



Taming the terrain

Georgia Southern students compete annually in the Society of Automotive Engineers' (SAE) Mini Baja® competition. The contest consists of three regional competitions simulating real-world engineering design projects and their related challenges. Students are tasked to design and build an off-road vehicle that will survive the severe punishment of rough terrain.



The racer's edge

Students also compete in Formula SAE® competition to conceive, design, fabricate, and race with small formula-style racing cars. Restrictions on the car frame and engine are limited so that the knowledge, creativity, and imagination of the students are challenged. The cars are built with a team effort over a period of about one year and face off against approximately 120 other vehicles from colleges and universities around the world.

Mechanical and Electrical Engineering Technology



What is Mechanical and Electrical Engineering Technology all about?

Philosophy majors wonder WHY things happen,

Business majors wonder HOW MUCH something should cost,

Science majors wonder WHAT makes things happen, and

Engineering Technology majors wonder HOW TO APPLY their knowledge to make things happen.

If you are the type of person who wonders how to make things happen, and have some further questions about engineering technology, then you just might want to read on to find out more about Engineering Technology at Georgia Southern.

What is engineering all about?

Do you ever talk on the cell phone? Do you listen to music? Have you ever poured a glass of water from a faucet? Do you play videogames? Have you ever aired out of a quarter pipe on a bike or board. Do you watch television, use the microwave, or surf the Internet? Have you ever flown in an airplane? Do you play a sport? Have you ever gone to a concert? Do you watch movies, chew gum, or drive a car? Have you ever gone fishing?

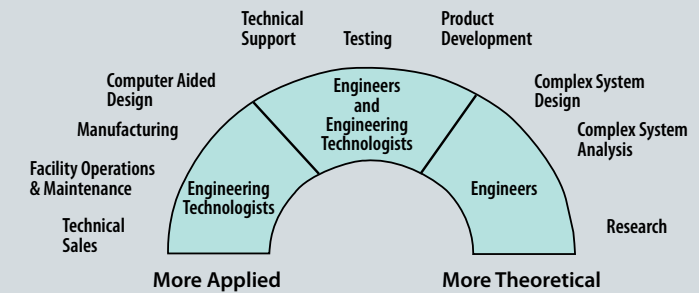
All of these activities involve some element of engineering. Engineers design, create, or modify almost everything we see, touch, hear, wear, use and eat. They are involved with every aspect of manufacturing and transportation. The work of engineers stimulates economic growth, fortifies national security systems, enhances energy conversion and generation, and protects the environment. If you have ever wondered how any of these things are accomplished, engineering technology might just be the degree for you.



Engineering vs. Engineering Technology?

The programs in Engineering Technology concentrate on the applications of technology and emphasize the processes involved in converting theories and ideas into practical techniques, processes, and products. Engineering technology prepares students for industry and focuses on turning practical ideas into marketable products. While being more applied in nature, engineering technology is less theoretical than engineering, and an emphasis is placed upon laboratory work. Nevertheless, there is some overlap in careers that both engineers and engineering technologists might find themselves in.

The Career options of Engineering Technologists and Engineers



How long will my degree take?

Mechanical, Electrical and Civil Engineer Technology are 4-year, Bachelor of Science degrees taught by Georgia Southern faculty. In addition to engineering science courses and courses in their area of specialization, engineering technology students take courses in mathematics through Calculus II, physics, chemistry, and environmental science. The study of the arts, literature, humanities, history and social sciences helps students gain a balanced, and well-rounded education.

If you have further questions, please contact:
 Mechanical and Electrical Engineering Technology
 Georgia Southern University
 P.O. Box 8045
 Statesboro, GA 30460-8045
 (912) 681-5373
<http://cost.georgiasouthern.edu/meteet/>

Can I complete my degree on the Georgia Southern campus?

Mechanical, Electrical and Civil Engineering Technology degrees are taught by Georgia Southern faculty and completed on the Statesboro campus. In fact, all engineering technology courses are taught exclusively by faculty; teaching assistants are not used. Class sizes are small, so there is ample access to the faculty. In fact most faculty members will know you by name before the end of the semester. As teacher-scholars, our faculty's first priority is to their teaching. However, they also engage in research to remain current in their disciplines, and interject this content into their teaching. All three Engineering Technology programs are accredited by the Technology Accrediting Commission of the Accreditation Board of Engineering Technology.

Will I be able to get a good job with this degree?

