included in the Center for Educational Partnerships are the following service units: America Reads-Mississippi, the World Class Teaching Project (which prepares teachers for National Board certification), the Writing/Thinking Institute (part of the National Writing Project), and the Mississippi Migrant Education Service Center.

COLLEGE OF ENGINEERING. For more than 100 years, the Bagley College of Engineering at Mississippi State University has been at the forefront of education and research. Advancing in every aspect, the college is committed to pursuing excellence in education, as well as providing an environment for personal growth and development. As one of approximately 40 named engineering colleges in the nation, the Bagley College offers degree programs in eight different academic engineering departments and many certificate programs. Each academic program provides a challenging curriculum and an encouraging environment to allow students to achieve their full potential.

The Bagley College of Engineering is Mississippi State's third largest college. It currently ranks 51st among all engineering colleges nationally in research and development expenditures according to the National Science Foundation. U.S. News and World Report ranks its undergraduate and graduate programs in the top 100 nationwide. A report published by the National Action Council on Minorities in Engineering stated that African Americans comprise only 5% of all engineering bachelor's degrees achieved, with the same percentage of career holders in the engineering workforce.

The Bagley College of Engineering is committed to the growth and development of our diversity initiatives including mentoring and helping our students transition into the engineering profession. It is that commitment that has our African American enrollment at 11%, as well as awarding 8.65% of bachelor's degrees in 2018/19 to 62 African American engineers. We recognize that diverse teams built across departments and with industry leaders can create the effective solutions for the challenges facing our ever-growing world.

COLLEGE OF FOREST RESOURCES. The College of Forest Resources includes the departments of forestry; wildlife, fisheries and aquaculture; and sustainable bioproducts. We offer four majors with fourteen options and hundreds of careers. The research arm of the College is the Forest and Wildlife Research Center and we work closely with the Mississippi Agricultural and Forestry Experiment Station. The outreach arm of the College is the MSU Extension Service. Many of our programs are accredited by the appropriate agencies and we offer numerous scholarships and part time jobs for qualified students. The mission for the College is to

promote, support and enable the management, conservation, and utilization of forest and other natural resources to benefit the stakeholders of Mississippi, the Nation, and the world.

COLLEGE OF VETERINARY MEDICINE. The Mississippi State University College of Veterinary Medicine captures a unique balance of world class research in animal and public health, high quality learning experiences and cutting-edge medical care, all with a family-like atmosphere. Our passion is to improve the health and well-being of animals for the benefit of the animals, their owners, agribusiness, biomedical research and, thus, society. We achieve our vision by providing compassionate, world-class health care and diagnostic services and by conducting translational veterinary research (bench to clinic). We further realize our vision, in part, by investing ourselves in training students and veterinary professionals and encouraging them to embrace and perpetuate our vision. We are driven to accomplish these goals by the knowledge that our calling will better the life of society and the animals entrusted to our care.

SCHOOL OF HUMAN SCIENCES. The School of Human Sciences provides education, research, and outreach programs related to human interaction and relationships, early childhood, child life, youth, adult and family studies, and teacher education in Family and Consumer Sciences and Agricultural Education. In addition, selected School programs focus on commerce, marketing, and using technology for problem solving and designing programs and projects. https://www.humansci.msstate.edu/

SCHOOL OF ACCOUNTANCY. The Richard C. Adkerson School of Accountancy offers outstanding academic programs, and a vibrant, challenging learning environment for its students, both face-to-face and online. The Adkerson School of Accountancy combines general, broad business and accounting education into a specialized curriculum designed to meet the greater demand for accountants, stemming from developments in information technology, increasingly complicated taxation and governmental control measures, and a growing awareness of the need for accurate control methods in existing businesses. This program prepares students for positions in public, private, or governmental accounting. https://www.business.msstate.edu/academics/adkerson-school-accountancy

SCHOOL OF CHEMICAL ENGINEERING. The Dave C. Swalm School of Chemical and Petroleum Engineering graduates receive broad training in college that equip them well for solving a range of technical problems. Chemical engineers are involved designing and improving chemical processes across industries including petroleum refining, traditional and novel methods of energy production, food, biomedicine and pharmaceuticals, electronics, materials, and pulp and paper. Petroleum Engineers provide for the world's every-increasing demand for readily available and economically advantageous sources of energy. Their training equips them for oil and gas reservoir discovery, assessment, and development; advanced drilling technologies for resource recovery; and production of energy resources.

The Dave C. Swalm School of Chemical Engineering is housed in a state-of-the-art building which opened in the fall of 2000. The Swalm building boasts modern, fully equipped research laboratories, state-of-the-art classrooms with wireless internet access, multiple small conference rooms, and a large lecture hall for classes and guest lectures. The Petroleum Engineering bachelor's degree program was re-started within the school in the fall 2015 semester, after almost 25 years' absence. The excitement with the revival of this program has been palpable—with steady growth in enrollment, accompanied by growth in alumni involvement and industry interest for our students through summer internships and full-time employment. https://www.che.msstate.edu/

4. RESEARCH CENTERS & INSTITUTES

The **ALLIANCE FOR SYSTEM SAFETY OF UAS THROUGH RESEARCH EXCELLENCE (ASSURE)** is comprised of 26 of the world's leading research institutions and more than a hundred leading industry and government partners. ASSURE members are core to three FAA UAS test sites, lead four FAA research centers, have seven airfields and a 340 UAS fleet — 24 more UAS than the USAF. This alliance features expertise across a broad spectrum of research areas, including air traffic control interoperability, UAS airport ground operations, control, and communications, detect and avoid, human factors, UAS noise reduction, UAS wake signatures, unmanned aircraft pilot training and certification, low altitude operations safety, spectrum management and UAS traffic management. ASSURE possess the expertise, experience, and influence that the FAA Center of Excellence for Unmanned Aircraft Systems demands. https://www.assureuas.org/.

