HISTORICALLY BLACK COLLEGES AND UNIVERSITIES

NASA TECHNOLOGY INFUSION
ROAD TOUR

AND MINORITY-SERVING INSTITUTIONS

Mississippi Valley State University

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Director of Bioinformatics

Office of
Small Business
Mentor-Protégé Program

Mississippi Valley State University (MVSU)

- A public historically black university located in Leflore County near Itta Bena, Mississippi

- Established in 1950 (youngest among Mississippi Institutions of Higher Learning)

- The 200-acre campus is located approximately 5 miles west of Greenwood, 50 miles east of Greenville, and 100 miles north of Jackson.

- A **master's degree-granting** institution of approximately 2,400 students and more than 500 faculty and staff.

- Currently offers 36 programs of study in varying fields leading to bachelor's and master's degrees.

- Accredited by the **Southern Association of Colleges and Schools Commission on Colleges (SACSCOC)**

- Athletics: NCAA Division I – Southwestern Athletic Conference (SWAC)

- https://en.wikipedia.org/wiki/Mississippi_Valley_State_University

Academics

Academic Department	Bachelor's	Master's
Business Administration	Accounting, Business Administration	Business Administration
Criminal Justice	Criminal Justice	Criminal Justice
Education	Early Childhood Education, Elementary Education, Secondary Education	Elementary Education, Master of Arts in Teaching, Special Education
English and Foreign Languages	English	
Fine Arts	Art, Music, Music Education	
Health, Physical Education and Recreations	Health, Physical Education and Recreation	Sports Administration
Engineering Technology	Engineering Technology	
Mass Communication	Communication, Speech	Convergent Media
Mathematics, Computer and Information Sciences	Computer Science, Mathematics	
Natural Sciences and Environmental Health	Biology, Chemistry, Environmental Health	Bioinformatics, Environmental Health
Social Sciences	General Studies, Government & Politics, History, Pre Law/Legal Studies, Sociology	Rural Public Policy and Planning
Social Work	Social Work	Social Work

STEM

[Engineering Technology](#)	B.S. Engineering Technology with the following concentrations: • Applied Management Technology • Architectural Construction Management • Automatic Identification Technology (AIT) • Computer Aided Drafting and Design • Electronic Technology
[Mathematics, Computer and Information Sciences](#)	B.S. Computer Science with the following tracks: • Computer Science • Cyber Security • Information Science B.S. Mathematics
[Natural Sciences and Environmental Health](#)	B.S. Biology B.S. Chemistry B.S. Environmental Health M.S. Bioinformatics M.S. Environmental Health

Research Capabilities

Biology

molecular systematics, nanotechnology, bioinformatics, environmental metabolic changes in small aquatic organisms, aquaculture, ecology, ichthyology

Chemistry

organic chemistry, drug design, nuclear waste, cancer research (prevention through food consumption), soybean science, physiology

Environmental Health

environmental quality and analysis, freshwater assessment, toxicogenomics, toxicology/risk assessment, remote sensing for ecological and human health, geographical information systems applications, geospatial analysis and modeling, geospatial statistics, artificial intelligence for environmental decision support

Research Capabilities

Engineering Technology
quality control, print reading, supervisory management, construction methods, surveying, industrial psychology, production management, technical writing, computer aided design (CAD)

Mathematics/Computer Science
intelligent systems, scientific visualization, commuter vision, signal processing, malware analysis, computer security, algorithms, software engineering, high-performance computing, human-computer interaction, computer science education/programming, cyber security, software development, remote sensing, partial differential equations, data analysis, ordinary differential equations, functional differential equations

Past Performance

Successful management of approximately **90** government-funded projects for over **$33.8M** for the past five years

Project Performance for the Past Three Years

Acquisition of equipment to study the toxicology and translational genomics of nanoparticle exposure, **Dept. of Defense**

Interaction of modified and unmodified biodegradable nanoparticles with innate immune system collectin proteins, **Dept. of Homeland Security**

Data collection and analysis on waterways and farming activities to determine the association between agricultural practices and existing or potential public health problems, **EPA**

Infuse NASA satellite data to model air-quality for Southeast United States, **NASA DEVELOP (UGA)**

Next-generation bioinformatics tools and analysis for agricultural research, **USDA**

Points of Contact

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