Most definitely! Our graduates are in high demand because they are technically trained, practical thinkers, and excellent communicators. MET graduates work in professional environments, often have the opportunity to travel, and earn starting salaries ranging from \$40,000-\$55,000. Our recent graduates have been hired by companies such as Great Dane, Gulfstream Aerospace, Easy-Go, Lumus Corporation, Applied Industrial Controls, Electrical Design Consultants, Timken and Honda.

What does an Electrical Engineering Technologist do?

An Electrical Engineering Technologist (EET) helps in the design, development, testing and manufacture of electrical and electronic equipment. For example, an EET would help build camera cell phones, MP3 players or iPods. An EET may perform quality control testing on medical devices or radar equipment. EET graduates may help design prototypes of intelligent robots. EETs help install and maintain computer



networks such as local area networks (LANs) and wide area networks (WANs). These are just a few of the types of job functions EETs graduates may pursue.

Since Engineering Technology is applications oriented, EET students learn how to **apply** their knowledge of electrical engineering principles to help design, develop and manufacture innovative technology. At Georgia Southern, EET students take several laboratory classes that emphasize the implementation of electrical designs. Students build and test analog and digital circuits, design and download programs for microcontrollers, analyze power distribution systems, and build PCM transmitters and receivers.

The EET program offered at Georgia Southern University is a four-year program leading to a Bachelor of Science degree. Graduates of our program have demonstrated knowledge of circuit analysis and design, analog and digital electronics, and microcontrollers. They have selected expertise in one or more of the following areas: RF Amplifier Design, Electrical Distribution Systems, Programmable Controllers, Fiber Optic Communication, Industrial Electronics, and Communications Electronics. Further Electrical Engineering Technology career information can be found at: <http://ieee.org/web/careers/home/index.html#students> <http://stats.bls.gov/oco/ocos027.htm>

What does a Mechanical Engineering Technologist do?

Mechanical Engineer Technology (MET) is a professional degree in the field of applied engineering sciences. MET areas of technical depth at Georgia Southern include mechanical design and analysis, material science and manufacturing processes, thermal-fluid-energy sciences, computer aided engineering graphics and analysis, and electro-mechanical devices and controls. By applied engineering sciences, it is meant that application is emphasized over theory.

The field of Mechanical Engineering Technology encompasses a broad range of careers that include design, testing, manufacturing, operations, maintenance, technical support, customer service, and technical sales. These varied careers can be in support of industries as diverse as product design and fabrication, materials testing, power generation, climate control (Heating, Ventilation, and Air Conditioning), transportation (vehicles and infrastructure), computer aided manufacturing, robotics, systems control, and solar and alternative energy applications. Mechanical Engineering Technologists are applied problem solvers, limited in their professional growth only by their personal

motivation and ability. Responsibilities can range from those of a support technician to plant manager. In the State of Georgia, MET professionals can attempt the challenging process to become licensed Professional Engineers (PE).

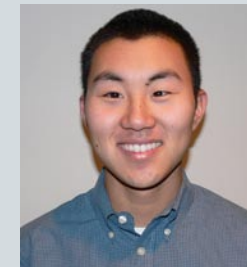
The MET program at Georgia Southern is a rapidly growing program with a mature and stable curriculum. A Bachelor of Engineering Technology degree was approved by the Board of Regents in 1972 and first offered at Georgia Southern in 1973. Undergraduate research and student projects are key components of Mechanical Engineering Technology at Georgia Southern. On-going student projects include design and fabrication of an off-road vehicle (Society of Automotive Engineers Mini Baja), design and fabrication of a scale formula-style race car (FormulaSAE), and design and fabrication of human powered vehicles. Through an active professional society student chapter of the American Society of Mechanical Engineers (ASME), MET students have the opportunity to engage in professional development, social, and service activities. Further Mechanical Engineering Technology career information can be found at:

http://www.asme.org/Education/PreCollege/EngineeringResources/Technology_Which_Path_Take.cfm



"I am living in New Jersey and working for a company called SEA / Altran Solutions. They deal with power plants in the New York area. They also do a lot of design work for companies. I've come to realize that GSU gave me the tools to be successful in the work world."

– Kyle Ryan, Class of 2005



"I'm sure you've heard about the push to get more trucks armored to protect our troops from roadside bombs and small arms fire. A question arose about whether some of our improvised armor was capable of stopping small arms fire. As I was sanding the metal down, I remembered doing a similar exercise in engineering technology class. I never thought I would do anything similar to that experiment in real life."

– Jeff Frankart, Class of 1997



"I'm currently working with a company called RDM Technologies up in Marietta, Ga., that deals with refrigeration and process systems. They build the process equipment that mixes beverages like Pepsi and Coke. It's really quite interesting, and I'm enjoying it."

– Tera Kudrasovs, Class of 2004