The **CENTER FOR ADVANCED VEHICULAR SYSTEMS (CAVS)** is a world-class technology development center comprised of engineering, research, development, and technology transfer teams. Founded in 2002, CAVS is committed to exploring solutions to complex problems, in areas such as autonomous vehicles, materials science, high-performance computing, advanced controls, and human-machine interaction. CAVS is a strong partner at the state, national, and international level; with academic partnerships in place across multiple continents, we form collaborations which help us work smarter, faster, and more efficiently. Through the Institute for Systems Engineering Research (ISER), co-located with the US Army's Engineering Research and Development Center in Vicksburg, MS, CAVS serves our national interests with expertise in systems engineering and big data management. CAVS Extension arm has a 15-year history of enhancing our state's manufacturing operations and aiding economic development, and the Institute for Imaging and Analytical Technologies (I2AT) provides cutting-edge services to industry across the region. http://www.cavs.msstate.edu/.

The **CENTER FOR CYBER INNOVATION (CCI)** is part of the High Performance Computing Collaboratory at MSU and develops solutions for Defense, Homeland Security and the Intelligence Community. The primary focus of the CCI is to research, prototype and deliver cutting-edge cyber solutions that support global national security, homeland security and peacekeeping operations. CCI serves as a focal point for academic, government, and commercial resources to pursue cyber technologies, apply unbiased expertise, provide rapid and relevant research solutions, and integrate these solutions into applications and products. CCI will research, prototype, deliver and provide cutting-edge technological and operational solutions to complex problems for U.S. Government, scientific community and commercial (domestic and international) customers. CCI serves as an economic development generator by producing cyber solutions with commercial applications. https://www.cci.msstate.edu/.

The **GLOBAL CENTER FOR AQUATIC HEALTH AND FOOD SECURITY (GCAHFS)** aims to reduce world hunger through research that supports sustainable aquaculture and ecological health of aquatic resources. The GCAHFS also works to protect and manage health of aquatic animals, including marine mammals and endangered species, such as dolphins and sea turtles. The center supports both domestic and international projects in a wide range of natural and social science areas. https://www.gcafs.msstate.edu/.

The **HIGH PERFORMANCE COMPUTING COLLABORATORY (HPC²)** an evolution of the MSU NSF Engineering Research Center (ERC) for Computational Field Simulation, at Mississippi State University is coalition of member institutes and centers that share a common core objective of advancing the state-of-the-art in computational sciences and engineering using high performance computing; a common approach to research that embraces a multi-disciplinary, team-oriented concept; and a commitment to a full partnership between education, research, and service. http://www.hpc.msstate.edu/.

The **INSTITUTE FOR COMPUTATIONAL RESEARCH IN ENGINEERING AND SCIENCE (ICRES)** strives to be a world-class center of excellence for research, technology and education equipped to address engineering challenges facing the nation's industrial base. Utilizing high performance computational resources and state-of-the-art analytical tools for modeling, simulation, and experimentation, ICRES will provide a distinctive, interdisciplinary environment that will support economic development and outreach activities throughout the State of Mississippi and beyond. http://www.icres.msstate.edu/.

The **INSTITUTE FOR IMAGINE AND ANALYTICAL TECHNOLOGIES (I²AT)** is a university-wide research institute and core facility which meets MSU's missions in research, teaching and service by facilitating inter- and multi-disciplinary research, education and outreach in the life and materials sciences. I²AT houses major research instrumentation that is available to faculty, staff, students, and outside users. Instrumentation includes technologies for diverse microscopy (light, confocal, atomic force, and electron) and microanalysis (e.g. X-ray

diffraction) applications, in addition to magnetic resonance imaging used in areas of veterinary medicine, cognitive science and medical systems. These technologies provide MSU, the State of Mississippi and the local community with state-of-the-art resources that facilitate scholarly research, spawn competitive funding, foster project completion, enable high-quality undergraduate and graduate education, enhance impact of outreach, and promote economic development. I²AT as a university-level research institute, is organized with university-wide responsibilities, and is administered out of MSU's Office of Research and Economic Development. https://www.i2at.msstate.edu/.

The **ADVANCED COMPOSITES INSTITUTE (ACI)** is an internationally recognized institute of excellence for composites research and technology bridging engineering and fundamental science disciplines at MSU and beyond. ACI is a highly respected university and industry applied research asset focused on pioneering transformational composite technologies in a variety of critical sectors. The Institute is equipped and positioned to support disruptive, transdisciplinary programs that address fundamental upstream and broader downstream needs in aerospace, civil, military, energy, automotive and other crucial emerging markets. The ACI is acutely attentive to genuine satisfaction gaps, trends and drivers in target markets and strategically invests in capabilities and expertise that align with acknowledged real-word problems. The ACI has direct access to world-renowned experts in composite technologies and is focused on sustainable organic growth in both capabilities and expertise. https://www.aci.msstate.edu/.

MISSISSIPPI STATE CHEMICAL LABORATORY (MSCL) is a state-appropriated regulatory agency for the State of Mississippi as well as a fee-for-service laboratory. It provides analytical data to assure quality, labeling, and safety of fertilizers, animal feeds, human foods, pesticides, and petroleum products in Mississippi. MSCL also checks private water supplies, provides assistance to industry, performs analysis of toxic chemicals for farmers, hospitals, doctors, veterinarians, law enforcement agencies and provides other analyses of interest to our citizens. http://www.mscl.msstate.edu/.

