

ENVIRONMENTAL ENGINEERING PROGRAM

Master of Environmental Engineering (M.E.V.E.) Degree

DEGREE INFORMATION

Program Admission Deadlines:

Fall:
February 15
Spring:
October 15
Summer:
February 15

Minimum Total Hours: 30
Program Level: Masters

CIP Code:
14.1401

Dept Code: EGX

Program (Major/College): EVE EN

CONTACT INFORMATION

College: Engineering
Department: Civil and Environmental Engineering

Contact Information: www.grad.usf.edu

Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

The M.E. degree provides a student with the opportunity to earn the advanced degree by coursework only. Students must have an accredited first degree in engineering or complete a list of makeup engineering coursework. Many of the department's graduate courses are offered on weekday evenings, which permits part-time and FEEDS (Florida Engineering Education Delivery System online) students the opportunity to seek a graduate degree.

Accreditation:

Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas:

The field of Environmental Engineering has long been known for its breadth and ability to adapt to the new technological, societal, and global problems facing the environment. Major research areas include water quality engineering; air quality engineering; fate and transport of contaminants in the environment; environmental biotechnology and nanotechnology; waste management; sustainability and ecological engineering; surface water hydrology and hydraulics; and groundwater hydrology. Other focus areas include water reuse, green engineering, renewable energy, fate of emerging contaminants, and humanitarian engineering that has a developing world focus. Graduates of the programs are prepared for careers with governmental agencies, nongovernmental organizations (NGOs), or private industry and firms involved in planning, design, research and development, or policy. The environmental engineering laboratories provide state-of-the-art analytical equipment for chemical and biological research. Equipment includes an ion chromatograph, atomic absorption spectrophotometer, several gas chromatographs, HPLC, ICPs, TOC machine, and environmental chambers. Field research sites are available locally and in several international settings that include developing world communities.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

- Overall GPA 2.75; GPA in major 3.00

- GRE ~~1510~~650Q; ~~143~~350V and with 3.0 AW or valid fundamentals of engineering (FE) certificate preferred. Verification of FE certification should be obtained from the professional engineering (PE) board where the FE certification was obtained. See the CEE department website for more information: <http://www2.eng.usf.edu/cee/graduate/apply.htm>.
- TOEFL (international applicants only) 79 (550 paper based exam) or 6.5 (IELTS) ~~2.13 (CBT)~~
- Two Letters of Reference.
- Statement of Purpose
- Resume
- Exceptions made on a case-by-case basis where warranted.

DEGREE PROGRAM REQUIREMENTS

Total Program Minimum Hours: 30 hours minimum

The minimum coursework requirement for the Master of Engineering degrees is 30 credit hours. No research thesis is required. All students must take four principles courses in physical/chemical principles; biological principles; aquatic chemistry, and sustainability and two environmental engineering process elective courses. ~~An international capstone design course is available that includes a field experience in the developing world.~~

Core Courses (required) 12 hours minimum

ENV 6002 Physical Chemical Principles	3
EES 6107 Biological Principles of Environmental Engineering	3
ENV 6666 Aquatic Chemistry	3
CGN 6933 Green Engineering for Sustainability <i>or</i>	3
CGN 6933 Green Infrastructure for Sustainable Communities) <i>or</i>	3
ENV 6510 Sustainable Development Engineering	3

Elective Courses (18 ~~2~~ additional courses required, two courses must be from this list) 18 hours minimum

ENV 6519 <u>Advanced Physical/Chemical Processes in Environmental Engineering</u>	3
CGN 6933 Environmental Biotechnology	3
ENV 6105 Air Pollution <u>Fundamentals</u>	3
<u>CGN 6933 Air Pollution Engineering</u>	3
<u>ENV 6564 Environmental Engineering Design</u>	

COURSES

See <http://www.ugs.usf.edu/sab/sabs.cfm>

ENVIRONMENTAL ENGINEERING PROGRAM

Master of Science in Engineering Science (M.S.E.S.) Degree

DEGREE INFORMATION

Program Admission Deadlines:

Fall:
February 15
Spring:
October 15
Summer:
February 15

Minimum Total Hours: 30
Program Level: Masters
CIP Code:

14.1401

Dept Code: EGX

Program (Major/College): EVE EN

Concentration:

