Program Description

Degree Awarded: MS Environmental and Resource Management (Water Management)
The MS program in environmental and resource management provides students who have a background in the sciences, engineering, management, natural resources management, environmental health and safety, or other affiliated areas with the regulatory and technical background they need to mitigate the environmental impact of industrial sources of pollution, ensure compliance with environmental regulations, and manage and preserve engineered and natural ecosystems.

The concentration in water management focuses on issues of water quality, supply, treatment, reclamation, conservation and augmentation strategies. This program is applicable especially to people who work in municipal, state, federal and tribal water and environmental agencies; water providers to urban and agricultural users; people who work in manufacturing and mining industries; as well as those interested in sustainable development in this country and around the world.

Graduate courses are available in a traditional face-to-face format as well as web-based, asynchronous distance learning. It is possible to complete the program within two years, including summers. Many students are working professionals and are able to finish the degree while working full time.

At a Glance

- **College/School:** [Ira A. Fulton Schools of Engineering](#)
- **Location:** [Polytechnic](#)

Accelerated Program Options
This program allows students to obtain both a bachelor's and master's degree in as little as five years. It is offered as an accelerated bachelor's and master's degree with:

- Environmental Science, BA
- Environmental Science, BS
- Environmental and Resource Management, BS

Acceptance to the graduate program requires a separate application. During their junior year, eligible students are advised by their academic departments to apply.

### Degree Requirements

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

#### Required Core (6 credit hours)
ERM 502 Regulatory Framework for Toxic and Hazardous Substances (3) or ERM 527 Environmental/Resources Regulations Concepts (3)
ERM 503 Principles of Toxicology (3)

#### Concentration (9 credit hours)
ERM 523 Soils and Groundwater Contamination (3)
ERM 533 Water and Wastewater Treatment Technologies (3)
ERM 535 Water Law and Policy (3)

#### Electives or Research (9-15 credit hours)

#### Culminating Experience (0-6 credit hours)
ERM 593 Applied Project (3)
ERM 599 Thesis (6)
portfolio (0)
written comprehensive exam (0)

### Additional Curriculum Information

Students choose one of the culminating experiences listed above. Thesis students take nine credit hours of electives and research; applied project students take 12 credit hours of electives and research; portfolio and written comprehensive exam students take 15 credit hours of electives and research.

Students should see the academic unit for the approved course list for electives or research. Other coursework may be used with the approval of the academic unit.

The thesis and applied project options have an oral defense.
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 U.S. bachelor's or master's degree from a regionally accredited institution or the equivalent of a U.S. bachelor's degree from an international institution that is officially recognized by that country in engineering, physical sciences, mathematics or a similar field.

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. personal statement
4. professional resume
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. Applicants should see the Graduate Admission Services website at https://admission.asu.edu/international/graduate/english-proficiency.

Global Launch at ASU offers an online alternative to standardized testing for international students who are seeking admission to ASU but need proof of English proficiency. https://globallaunch.asu.edu/learn-english/online-english/english-for-admission

If the applicant does not meet the minimum GPA requirements, the application may still be considered. In certain cases, demonstrated aptitude through professional experience or additional postbaccalaureate education is considered.

Unofficial transcripts may be submitted at time of application. If admitted, applicants must then submit official transcripts to ASU Graduate Admission Services.

Application Deadlines

Fall

Spring
Career Opportunities

Graduates are employed by industrial operations such as manufacturing and mining industries; federal, state and local environmental and water agencies; environmental firms; utilities; international agencies such as the U.N. and the World Bank; and NGOs.

Contact Information

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