Grambling State University is a Historically Black University that was founded in 1901. The University offers baccalaureate, masters, and doctoral degree programs. Grambling State University is accredited by SACSCOC. As a component of its mission, the University seeks to provide opportunities for students to develop intellectually and to acquire appropriate career skills through instruction, research, public service, and special programs.

**Accreditations**
ABET-ETAC, ABET-CAC, ACS, AACSB, NASPAA, NASM, CAEP, NAST, ACEN, CSWE

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**CORE COMPETENCIES**

- **Biomedical** - toxicology and genomics to understand how molecular events lead to cancer, cellular mechanisms to understand disease development/progression, mapping protein-DNA interactions of nuclear cyclin D1 in distinct cancer systems

- **Business** - E-commerce, entrepreneurship, leadership training, operational excellence, logistics

- **Engineering Technology** - construction engineering technology, electronics engineering technology

- **Cybersecurity & Big Data** - cognitive radio network security, high performance GP-GPU computing in federated hadoop systems, deep learning & anomaly detection, game models, backpropagation models-neural networks, cloud data security

- **Education** - social and economic predictors of postsecondary students’ educational outcomes, methods to teach mathematical concepts

- **Material Science** - materials synthesis using additive manufacturing techniques, ultra-high temperature ceramic composites, nanoporosity in polymers and vacancy defects in metals, crystal phase composition, nanoparticle size analysis, micro-hardness analysis, magnetization studies, polymer synthesis

- **Mathematical Biology** - deterministic mathematical and stochastics models to study the spread of infectious diseases such as malaria, HIV, and typhoid

- **Molecular Modeling** - study of charge transport and their relation with structural properties of polymer and polymer composites using quantum mechanics and Monte Carlo-based computational methods. Study of Molecular transport in nanostructures using stochastic models

- **Public Health** - models for addressing low health literacy in Cameroon and Sub Saharan Africa, influence of stress on Type 2 diabetes

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**PAST PERFORMANCE**

Air Force Research Laboratory, Department of Energy, National Institutes of Health, National Science Foundation, NASA, Office of Naval Research, Housing and Urban Development, USDA-Rural Development, Louisiana Biomedical Research Network
### Air Force Research Laboratory Funding

- Design and Implementation of a Cognitive Radio Cloud Network
- High Performance GP-GPU Computing in Federated Hadoop Systems
- Advanced Ceramic Materials Processing and Characterization
- Preparation of Advanced Nano-Reinforced Composite Materials and characterization of properties
- Synthesis of Polyimides for use in the Fabrication of a Low Driving Voltage Electro-optic Modulator

### NASA Funding

- Consortium for Innovation in Manufacturing and Materials
- Polymerizable Monomer Reactants
- Synthesis of Thermally Stable Polymers for Nonlinear Optic Applications

### NSF Funding

- Materials for Energy Storage and Conversion - Catalytic Reactions Involving Metal Oxides
- Biodegradable Polymers (molecular modeling, synthesis, characterization of biodegradation properties)
- Secure and Survivable Cyber-Centric Sensor Networks-Algorithms and Architecture Research

### DOE Funding

- Role of Microstructure/Nanoporosity and Atomic structure in Activation, Deactivation, and Temporal Stability of Catalyst/support Systems for Fuel Conversion
- Development of Low Cost Membranes for H₂/CO₂ Separation in WGS Reactors

### Louisiana Biomedical Research Network Funding

- Investigation of the Toxicity of PCP and its impact on Gene Expressions in Hepatocyte Cultures
- Understanding Cellular Mechanisms that lead to Non-Alcoholic Fatty Liver Disease Development and Progression