

ASSISTANT, ASSOCIATE, FULL PROFESSORS
Mississippi State University
Bagley College of Engineering

Mississippi State University, through its Bagley College of Engineering, is seeking five new tenure-track faculty at the rank of Assistant Professor, Associate Professor or Full Professor. Applicants should have teaching and research interests that can enhance the strengths of the college in one or more of the following areas of interest:

- 1) *Energy* – Development of new energy sources, alternate forms of energy, advances in clean energy, intelligent generation, storage, control and distribution, the development of environmentally and economically sustainable energy sources, and modeling and simulation of different multiphysics energy systems. Current research includes environmentally and economically sustainable energy sources, energy generation and distribution, battery power, integrated micro-cooling, heating and power, energy efficient housing, and smart grids, and catalytic conversion of biomass to fuels and chemicals.
- 2) *Human Health Enhancement* – Current research includes modeling, simulating, and characterizing biomaterials, biomechanics, bioinformatics, tissue engineering, biosensors and antennas, pulmonary system, the brain, and human factors.
- 3) *Cybersecurity / Information and Decision Systems* – Acquisition, organization and interpretation of large amounts of data, and the underlying security and decision-making aspects including data acquisition, sensor systems, human machine interaction, data analysis, visualization, and artificial intelligence, modeling of decision processes, computational modeling, autonomous computing, multi-scale modeling, critical infrastructure protection, security management, and law enforcement support.
- 4) *Materials - Science and Engineering* – Understanding and modeling the process-structure-property relationships of materials from the atomic to the macroscopic scales and the critical multiscale relationships. Current research includes nanoscience and nanotechnology, fundamental properties and characteristics of materials, self-assembly and directed assembly of materials, soft and active materials, metallurgy, enhanced and sustainable building materials, failure analysis, composite materials and polymers, materials design, and mechanical design of structural materials.
- 5) *Transportation and Vehicular Systems* – Research on all transportation systems – air, land, sea, and space – manned and unmanned. Current research includes transportation planning, safety and security, military transport systems, automotive, aircraft, human factors, ergonomics, robotics, materials, simulation and optimization of transportation components, structures, and networks and mobile systems, guidance and navigation of spacecraft, transportation infrastructure, and optimization of transportation systems.
- 6) *Water and the Environment* – Ensuring healthy watersheds, oceans and ecosystems, protection of our fragile resources, and contaminant elimination. Current research areas include water quality modeling, bioremediation, sediment transport, earth systems modeling, nutrient management, risk management modeling, soil and environmental remediation, and modeling and optimization of treatment and post-treatment systems.

The successful applicants from this strategic college-level search will be placed into the most appropriate academic department. Preference will be given to individuals with a track record of interdisciplinary research collaboration.

MSU (www.msstate.edu), a Carnegie Foundation Higher Research University, is a comprehensive public institution with more than 20,000 graduate and undergraduate students and approximately 1,300 full-time faculty members, located in Starkville, Mississippi (visit.starkville.org). The Bagley College of Engineering has an approximate enrollment of 3,800 undergraduate and 670 graduate students and is nationally ranked in the top 75 for research expenditures (\$40.7MM). With over 100 tenure-track/tenured faculty members, the Bagley College of Engineering (www.bagley.msstate.edu) offers degree programs in eight academic departments (aerospace, agricultural and biological, chemical, civil and environmental, computer science, electrical and computer, industrial and systems, and mechanical).

Interested candidates must apply on-line at <https://www.msujobs.msstate.edu> (search for positions in the Dean of Engineering or PARF #496391). A PhD in an appropriate engineering or computer science discipline is required. Candidates are expected to have demonstrated the ability to conduct research at the highest level, and to have a record of, or the promise for, outstanding teaching and supervision of students. Applicant should submit a cover letter, curriculum vitae, names and contact information for at least three professional references, and a statement (limited to three pages) that describes research and educational interests. Screening of applications will begin November 27, 2017 and will continue until the position is filled.

MSU is an equal opportunity employer, and all qualified applicants will receive consideration for employment without regard to race, color, religion, ethnicity, sex (including pregnancy and gender identity), national origin, disability status, age, sexual orientation, genetic information, protected veteran status, or any other characteristic protected by law. We always welcome nominations and applications from women, members of any minority group, and others who share our passion for building a diverse community that reflects the diversity in our student population.