The **NATIONAL STRATEGIC PLANNING AND ANALYSIS RESEARCH CENTER (nSPARC)** is a trusted and reliable source for high-quality research and analysis which specializes in use-inspired research, data analytics, and software architecture and development. The research emphasizes workforce and economic development, but the diversity of expertise on our team means we cover a broad range of topics in education, economics, health, human services, and corrections. Unique experience with administrative records and longitudinal data systems, matched with the ability to apply the latest methodological and machine learning approaches allows nSPARC to draw meaningful insights from data to address challenges faced by policymakers, employers, economic developers, and state agencies. https://www.nsparc.msstate.edu/.

The **NORTHERN GULF INSTITUTE (NGI)** is a National Oceanic and Atmospheric Administration (NOAA) Cooperative Institute comprised of six academic institutions: Mississippi State University (lead), the University of Southern Mississippi, Florida State University, Louisiana State University, the University of Alabama in Huntsville, and the Dauphin Island Sea Laboratory. As such, the NGI is a consortium of academic institutions geographically distributed across the US Gulf Coast states with the research themes including Climate Change and Climate Variability Effects on Regional Ecosystems, Ecosystem Management, Coastal Hazards, Effective and Efficient Data Management Systems Supporting a Data-driven Economy. http://www.northerngulfinstitute.org/.

The **RASPET FLIGHT RESEARCH LABORATORY (RFRL)** is a historic, nationally recognized leader in the field of experimental aviation research. Raspet stands out as one of the University's most long standing and prominently established research entities with a 70-year history of excellence. True to its heritage, today Raspet continually advances modern concepts in experimental aviation through the research, development, testing, and evaluation of Unmanned Aircraft Systems (UAS) and their associated technologies. Raspet also leads the Department of Homeland Security's Systems Demonstration Range Facility for UAS. https://www.rcu.msstate.edu/.

The **RESEARCH AND CURRICULUM UNIT (RCU)** benefits K-12 and higher education by developing curricula and assessments, providing training and learning opportunities for educators, researching and evaluating programs, supporting and promoting career and technical education, and leading education innovations. https://www.rcu.msstate.edu/.

The **SOCIAL SCIENCE RESEARCH CENTER (SSRC)** is a multi-and inter- disciplinary research center with over 70 years of experience. The center conducts research on social, economic, political, human resource, social and environmental problems facing the state, nation, and world. The range of interdisciplinary involvement includes partnerships that go beyond the traditional social sciences and their work touches regions and people groups around the globe working with agencies and foundations at a state, federal, and international level. The center also supports several unique laboratories and research programs that conduct work in a variety of areas. https://ssrc.msstate.edu/.

THE FRED CARL, JR. SMALL TOWN CENTER is a community design center in the College of Architecture, Art, and Design at Mississippi State University. They provide a range of design and planning services for communities and research about small town challenges. They also provide a variety of design services including community engagement and visioning; master planning; project feasibility studies; downtown revitalizations; bike and pedestrian planning; research; creating and building; grant writing; and design seminars and workshops. https://www.smalltowncenter.msstate.edu/.

The **CENTER FOR ADVANCED VEHICULAR SYSTEMS EXTENSION (CAVS-E)** is a unit of Mississippi State University focused on meeting the needs of Mississippi's manufacturers by providing technical expertise with advanced engineering tools, professional development training geared for industry and on-site project support in the areas of product and process improvement. https://cavse.msstate.edu/.

The **CENTER FOR BIOMEDICAL RESEARCH EXCELLENCE (COBRE)** program is funded by a competitive grant from the Center for Research Capacity Building (CRCB) in the National Institute for General Medical Sciences (Grant # P20 GM103646), an Institute in the National Institutes of Health (NIH). COBRE is part of the Institutional Development Award (IDeA) Program, and this is the second 5-year period of support for this Center at MSU's College of Veterinary Medicine. https://www.vetmed.msstate.edu/research/cobre.

Through the **CENTER FOR COMPUTATIONAL SCIENCES**, the College of Arts and Sciences at Mississippi State University provides resources and a focal point for addressing scientific and educational questions in an interdisciplinary manner. https://www.ccs.msstate.edu/.

The **CENTER FOR GOVERNMENT AND COMMUNITY DEVELOPMENT** is a unit of the Mississippi State University Extension Service, which is located within the Division of Agriculture, Forestry, and Veterinary Medicine where educational programs, training activities information and technical assistance is provided in response to the high priority economic and community development needs of Mississippi communities and their citizens. https://gcd.extension.msstate.edu/about-us

The **COBB INSTITUTE OF ARCHAEOLOGY** is a unit of the College of Arts & Sciences of Mississippi State University that provides sponsorship and support for research, outreach and instructional programs related to the Middle Eastern origins of Western Civilization and to the Indians of the sound. The Institute's facilities include the Lois Dowdle Cobb Museum of Archaeology and its artifact collections, as well as multiple laboratories, classrooms, office space, and a library. https://www.cobb.msstate.edu/

The **CENTER FOR ENTREPRENEURSHIP AND OUTREACH (MSU E-center)** helps entrepreneurs start new companies and grow existing businesses, builds relationships with peers and successful entrepreneurs, and helps master essential skills to assess markets and operate businesses. https://ecenter.msstate.edu/about-us/

The **FOREST AND WILDLIFE RESEARCH CENTER** assists in conserving, developing, and using the forest, forest products, wildlife and fisheries resources of Mississippi, the nation, and other countries through research, technology transfer, and other service activities. https://www.fwrc.msstate.edu/.

The MSU **DIVISION OF AGRICULTURE, FORESTRY AND VETERINARY MEDICINE CENTERS AND INSTITUTES (DAFVM)** embodies MSU's national land-grant mission of teaching, research, and extension service while committing to growing food and fiber, conserving natural resources, and delivering reliable education. The Division is comprised of six major units. They are the College of Agriculture and Life Sciences, the College of Forest Resources, the College of Veterinary Medicine, the Forest and Wildlife Research Center, the Mississippi Agricultural and Forestry Experiment Station and the MSU Extension Service. All functions are performed at the main campus of MSU, four research and Extension centers, 15 branch stations and locations and county Extension offices in all 82 counties. https://www.dafvm.msstate.edu/.

