Sustainable Engineering, MSE

Program Description

Degree Awarded: MSE Sustainable Engineering

The MSE in sustainable engineering is a multidisciplinary graduate program ideal for professionals and graduate-level students with engineering and physical science backgrounds who wish to design a flexible individualized plan of study.

Courses cover such sustainable engineering topic areas as energy systems and alternative energy production, water, transportation, earth systems engineering, industrial ecology, life cycle assessment, environmental technologies, green construction practices and sustainable technology systems.

The goal of sustainable engineering is to enable long-lasting improvement of the human condition. Sustainable engineering transcends traditional engineering education by integrating considerations of complex social, environmental, political and economic factors into engineering theory and practice in order to achieve more economically, technically, environmentally, institutionally, and socially efficient and robust solutions.

At a Glance

- **College/School:** Ira A. Fulton Schools of Engineering
- **Location:** online

Degree Requirements

30 credit hours including a capstone course and a written comprehensive exam, or
30 credit hours including a thesis and written comprehensive exam, or
30 credit hours including the required applied project course (CEE 593) and a written comprehensive exam

**Required Core (12 credit hours)**

**Infrastructure Systems Track Courses (9 credit hours) or**
Energy Systems Track Courses (9 credit hours) or

Earth Systems Engineering and Industrial Ecology Track Courses (9 credit hours)

Electives (3 credit hours)

Culminating Experience (6 credit hours)

Additional Curriculum Information
Students complete nine credit hours in a selected track. Available track options are infrastructure systems, energy systems, and earth systems engineering and industrial ecology.

Students should see the academic unit for an approved course list.

Admission Requirements

Applicants must fulfill the requirements of both the Graduate College and the Ira A. Fulton Schools of Engineering.

Applicants are eligible to apply to the program if they have earned a bachelor's degree or master's degree in engineering or a closely related field from a regionally accredited institution.

Applicants must have a minimum of a 3.00 cumulative GPA (scale is 4.00 = "A") in the last 60 hours of a student's first bachelor's degree program, or applicants must have a minimum of 3.00 cumulative GPA (scale is 4.00 = "A") in an applicable master's degree program.

All applicants must submit:

1. graduate admission application and application fee
2. official transcripts
3. GRE scores
4. letters of recommendation
5. proof of English proficiency

Additional Application Information
An applicant whose native language is not English (regardless of current residency) must provide proof of English proficiency.

Students with a degree in civil engineering, environmental engineering, construction engineering, mechanical engineering or with an engineering degree other than these listed may be admitted, with deficiencies as identified by the sustainable engineering faculty, if appropriate. If the applicant does not have an
undergraduate degree in any of these programs, additional requirements may be necessary based upon the applicant's background, including sufficient courses in mathematics that include but are not limited to calculus, differential equations and linear algebra. A faculty committee will determine which required courses are needed on a case-by-case basis.

**Attend Online**

ASU offers this program in an online format with multiple enrollment sessions throughout the year. Applicants may view the program description and request more information [here](#).

**Contact Information**

School of Sustainable Engineering & Built Envirnmt | CAVC 437  
Sebe.advising@asu.edu | 480-965-0595