Sustainable Engineering, MSE

ESSUEMSE

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 or 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 the required applied project course (CEE 593) and a written comprehensive exam, or
30 credit hours, a thesis and a written comprehensive exam, or
30 credit hours, a written comprehensive exam and the required capstone course (CEE 588)
Required Core (12 credit hours)

Infrastructure Systems Track (9 credit hours) or
Energy Systems Track (9 credit hours) or
Earth Systems Engineering and Industrial Ecology Track (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.

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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 cumulative GPA of 3.00 (scale is 4.00 = "A") in the last 60 hours of their first bachelor's degree program, or applicants must have a minimum cumulative GPA of 3.00 (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 must provide proof of English proficiency regardless of current residency.

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 calculus, differential equations and linear algebra. A faculty committee determines 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.

**Career Opportunities**

Sustainable engineering students can pursue careers as sustainability consultants, sustainability managers, corporate social responsibility sustainability professionals and water engineering specialists, among others.

**Contact Information**

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