The **GEOSYSTEMS RESEARCH INSTITUTE (GRI)** is a collaborative of academic scientist, engineers, and government and industry stakeholders active in conducting research to advance knowledge and practice in earth and its systems to improve policy and public awareness. Using geospatial technologies and high-performance computing, GRI is at the forefront in addressing some of today's most pressing agriculture, water resources, conservation, and wetland issues. https://www.gri.msstate.edu/.

THE GULF COAST COMMUNITY DESIGN STUDIO (GCCDS) is a professional service and outreach program of MSU's College of Architecture, Art + Design. GCCDS was established in Biloxi, Mississippi in response to Hurricane Katrina to provide architectural design services, landscape and planning assistance, educational opportunities and research to organizations and communities along the Mississippi Gulf Coast. GCCDS works through close, pragmatic partnerships with local organizations and communities in and beyond the three Mississippi's coastal counties, putting professional expertise to work to shape vibrant and resilient Gulf Coast communities. http://gccds.org/.

The **PAUL B. JACOB HIGH VOLTAGE LABORATORY** serves as an independent, non-industrial, university center for high voltage engineering. The laboratory focuses on high voltage research, evaluation, and education. This multi-purpose high voltage facility is designed to meet the evaluation needs of the industry and provides the necessary environment for academic research in high voltage engineering. As an integral part of our national high voltage technology structure, the laboratory serves as a means of strengthening the U.S. position in this specialized technical area. https://www.ece.msstate.edu/high-voltage-lab/.

The **INSTITUTE FOR CLEAN ENERGY TECHNOLOGY (ICET)** has historically operated as an engineering measurement and instrumentation laboratory. Of late, ICET has concentrated its efforts on HEPA filter testing and on the development of radiological mapping technologies. Most recently, establishing a Nuclear Quality Assurance Program (NQA-1) to better meet the needs of the nuclear power industry. The facilities include a department for machining and welding, a high-bay laboratory holding six industrial-scale HEPA filter test stands, and

additional laboratories equipped for the safe testing of radioactive materials.
https://www.icet.msstate.edu/

The **INSTITUTE FOR GENOMICS, BIOCOMPUTING, AND BIOTECHNOLOGY (IGBB)** provides researchers access to a team of highly skilled professionals trained in cutting edge genomics, proteomics, and high performance computing principles and techniques. The IGBB team not only generates molecular data using state-of-the-art equipment but works with investigators to efficiently derive biological knowledge from that data.
https://www.igbb.msstate.edu/

The **INSTITUTE FOR SYSTEMS ENGINEERING RESEARCH (ISER)** is a collaborative effort between the U.S. Army Engineer Research and Development Center and MSU. The goal of ISER's efforts and products is to mitigate risk, reduce cost and improve efficiency in Department of Defense (DoD) acquisition programs, serve as an additional asset for the state's industrial base for systems engineering related tasks, and create an environment that draws DoD and civilian industry development to the state of Mississippi. https://www.iser.msstate.edu/.

The **INTERNATIONAL INSTITUTE** is our state's leading global connection to dynamic worldwide partnerships, competitive international academic opportunities, and impactful research collaborations that shape our world's future. The International Institute serves as a hub for Mississippi State's expanding international activities and mobilizes faculty, staff, and students to engage globally and positively influence the lives of Mississippians and our neighbors around the world. https://www.international.msstate.edu/

The **MISSISSIPPI MIGRANT EDUCATION SERVICE CENTER** is a federal program that offers supplemental and supportive educational services to ensure that migrant children have access to all opportunities that a public education offers. A variety of services are available to migrant students in addition to the educational services provided by the school district.
https://www.mmesc.msstate.edu/

The **MISSISSIPPI WATER RESOURCES RESEARCH INSTITUTE (MWRRI)** provides a statewide center of expertise in water and associated land-use and serves as a repository of knowledge for use in education, research, planning, and community service.
https://www.wrri.msstate.edu/

The **MSU WORLD CLASS TEACHING PROGRAM** is a university-based initiative designed to recruit and mentor teachers seeking advanced certification through the National Board for Professional Teaching Standards (NBPTS) process. https://www.wctp.msstate.edu/.

The **MISSISSIPPI WRITING/THINKING INSTITUTE** is a network of educators committed to advance reading and writing instruction. The MSU Writing Project has partnered with the

MSU College of Education since 1985 and continues to serve teachers throughout the northeast Mississippi area. The MSU Writing Thinking Project supports teachers through high quality, on-going professional development, as they implement cognitively rigorous instructional practices aligned with state and national standards and assessments. https://www.msuwtp.msstate.edu/.

The **NATIONAL RESEARCH AND TRAINING CENTER ON BLINDNESS AND LOW VISION (NRTC)** is the nation's only federally funded center focused on employment outcomes for people who are blind or have low vision. The NRTC produces field-leading research and provides training to professionals ranging from direct-service practitioners to administrators of state agencies and federal programs. https://www.blind.msstate.edu/

The **STENNIS INSTITUTE OF GOVERNMENT AND COMMUNITY DEVELOPMENT** aims to enhance the efficiency and effectiveness of local and state governments, provide technical assistance to both rural and highly active communities in the southeast, and promote civic engagement and citizen involvement in the political landscape. https://www.sig.msstate.edu/

The **SOUTHERN RURAL DEVELOPMENT CENTER** seeks to strengthen the capacity of the region's 30 land-grant institutions to address critical contemporary rural development issues impacting the well-being of people and communities in the rural South. http://srdc.msstate.edu/

The **T.K. MARTIN CENTER FOR TECHNOLOGY AND DISABILITY** provides comprehensive, multi-disciplinary evaluations and services to remove limitations through the application of assistive technology, evidenced-based practice, training, and educational supports. The comprehensive nature of the services allows individuals across the lifespan to participate in educational, vocational, and leisure activities to the fullest degree they choose, while continuing to advance research in disability. The staff of the T.K. Martin Center consists of a specialized team of Special Educators, Speech-language Pathologists, Occupational Therapists, Physical Therapists, Psychologists, and Rehabilitation and Biomedical Engineers. Facilities at the center include adaptive computer laboratories, design and fabrication workshops, a driver rehabilitation program, a seating and mobility center and specialized evaluation rooms. https://www.tkmartin.msstate.edu/.