Masters International Program (MIP)

CONTACT INFORMATION

College: Engineering
Department: Civil and Environmental Engineering

Contact Information: www.grad.usf.edu

Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

The M.S.E.S. degree provides a student with the opportunity to earn the advanced degree by combining coursework and a research thesis. ~~This program is typically open to students who have a first degree in science or mathematics but do not have an accredited first degree in engineering and are not completing makeup coursework that would be required for the M.S. or M.E. degrees.~~ A Master's International Program in Civil & Environmental Engineering allows students to combine their graduate education and research with engineering service in the Peace Corps. ~~Many of the department's graduate courses are offered on weekday evenings, which permits part-time and FEEDS (Florida Engineering Education Delivery System online) students the opportunity to seek a graduate degree.~~ The M.S.E.S. is a research oriented degree in which the student writes, as a major part of the degree requirements, a thesis that defines, examines and reports in depth on a subject area relevant to environmental engineering.

Accreditation:

Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas:

The field of Environmental Engineering has long been known for its breadth and ability to adapt to the new technological, societal, and global problems facing the environment. Major research areas include water quality engineering; air quality engineering; fate and transport of contaminants in the environment; environmental biotechnology and nanotechnology; waste management; sustainability and ecological engineering; surface water hydrology and hydraulics; and groundwater hydrology. Other focus areas include water reuse, green engineering, renewable energy, fate of emerging contaminants, and humanitarian engineering that has a developing world focus. Graduates of the programs are prepared for careers with academia, governmental agencies, nongovernmental organizations (NGOs), or private industry and firms involved in planning, design, research and development, or policy. The environmental engineering laboratories provide state-of-the-art analytical equipment for chemical and biological research. Equipment includes an ion chromatograph, atomic absorption spectrophotometer, several gas chromatographs, HPLC, ICPs, TOC machine, and environmental chambers. Field research sites are available locally and in several international settings that include developing world communities.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

- Overall GPA 2.75; GPA in major 3.00
- GRE [151Q, 143V and 3.0 AQ](#)~~650Q, 350V with 3.0 AW~~ or valid fundamentals of engineering (FE) certificate preferred. Verification of FE certification should be obtained from the professional engineering (PE) board where the FE certification was obtained. See the CEE Dept. website for more information: <http://www2.eng.usf.edu/cee/graduate/apply.htm>.
- TOEFL (international applicants only) [79 \(550 paper based exam\) or 6.5 \(IELTS\) or 213 \(CBT\)](#)
- [Two \(2\) Letters of Reference \(MIP students must submit 3 letters of reference\)](#)
- [Statement of Purposes](#)
- [Resume](#).
- Exceptions made on a case-by-case basis where warranted.

DEGREE PROGRAM REQUIREMENTS

The programs consist of a minimum of 24 credit hours of coursework and 6 credit hours of thesis. All students must take four principles courses in physical/chemical principles; biological principles; aquatic chemistry, and sustainability and two environmental engineering process courses. An international capstone design course is available that includes a field experience in the developing world.

Core Courses (required)

ENV 6002 Physical Chemical Principles	3
EES 6107 Biological Principles of Environmental Engineering	3
ENV 6666 Aquatic Chemistry	3
CGN 6933 Green Engineering for Sustainability <i>or</i>	3
CGN 6933 Green Infrastructure for Sustainable Communities <i>or</i>	3
ENV 6510 Sustainable Development Engineering	3

Masters International Program (MIP)

12 hours minimum

EMV 6510 Sustainable Development Engineering

A minimum of one (1) course (3 credits) from the following anthropology courses:

ANG 6766 Research Methods in Applied Anthropology

ANG 6730 Socio Cultural Aspects of HIV/AIDS

ANG 6469 Health, Illness and Culture

ANT 4930 Infectious Diseases

A minimum of one (1) course (3 credits) from the following global public health courses:

PHC 6764 Global Health Principles and contemporary Issues

PHC 6761 Global Health Assessment Strategies

Three (3) additional credits of coursework in international development engineering or related areas

CST 6990 for full time global training and service in the U.S. Peace Corps (0 Credits)

Elective Courses (12 additional courses required based on approval of graduate committee)

COURSES

See <http://www.ugs.usf.edu/sab/sabs.cfm>

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