Structure

Department of Civil Engineering and Construction Management

The Master of Science in Applied Engineering (MSAE) degree program at Georgia Southern integrates state-of-the-art technology and interdisciplinary and conceptual science with hands-on, operational skills preparation. Graduates gain valuable knowledge and are placed in a unique position to make an immediate impact on their career and their employers. The Department of Civil Engineering and Construction Management offers MSAE students a concentration in Civil Engineering and Construction. Thesis or Non-thesis tracks are available within the program. Courses in the Civil Engineering and Construction concentration include hydrology, advanced water and waste water treatment, pavement analysis and design, asphalt mix design, structural analysis, and finite elements. Research conducted through the thesis or independent study project provides opportunity for individualized in-depth study within the concentration.

Department of Computer Science

The Master of Science in Computer Science (MSCS) degree program is structured specifically to provide a rigorous master’s program for people currently working in the information technology industry, as well as for those who wish to enter the field or are current undergraduate students interested in advancing their education. This unique program prepares students in the area of data and knowledge systems. With a concentration in the high-demand, competitive fields of data mining and data warehousing, the Georgia Southern University MSCS program is one of only a handful of such master’s degree programs in the world. Both thesis and project options are available within the MSCS program.

Department of Electrical Engineering

The Master of Science in Applied Engineering (MSAE) degree program at Georgia Southern integrates state-of-the-art technology and interdisciplinary and conceptual science with hands-on, operational skills preparation. Graduates gain valuable knowledge and are placed in a unique position to make an immediate impact on their career and their employers. The Department of Electrical Engineering offers MSAE students a concentration in Electrical and Electronic Systems. Thesis or Non-thesis tracks are available within the program. Courses in the Electrical and Electronic Systems concentration include analytical math, experimental research in area such as autonomous systems, optical communications, wireless power, micro antennas, and energy harvesting. Research conducted through the thesis or independent study project provides opportunity for individualized in-depth study within the concentration.

Department of Information Technology

The Master of Science in Applied Engineering (MSAE) degree program at Georgia Southern integrates state-of-the-art technology and interdisciplinary and conceptual science with hands-on, operational skills preparation. Graduates gain valuable knowledge and are placed in a unique position to make an immediate impact on their career and their employers. The Information Technology concentration in the MSAE program embraces the constantly changing IT industry, prepares graduates to analyze and manage IT networks and systems. Thesis or Non-thesis tracks are available within the program. Courses include IT management, data analytics, networking, data management and storage, and network security. Research conducted through the thesis or independent study project provides opportunity for individualized in-depth study within the concentration.

Department of Manufacturing Engineering

The Master of Science in Applied Engineering (MSAE) degree program at Georgia Southern integrates state-of-the-art technology and interdisciplinary and conceptual science with hands-on, operational skills preparation. Graduates gain valuable knowledge and are placed in a unique position to make an immediate impact on their career and their employers. The undergraduate Manufacturing Engineering program was launched in the fall semester 2015. With a projected program rollout over four years, the first program graduates are expected in spring semester 2019. Graduate level courses in the areas of Lean and Six Sigma, Additive Manufacturing, NanoManufacturing, and Packaging will be offered as the rollout process progresses. These graduate courses are applicable as electives in MSAE concentrations as determined in consultation with the major advisor. MSAE concentrations are Electrical and Electronic Systems, Energy Science, Engineering Management, Information Technology, or Mechatronics. Thesis or Non-thesis tracks are available within the program. Research conducted through the thesis or independent study project provides opportunity for individualized in-depth study within the concentration.

Department of Mechanical Engineering

The Master of Science in Applied Engineering (MSAE) degree program at Georgia Southern integrates state-of-the-art technology and interdisciplinary and conceptual science with hands-on, operational skills preparation. Graduates gain valuable knowledge and are placed in a unique position to make an immediate impact on their career and their employers. The Department of Mechanical Engineering offers concentrations in Energy Science, Engineering Management, and Mechatronics. Thesis or Non-thesis tracks are available within the program. Courses in the Mechanical Engineering concentrations include analytical math, renewable energy, combustion, engine development, quality control, leadership, environmental law, mechanical controls, system design and automation, modeling and simulation, fracture mechanics, robot dynamics, design and analysis, as well as experimental research. Thesis or independent study project research provides opportunity for individualized in-depth study within the concentration.