MSU researchers have the expertise and resources to solve critical issues and remain at the forefront of their fields. At the same time, they're working with students on worldwide challenges such as food security, solutions to human diseases, social and economic disparity, and cybersecurity. MSU is home to centers and institutes that are leaders in areas such as aerospace engineering, automotive engineering, unmanned aircraft systems, agriculture, data analytics, and social sciences, among other areas. To see more about research impacts, visit here: https://www.research.msstate.edu/about/research-impact

5. RESEARCH ADMINISTRION RESOURCES

OFFICE OF ENVIRONMENTAL HEALTH AND SAFETY (OHS). Environmental Health & Safety is a part of the Office of Compliance & Risk Management which provides leadership and university wide collaboration that strengthens accountability, proactively and cooperatively manages significant risks, upholds a safe and healthy campus environment, and promotes and assists in compliance with federal and state law. https://www.ehs.msstate.edu/

OFFICE OF LABORATORY ANIMAL RESOURCES (OLAR). OLAR is the service unit that provides veterinary care and animal husbandry resources for all animals required in biomedical research, teaching, and testing programs at MSU. The OLAR operates under the administrative authority of the President of MSU. The President has delegated institutional authority to the Vice President for Research (VPR), who serves as the MSU Institutional Official. The Director of OLAR reports to the VPR. The Manager of the Laboratory Animal Resources and Care (LARAC) unit reports to the Director of OLAR. The OLAR animal care and use program is accredited by AAALAC International, is registered by the USDA, and maintains an Animal Welfare Assurance with the Public Health Service. https://www.lar.msstate.edu/

OFFICE OF RESEARCH DEVELOPMENT (ORD). Research Development describes a complement of support services and strategic, proactive activities to build institutional capacity and to increase faculty members' competitiveness for attracting extramural research funding. The Office of Research Development supplements the administrative and compliance processes required for external funding by supporting individual faculty members, as well as large-scale institutional initiatives to improve funding success and grow the research enterprise. ORD provides support for investigators in addition to or beyond the support available within their College, Center, or Department. We serve as a liaison between and among investigators, departments, potential funders, and the Office of Sponsored Projects to produce quality, competitive, and compliant proposals and to support faculty and staff in achieving their funding goals. https://www.ord.msstate.edu/

OFFICE OF SPONSORED PROJECTS (OSP). The Office of Sponsored Projects, housed within the Office of Research and Economic Development, oversees Mississippi State University's external sponsored programs as the University's authorized signatory for grants, contracts, and other sponsored agreements. OSP coordinates interaction between the University, research faculty, and Sponsors by providing services such as proposal review and endorsement, agreement negotiation, award acceptance and authorization, and limited post-award research administrative services. The staff is responsible for ensuring that all research proposals and projects comply with university, federal, and sponsor regulations, policies, and procedures. https://www.osp.msstate.edu/

OFFICE OF TECHNOLOGY MANAGEMENT (OTM). The Office of Technology Management works to assess, protect, and manage the Intellectual Property (IP) developed by MSU faculty, staff, and students. The staff helps though the commercialization process, provides access to legal expertise, and help with the documentation needed for the discoveries to make it to market. https://www.otm.msstate.edu/

OFFICE OF RESEARCH COMPLIANCE AND SECURITY (ORCS). The Office of Research Compliance and Security provides support and protection for MSU's research enterprise with the highest standards of security, compliance, and ethics utilizing outreach, education, and effective, fair, and consistent customer service. They protect MSU, the researchers, research subjects (human or animal), and employees by helping to maintain compliance with regulations. https://www.orc.msstate.edu/

SPONSORED PROGRAMS ACCOUNTING (SPA). Sponsored Programs Accounting is primarily responsible for managing the restricted funds of Mississippi State University. This includes calculating and posting overhead, invoicing the appropriate agencies, monitoring timely receipt of the funds, and preparing financial reports for external agencies. Additionally, our office coordinates the time and effort reporting cycle, processes cost transfers, performs non-sufficient fund checking on restricted funds and continuously monitors accounts for compliance purposes. https://www.controller.msstate.edu/sponsoredprograms/

6. TECHNOLOGY, COMPUTING & CYBERSECURITY

INFORMATION TECHNOLOGY SERVICES. The mission of MSU's ITS is to enable learning, research, and service through an advanced information technology environment. The organization consists of 122 full-time employees, 7 graduate assistants, and 22 student workers working in three primary units – Information Technology Infrastructure, Enterprise Information Systems, and User Services. The Chief Information Officer, who reports to the Provost and Executive Vice President, is responsible for operational and budgetary oversight of ITS.

