Civil Engineering

About the Online Course Offerings for the Civil Engineering M.S. Program

The Department of Civil and Environmental Engineering (CEE) now offers online courses that can be taken as part of the Master of Science in Civil Engineering (MSCE) degree. The MSCE program connects structural engineering with the disciplines of geotechnical engineering, hydrosystems engineering, environmental engineering, geosensing and geoinformatics, mechanical engineering and subsea engineering.

Our online offerings are an added component to several of our courses offered in a face-to-face format. The face-to-face lectures are streamed live and also archived for on-demand playback for students registered in an online section. Students are able to attend all lectures online and will be required to come to campus only for an initial orientation and exams.

The online offerings should be particularly attractive to the working professional who is interested in a Master’s degree program that offers the flexibility that an online format can provide.

Why the University of Houston?

The civil engineering graduate program at the University of Houston equips students with an extensive background required for present day professional civil engineering practice in industry. The curriculum is focused on design, construction, management and operation to enable graduates of the program to cope with and solve current and future grand challenges facing the civil engineering field. The department is recognized as a leader in education and research related to structural engineering and mechanics, advanced civil engineering, geotechnical engineering, fluid mechanics/water resources, environmental engineering and geosensing engineering.

Careers in Civil Engineering

Civil engineers find employment opportunities in both the private and public sectors. Career opportunities in civil engineering are excellent, especially in Houston, the energy capital of the world. Employment for civil engineers is expected to increase significantly, spurred by ongoing emphasis to improve our nation’s infrastructure. Civil engineering tops the list of growing occupations released by the staffing agency Kelly Services, with an estimated 45,000 jobs coming online through 2023. The outlook for civil engineers is even
better in the city of Houston, where demand for engineering talent is higher than in any other major U.S. city.

A 2015 salary survey produced by the National Association of Colleges and Employers found that new graduates with an M.S. in civil engineering earn an average starting salary of $62,837.

Courses and Curriculum

To provide the most flexibility for working professionals, several courses required for the civil engineering M.S. program are offered online. The civil engineering non-thesis M.S. degree is a 31-hour program that can be completed in as little as two years. Depending on the area of interest of the student, beginning in fall 2016 most, if not all, of the 10 courses needed for completing the MSCE degree can be taken online.

Civil engineering courses that are offered as online classes include:

- CIVE 6320 Constitutive Modeling of Materials
- CIVE 6323 Advanced Foundations*
- CIVE 6338 Advanced Steel Design*
- CIVE 6355 Introduction to Dynamics of Structures*
- CIVE 6362 Water Quality*
- CIVE 6372 Hydrodynamics of Offshore Structures
- CIVE 6377 Environmental Chemistry*
- CIVE 6388 Hazardous Waste Treatment Processes
- CIVE 6392 Mass Transfer in Environmental Systems*CIVE 6393 Geostatistics
- CIVE 7397 Computational Mechanics*

*Offered fall 2016

Other online courses available outside the department as electives are:

- SUBS 6310 Flow Assurance
- SUBS 6320 Riser Design
- SUBS 6330 Pipeline Design
- Intelligent Structural Systems
- Materials for Energy Storage

More courses with an online component will be added over the next academic year.

A description of the courses listed above and all graduate civil engineering courses can be obtained from the UH Graduate Catalog: [http://publications.uh.edu/index.php?catoid=13](http://publications.uh.edu/index.php?catoid=13) [2].

Additional Information

For degree objectives and application information:
[http://www.cive.uh.edu/programs/civil-graduate](http://www.cive.uh.edu/programs/civil-graduate) [3]

For admission requirements, advising, and other information specific to the civil engineering program:
[http://www.cive.uh.edu/admissions/civil-engineering](http://www.cive.uh.edu/admissions/civil-engineering) [4]
Admissions requirements are the same as those for the non-thesis M.S. Civil Engineering degree.

Application forms and other information related to admission can be obtained by e-mailing the Graduate Advisor at civilgrad [at] egr [dot] uh [dot] edu.

To receive additional information regarding this program contact the program advisors: civilgrad [at] egr [dot] uh [dot] edu

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Links: