Graduate studies in environmental engineering at the University of Hartford lead to the Master of Engineering (M.Eng.). The program emphasizes applied design and stresses communication, which is very important for a successful career. The Master of Engineering program includes independent study requirements, which offer the opportunity to pursue design projects or self-directed study. The program, which offers specialty course work, applied mathematics, engineering management, and design project independent study, provides excellent preparation for an engineering career and for continued graduate study.

The graduate program stresses applied research for the practicing engineer. The goal is to prepare you to solve more sophisticated design problems that will help you advance in your engineering career. Small classes promote interaction with the faculty and keep you up to date with the most recent technology. This is combined with research projects that offer you the opportunity to become an expert in your chosen field.
ACCREDITATION

All graduate engineering degree programs are accredited by the New England Association of Schools and Colleges and by the Board of Higher Education of the state of Connecticut. According to ABET (Accreditation Board for Engineering and Technology) regulations, ABET does not accredit both undergraduate and graduate programs at the same time.

GRADUATE ENVIRONMENTAL ENGINEERING PROGRAM REQUIREMENTS

To be considered for admission applicants must have an appropriate baccalaureate degree in engineering from an engineering degree program accredited by the Engineering Accreditation Commission (EAC) of the Accrediting Board for Engineering and Technology (ABET); and have a minimum 3.0 GPA as an undergraduate.

Applicants who hold baccalaureate degrees in engineering fields not usually considered typical (electrical, mechanical, civil, aerospace, chemical, computer, or control engineering are typical engineering degrees), or who hold baccalaureate or master’s degrees in non-engineering fields or in engineering technology, or those whose undergraduate GPA is below 3.0 but who have significant engineering experience will be considered on an individual basis. The same applies to applicants holding bachelor degrees from institutions not accredited by EAC/ABET. Applicants in these categories may be required to complete specified undergraduate engineering courses before being admitted to the Master of Engineering program. Students should obtain at least a B grade in all such preparatory courses. Applicants may enroll for up to 6 credits on a non-matriculated basis prior to making a formal application for admission. Grades of courses taken on this basis will be considered in the review of the application.

APPLICATION REQUIREMENTS

The admissions review committee will consider only complete applications. All application materials should be sent to the Graduate Office at the following address: Center for Adult and Graduate Academic Services, CC231; University of Hartford; 200 Bloomfield Avenue; West Hartford, CT 06117 USA.

The following items are required:

• An on-line application
• A non-refundable application fee of $50
• Official transcripts for all collegiate level coursework forwarded to the University of Hartford
• Letter of intent or resume
• 2 letters of recommendation
• If interested enrolling full time and applying for an assistantship: Official results of the GRE (Graduate Record Exam) forwarded to the University of Hartford using school code 3436. Visit: www.ets.org

International Applicants

The following items are required in addition to the above:

• TOEFL – official scores to be submitted. The University of Hartford test code Number is 3436. Visit TOEFL at: www.ets.org Min score: 550 paper-based; 79-80 iBT. IELTS is also accepted. Min score 6.5 Visit: www.ielts.org
• Guarantor’s Statement – A certified Guarantor’s Statement of financial support is required. You may download the Guarantor’s Statement at: www.hartford.edu/graduate/int
DEADLINES AND DATES

Admission into Engineering can occur for the Fall or Spring Semester. Applications are accepted year-round, but should be received no later than November 1 for the spring term and April 15 for the fall term. The admissions committee will review complete applications in the order in which they are received.

COSTS OF ATTENDANCE

Graduate students in Engineering are charged the per-credit-hour rate. The 2013-2014 academic year per-credit-hour rate for courses in the Engineering program is $695 per credit hour.

International students who hold F-1 visas are required to attend as full-time students (minimum of 9 credits per semester). The 2013-2014 academic year full-time tuition and fees for international graduate students in Engineering program is $12,570 per year. This is estimated and based on the minimum full-time cost for tuition and fees for the fall and spring semesters.

FINANCIAL AID

Domestic Financial Aid:
Student financial assistance for graduate and professional students through the Office of Admission and Student Financial Assistance at the University of Hartford is limited to the Federal Family Education Loan and supplemental loan programs. Students must meet all eligibility requirements as established by the U.S. Department of Education. The academic year includes summer, fall, and spring.

There are three items which students must satisfy in order to be eligible for financial aid:
• Be matriculated into a graduate degree-granting program
• Be registered for at least 6 credits a semester-except Summer term, which contains 2 six-week sessions. You may satisfy the 6 credit requirement during Summer term by taking 6 credits during one session or by taking 3 credits each session.
• File the Free Application for Federal Student Aid (FAFSA) for the academic year and meet all eligibility requirements established by the U.S. Department of Education.