ITS has responsibility for overseeing MSU's academic and administrative systems and the information technology infrastructure that supports them. MSU is widely seen as a leader in providing a robust infrastructure for campus computing and in identifying and deploying new technologies that enable academic innovation in teaching, learning, research, and scholarship. *Enterprise Information Systems.* The mission of Enterprise Information Systems is to plan, develop, implement, and support administrative information systems throughout the university. These systems range from small departmental applications to comprehensive, enterprise systems such as Banner from Ellucian. Enterprise Information Systems is further organized into Application and Integration Services, Business Systems, Student Systems, and Web Development Services. Responsibilities include database administration, system integration,

system design, programming, implementation, web development, and on-going maintenance and support of the various systems. https://www.its.msstate.edu/

INFORMATION TECHNOLOGY COUNCIL. The Information Technology Council is chaired by the CIO and reports to the Provost and Executive Vice President. The Council's charge is to recommend strategies and policies aimed at ensuring a unified, state-of-the-art information technology environment delivered in a secure, efficient, effective, and non-duplicative manner. The Council also provides oversight and coordination for data and information security matters, including the university's Information Security Program, Incident Response Plan, and IT Disaster Recovery Plan, as prescribed by MSU's Information Security Policy, OP 01.10. Council membership represents a cross-section of University stakeholders from all vice-presidential divisions as well as the Presidents of the Faculty Senate and the Student Association. Full Council membership can be found at http://www.msstate.edu/directory/standing-committees/?committee_id=76.

USER SERVICES. User Services is the interface between the user and the technology. We provide quality training, support, and help that encompasses a complete spectrum of user backgrounds and skill levels. User Services is responsible for operation of the Service Desk, Campus Card Office, Desktop Services, and User Training and Support.

INSTRUCTIONAL TECHNOLOGY ADVISORY COMMITTEE. The Instructional Technology Advisory Committee (ITAC) advises the Provost and Executive Vice President, the Academic Deans Council, and the CIO on instructional technology policy and priorities, including the operation of university units supporting instructional technology. The committee is expected to monitor the needs for, progress of, and the competitive position of the use of instructional technology in the programs of the university. Where appropriate, the committee recommends goals and objectives, resource allocation strategies, support personnel and services, organizational structures, and exemplary instructional technology projects. Current ITAC membership can be found at http://www.msstate.edu/directory/standing-committees/?committee_id=29.

MISSISSIPPI DEPARTMENT OF INFORMATION TECHNOLOGY SERVICES. The Mississippi Department of Information Technology Services (MDITS), www.its.ms.gov, has legislative authority for information technology procurements over all state agencies, excluding K12 and Community Colleges. For IT procurements of $250,000 or less, MDITS has delegated that authority to the CIOs at the Mississippi Institutions of Higher Learning. For procurements over $250,000, the MSU CIO works with the procuring department and submits the appropriate procurement request – competitive procurement, exemption, cooperative purchasing, sole source, etc. - to MDITS for review/approval. Detailed information about IT procurement procedures can be found in the MDITS Procurement Handbook at http://www.its.ms.gov/Procurement/Documents/ISS%20Procurement%20Manual.pdf#page=1.

MissiON ADVISORY COUNCIL. The Mississippi Optical Network, MissiON, is a critical resource for MSU, as it is via MissiON that the University participates in the global commodity Internet as well as Internet2, the ultra-high performance research and education network of 300+ U.S. institutions of higher education. MissiON governance is via the MissiON Advisory Council, which is composed of the Chief Research Officers and Chief Information Officers of Mississippi State University, University of Southern Mississippi, Jackson State University, and University of Mississippi, as well as representatives from the Mississippi Department of Information Technology Services and the Mississippi Institutions of Higher Learning. See http://mission.mississippi.edu for more information.

INFORMATION TECHNOLOGY SERVICES

Mississippi State University is home to the **HIGH PERFORMANCE COMPUTING COLLABORATORY**, or HPC^2, an evolution of the MSU NSF Engineering Research Center for Computational Field Simulation at MSU. It is a coalition of member centers and institutes that share a common core objective of advancing the state-of-the-art in computational science and engineering through the utilization of high performance computing; a common approach to research that embraces a multi-disciplinary, team-oriented concept; and a commitment to a full partnership between education, research, and service. The HPC^2 member units are the Alliance for System Safety of UAS through Research Excellence (ASSURE); the Institute for Computational Research in Engineering and Science (ICRES); the Center for Cyber Innovation (CCI); the Center for Computational Sciences (CCS); the Geosystems Research Institute (GRI); the Institute for Genomic, Biocomputing & Biotechnology (IGBB); and the Northern Gulf Institute (NGI).

The HPC^2 facilities include two buildings, the High Performance Computing Center (HPCC) and Center for Advanced Vehicular Systems (CAVS) buildings, within the Thad Cochran Research, Technology, and Economic Development Park adjacent to the Mississippi State University campus in Starkville, Mississippi, and the Scient and Technology Center (STC) building at the NASA John C. Stennis Space Center (SSC) near Bay St. Louis, Mississippi. The HPCC building is a 71,000 square foot facility designed in an open manner to facilitate multi-disciplinary interactions and houses the organization's primary data center. The CAVS building is a 57,000 square foot facility consisting of numerous office suites, experimental laboratories housing an extensive array of equipment in support of materials, advanced power systems, and human factors research activities, as well as a small data center. The STC building at the NASA SSC is a 38,000 square foot facility consisting of office space, classroom space, and a data center. The HPC^2 provides an advanced computing infrastructure in support of research and education activities of the collaboratory's member centers and institutes. This infrastructure includes high performance computing (HPC) systems, high performance storage systems, a large capacity

archival system, high-bandwidth networking systems, and an extensive number of desktop workstations.

