Renewable Energy Engineering Minor

Program Description

A minor in Renewable Energy Engineering is suitable for students who intend to apply their knowledge of engineering principles to renewable and alternative energy generation and efficient utilization. This minor will provide students an opportunity to examine different renewable energy sources including solar, hydrokinetic, wind, geothermal and learn energy efficiency aspects of sustainable energy systems. This program is multidisciplinary in nature and is developed in collaboration between the Electrical Engineering and Mechanical Engineering departments at the Southern Polytechnic College of Engineering and Engineering Technology. Students need to complete 15 credit hours in this minor program (6 credit hours of core courses and 9 credit hours of renewable energy elective courses). A student must earn a grade of "C" or better in all courses for the minor. At least 6 hours of this minor must be non-duplicative with the course requirements of the student's major.

All upper-level engineering courses require Engineering Standing. Non-engineering students who desire to enroll in upper-level engineering courses to complete a minor or a dual major must have the applicable course prerequisites and at least 2.70 GPA in the following courses:

- ENGL 1101
- ENGL 1102
- PHYS 2211 and PHYS 2211L
- CHEM 1211 and CHEM 1211L OR PHYS 2212 and PHYS 2212L
- MATH 1190
- MATH 2202

12 additional credits from courses in the Southern Polytechnic College of Engineering and Engineering Technology or with prefixes CHEM, CS, CSE, IT, MATH, PHYS, or STAT.

This program is a part of the Southern Polytechnic College of Engineering and Engineering Technology.

Admission, Enrollment, and Graduation Policies

<u>Admission Requirements</u>

This program does not have specific admission requirements and only Admissions to Kennesaw State University is required.

Graduation Requirements

Each student is expected to meet the requirements outlined in the Academic Policies: 5.0 PROGRAM REQUIREMENTS & GRADUATION.

Program Course Requirements

Required Courses (6 Credit Hours)

- ENGR 3601: Fundamentals of Renewable Energy
- ENGR 3602: Energy Efficiency

Electives (9 Credit Hours)

Select three of the following for a total of nine credit hours:

- ENGR 3603: Hydrokinetic Energy
- ENGR 4601: Fundamentals of Solar Power
- ENGR 4602: Wind Power
- ENGR 4603: Geothermal and Bioenergy Systems
- ENGR 4604: Distributed Generation & Smart Grids
- EE / ME / MTRE / CPE / ISYE / CE 4400-Directed Study*
 *Research project must have Renewable Energy emphasis and requires the approval of the Renewable Energy Engineering Minor Program Coordinator.

Program Total (15 Credit Hours)