For more information, call: 800.947.4303 or email: finaid@hartford.edu

International Financial Aid:
Financial Aid for international graduate students is currently limited to Graduate Assistantships. These assistantships are administered by the individual departments throughout the University and vary in size and availability.

Assistantships and Fellowships:
CETA has a number of openings available for graduate assistantships. To qualify, a graduate student must be matriculated and carrying at least 9 credits per semester. Official Graduate Record Examination (GRE) scores are also required but only for the first semester of study. The amount of assistantship is up to $2,500 per semester, reflecting a commitment of up to 10 work hours per week. Work assignments are determined by the department that oversees the student's technical specialty. Assistantships will be awarded on the basis of academic performance and financial need. Cumulative and most recent semester grade point averages will determine academic performance. Assistantships will be awarded on a semester basis. Consideration for continuation of an assistantship requires a minimum cumulative grade point average of 3.6 Please note, assistantships, fellowships or other support a student receives as a result of their enrollment may impact Federal Stafford Loan eligibility.
The Master of Environmental Engineering program requires a minimum of 30 credits. The general requirements structure of the Master of Environmental Engineering program is as follows (all courses are 3 credits unless otherwise specified):

**CORE COURSES [9 CREDITS REQUIRED]**
- CE 609 Advanced Air Quality Engineering
- CE 610 Hazardous Waste Management
- CE 612 Advanced Water Quality Engineering

**CHEMISTRY COURSES [3 CREDITS REQUIRED]**
- CH 519 Applied Environmental Chemistry

**MATHEMATICS [3 CREDITS REQUIRED]**
- M 517 Applied Engineering Statistics OR
- MBA 610 Quantitative Decision Making

**ENGINEERING MANAGEMENT [3 CREDITS REQUIRED]**
- EM 601 Engineering Program Management

**GRADUATE PROJECT**
- 3 credits required, up to 6 additional credits as electives, if elective credits are available
- CE 600 Graduate Project in Civil Engineering (3-9 credits)

**ELECTIVE COURSES (9 CREDITS REQUIRED)**
- CE 502 Groundwater Hydrology
- CE 503 Geographic Information Systems
- CE 507 Finite Element Analysis
- CE 523 Engineering Hydrology
- CE 524 Solid Waste Management
- CE 539 Organic Chemistry for Environmental Engineers
- CE 608 Analysis of Environmental Impact
- CH 539 Organic Chemistry for Environmental Engineers
- M 515 Methods of Applied Mathematics I
- EM 600 Engineering and the Corporation
- CE 591 Special Topic
  - CT Environmental Law and Regulations
  - Pollution Prevention

**RESEARCH TOPICS AND PROJECTS**

**Research Topics:**
- Applications of Remote Sensing Environmental Engineering
- Applications of GIS in Civil and Environmental Engineering
- Surface Water Modeling
- Watershed Modeling
- Aeration and Mass Transfer Applications of Finite element Methods in Analysis and Design of Structures

**Student Projects:**
- Integrating Geographic Information System (GIS) with Wastewater Facilities Planning and Design
- Achieving Environmental Stewardship – A Case Study
- Comparison of Mixed Oxidants and Free Chlorine for Reducing Disinfection By-Products
The graduate program stresses applied research for the practicing engineer. The goal is to prepare you to solve more sophisticated design problems that will help you advance in your engineering career. Small classes promote interaction with the faculty and keep you up to date with the most recent technology. This is combined with research projects that offer you the opportunity to become an expert in your chosen field.

- **Excellence in Engineering and Management (E²M).** Receive a Master’s degree in one of the above areas and an MBA.

### UNIQUE FEATURES

- **NFS Funded GIS Laboratory (Geographical Information Systems).** This laboratory uses computers to store and then analyze information contained on maps. It has applications in city planning, transportation systems, surveying, water resources, and environmental protection programs.

- **Structural Engineering.** State-of-the-art computational facilities are used for the application of finite element analysis in the design and analysis of large and small structural components.

- **NSF Funded Environmental Engineering Laboratory.** Here, specialties include the advancement of physical, chemical, and biological processes for water treatment and the remediation of sites contaminated with hazardous materials.

- **NSF Funded Instructional Design Laboratory** provides state-of-the-art facilities for conducting design and simulation projects. It also has facilities for multimedia presentation and Web-based educational technology tools.

### FURTHER INFORMATION

The Center for Graduate and Adult Academic Services would be happy to provide more specific information about a degree program or answer any other questions you may have. Please contact the office at: GradStudy@hartford.edu or by phone 860.768.4371 or 800.945.0712.

For more specific information about the Engineer program please contact the Graduate Program Manager Laurie Granstrand at 860.768.4858 or email: granstran@hartford.edu or visit the CETA website.

Program Website: new.hartford.edu/ceta/