Each of the three facilities obtains wide area (external) network connectivity to the commodity Internet and Internet2 through dual 10 Gigabit/sec connections into the Mississippi Optical Network (MISSION), a regional optical network supporting research activities within the state. The two MISSION network connections are via geographically diverse paths across the state, providing for high-availability and fault tolerant communication channels, and access to the Internet2 connector site in Jackson, Mississippi which supports a potential capacity of more than 8 terabits per second. These robust wide area network connections give the HPC^2 researchers the ability to share large sets of data with collaborators across the country and around the globe. The physical facilities for the HPC^2 are a tangible representation of the institutional support for synergistic research taking place between and among Mississippi State University's academic colleges. Leadership and faculty from MSU's Bagley College of Engineering and the College of Arts and Sciences, in conjunction of many of the institutes and centers, collaborate seamlessly across traditional silos to address the challenges of today. Supportive infrastructure for cross- and multi-disciplinary research and collegiality are valuable commodities which enable nimbleness and quick adaptation, when needed, to address research challenges.

DATA STORAGE

Mississippi State University provides secure and sufficient housing for project data in many forms. The library has resources for ensuring appropriate and compliant storage and access of project data both during and post the project period. The MSU Institutional Repository is a central digital archive located within the university libraries' electronic infrastructure for collecting, organizing, preserving, and sharing intellectual and scholarly creations, and research data. This repository will allow the PI to make all de-identified research data publicly available, and the librarians will assist researchers with preparing research data for storage in the repository and can be organized and described in a way that will increase its discoverability for other researchers. Raw data will be kept for at least ten years following the publication of the journal articles, thereby enhancing reproducibility of the results by other researchers.

In all activities, the project team will adhere to regulations and employ best practices for data management and access/open science. The PI has ultimate responsibility for ensuring compliance with agency, federal, and institutional policies regarding data, including dissemination of results, administration of data sharing access and agreements, and management of technology and intellectual property. For all data sharing, access and discovery activities, data presentation will contain the requisite acknowledgement of federal support per agency policy. Furthermore, the PI acknowledges and assumes responsibility for compliance with the agency policy for digital research data and digital media and that data will be made publicly available,

"to the greatest extent and with the fewest constraints possible," to increase discovery and "promote efficient and effective use of government funding resources."

Two primary types of data will be generated through the proposed project. Raw data generated during the research in design and experimental phases, (by both internal and external users) and data that will ultimately be made publicly available via publications, presentations, etc. All data generated over the life of the project will be stored in the formats compatible with software available in public domain. For example, experimental and analytical data will be stored in the appropriate format for use, such as MS Word, Excel, and PDF, as appropriate, and image data will be stored in JPEG format and PDF. All experimental and analytical data will be stored in desk top computers and will be shared among the project participants. For external users, data will be stored as defined in mutually agreed upon data sharing agreements between the user and Mississippi State University.

As the project progresses, the stored data will be disclosed and uploaded to a dedicated drive accessible to the project staff and evaluator for evaluation and reference use. Data will be backed up on the main server of the Mississippi State University.

7. UNIVERSITY LIBRARY FACILITIES & SUPPORT

With creative discovery as a bold tradition and ever-evolving centerpiece of Mississippi State University's existence, MSU Libraries has an innovation driven presence as part of the state's leading research institution. World-class research collections, technology-infused learning labs, and user-driven centers make MSU Libraries inviting and exciting for those who are hungry for knowledge and solutions that can make a difference and positively impact lives. Driving the libraries forward is informed and highly trained faculty and staff providing teaching and research assistance.

MSU Libraries offer 100+ free workshops each semester, houses 2.3 million books and over 211,000 electronic journals. We offer students and faculty access to over 530 research databases and have over one hundred publicly accessible computers. We are one of only six universities with a Presidential Library, the Ulysses S. Grant Library. Our facilities house a wide range of libraries, museums, and reading rooms.

MITCHELL MEMORIAL LIBRARY is a state-of-the-art, main repository equipped to take advantage of the latest developments in information technology.
https://www.library.msstate.edu/mitchell-memorial-library#gsc.tab=0

The **BOB AND KATHY LUKE ARCHITECTURE LIBRARY** is housed in Giles Hall and supports the College of Architecture, Art and Design with an abundance of information on city planning, art, construction, interior design and more for students, faculty, and the community.

The **COLLEGE OF VETERINARY MEDICINE LIBRARY** has programming and services in the Wise Center designed to meet teaching, research, and clinical needs of the CVM's students and faculty, practicing vets, and the university and local community.

MSU'S GERTRUDE C. FORD FOUNDATION LIBRARY can be accessed by fifth-year School of Architecture students and faculty at the MSU Jackson Design Center in the state's capital city benefit from its holdings, along with local architectural firms.

PHIL HARDIN FOUNDATION LIBRARIES meet the reading, research, and information needs of students and employees at MSU-Meridian's College Park and Riley campuses.

The **ULYSSES S. GRANT PRESIDENTIAL LIBRARY** is the world's largest, single collection, with 17,000 linear feet of materials relating to the 18th President's life and work.

MUSEUMS, GALLERIES, AND EXHIBITS

The **JOHN GRISHAM ROOM** Displays memorabilia and materials from the writings and achievements of the bestselling author, former Mississippi legislator, and MSU alumnus.
CHARLES H. TEMPLETON, SR. MUSIC MUSEUM Tells the story of the "business of music" with its collection of more than 200 musical instruments, 13,000 recordings, and 22,000 pieces of sheet music.

ULYSSES S. GRANT PRESIDENTIAL LIBRARY MUSEUM Contains correspondence, photographs, paintings, engravings, statues, and other artifacts relating to the life of the 18th President of the United States.

FRANK AND VIRGINIA WILLIAMS COLLECTION OF LINCOLNIANA GALLERY Boasts the nation's largest, privately held research and display material on Abraham Lincoln, as well as the country's most comprehensive privately held Lincoln and Civil War library.

SOUTHERN LITERARY TRAIL GALLERY Emphasizes the country's first tri-state trail, with headquarters at MSU, connecting mythic places that influenced great American literature with its writers and playwrights.

8. DIVERSITY, EQUITY, AND INCLUSION

MSU is strongly committed to enhancing diversity at all university levels, and has made major strides in recruiting and successfully graduating students belonging to historically underrepresented groups (i.e. ethnicity, race, religion, differently-abled, etc.). The University's objectives pertaining to student diversity are to provide meaningful educational experiences and

interactions among a diverse undergraduate and graduate student body. To this end, MSU supports a university environment that values diversity and promotes intercultural growth for students by providing targeted programming and training which allows undergraduate and graduate students opportunities to develop intercultural skills and maturity and a wide array of diversity-related services and programs to better serve underrepresented populations.

MSU is designated as a 1862 Land Grant University, which gives MSU the opportunity to apply for grants to further expand its capacity to serve the academic needs of African American and Hispanic students. Furthermore, MSU is an **EPSCoR institution**. The NSF Established Program to Stimulate Competitive Research program seeks to enhance the research competitiveness of targeted jurisdictions (state, territory, or commonwealth) by strengthening STEM capacity and capability through a diverse portfolio of investments from talent development to local infrastructure. The EPSCoR program envisions its jurisdictions as recognized contributors to the national and global STEM research enterprise. The program seeks to catalyze the development of research capabilities and the creation of new knowledge that expands jurisdictions' contributions to scientific discovery, innovation, learning, and knowledge-based prosperity.

- Establish sustainable STEM education, training, and professional development pathways that advance jurisdiction-identified research areas and workforce development
- Broaden direct participation of diverse individuals, institutions, and organizations in the project's science and engineering research and education initiatives
- Effect sustainable engagement of project participants and partners, the jurisdiction, the national research community, and the general public through data-sharing, communication, outreach, and dissemination
- Impact research, education, and economic development beyond the project at academic, government, and private sector levels.

MSU's strategic plan reflects the University's interest in preserving and increasing the number of diverse faculty linked to its intellectual mission to provide the best possible education for all students. Faculty diversity is educationally relevant because it motivates students to incorporate different considerations, sensibilities, and lines of reasoning, which augment their analytical abilities. MSU's faculty and staff represent many different racial and ethnic backgrounds, gender and gender identities, sexual orientations, national origins, religious backgrounds, socioeconomic backgrounds, persons with disabilities and those with current or past military service. The university has multiple initiatives and activities to help foster increased diversity and equitable treatment for all and is studying and putting into action needed transformations.

Mississippi State University is committed to inclusive excellence at all levels, which is reflected and integrated into multiple aspects of campus life, including academic, co-curricular, and administrative activities and initiatives. Mississippi State University is committed to cultivating a community and atmosphere of mutual respect and civility across multiple identities, where all students, faculty, and staff can succeed.

The **OFFICE OF INSTITUTIONAL DIVERSITY AND INCLUSION (OIDI)** is committed to developing services, programs, and initiatives that foster successful recruitment and retention of faculty, staff, and students from diverse and under-represented groups. To this end, the Office strives to develop partnerships within communities to promote diversity which is an essential element of the mission of the University. Furthermore, the Office provides leadership and support toward developing a comprehensive and institution-wide approach to achieving and sustaining a diverse and pluralistic community of students, faculty, and staff.

OIDI supports faculty and staff through a variety of programs and services to assist individuals in their professional growth and provides departments and units with a variety of avenues to more actively recruit and retain underrepresented faculty and staff.
https://www.oidi.msstate.edu/diversity-msstate

Many students who interact with the center consider it to be a "home away from home." Through its many programs and services, the **HOLMES CULTURAL DIVERSITY CENTER** strives to:
- Encourage, through sensitivity training and programming, the development of a climate in which all cultures, especially minority and international students, are appreciated as valued members of the campus community
- Increase minority and international student enrollment and retention at Mississippi State by assisting the university's student recruitment and retention efforts
- Encourage and assist minority and international students with their academic, career aspirations and social adjustments to college life
- Serve as a liaison between minority students, international students, the faculty, and administration
- Promote the positive image that all cultures contribute to university life
- Make the college experience a productive and successful endeavor for all students

https://www.union.msstate.edu/hcdc/

DIVERSITY FACULTY FELLOWS:
https://www.msstate.edu/newsroom/article/2022/03/msu-names-spring-2022-access-diversity-and-inclusion-faculty-fellows; https://www.oidi.msstate.edu/diversity-msstate/our-commitment.

Info on First Generation Scholars: https://www.msstate.edu/newsroom/article/2022/10/first-generation-scholars-celebration-nov-7-11-be-eventful-week-msu.

Facts, Data, reports: https://www.oidi.msstate.edu/diversity-msstate/facts-reports.

Diversity info for recruitment and retention: https://www.oidi.msstate.edu/recruitment-retention

The **MSU LIBRARIES** are committed to creating a welcoming environment for all, respecting individual contributions to academics, providing equal access to information resources, fostering diversity in the workplace and the campus, and promoting civility and mutual respect. The libraries promote these goals through a variety of programs, resources, services, exhibits, speakers, policies, survey methods, and the recruitment and retention of a committed faculty and staff. Please join us in these worthy endeavors! https://www.library.msstate.edu/diversity

The **BAGLEY COLLEGE OF ENGINEERING** diversity program has a mission to increase the participation of minorities and women in the field of engineering. The program has been extremely successful in the past few years placing the Bagley College of Engineering in the top 15 institutions of higher learning in terms of graduating minority engineers. https://diversity.bagley.msstate.edu/

Through the diversity office located in the **MCCAIN ENGINEERING BUILDING**, students can join several groups that promote diversity and enhance the experiences of minority and women students throughout their college career. Each of these programs strives to create an educational environment of inclusiveness and high academic excellence that will continue to succeed in graduating and preparing minority students and women for an engineering career.