MASTER OF CIVIL AND ENVIRONMENTAL ENGINEERING (MCEE) DEGREE IN THE FIELD OF ENVIRONMENTAL ENGINEERING

Program Learning Outcomes for the MCEE Degree in the field of Environmental Engineering

Upon completing the MCEE degree in the field of Environmental Engineering, students will be able to:

1. Demonstrate a solid foundation in civil and environmental engineering at the graduate level.
2. Demonstrate professional written and oral communication skills.

Requirements for the MCEE Degree in the field of Environmental Engineering

The MCEE degree is a non-thesis master's degree. For general university requirements, please see Non-Thesis Master’s Degrees (ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-non-thesis-masters-degrees). Students pursuing the MCEE degree in the field of Environmental Engineering must complete:

- A minimum of 30 credit hours of graduate-level courses in one area of specialization: Civil Engineering or Sustainable Environmental Engineering and Design, including one semester of graduate seminar (CEVE 601/CEVE 602) and a final project (CEVE 590). All courses must be in the relevant field.
- A minimum of 24 credit hours at Rice.
- A minimum overall GPA of 3.0 in required coursework.
- A maximum of 6 credit hours of graduate-level coursework from transfer credit. For additional departmental guidelines regarding transfer credit, see the Policies tab.
- The minimum residency, which is one fall or spring semester in full-time or part-time graduate study.

The MCEE is a professional non-thesis degree requiring 30 credit hours of approved courses at the 500-level or above, including a final project of 2 credit hours. Students who have a BS or BA degree in any field of engineering or related study may apply. Depending on their background, some students may need to fulfill prerequisites or take remedial engineering courses to earn the MCEE degree. For more information, see the department website (http://www.ceve.rice.edu).

Summary

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>CEVE 301</td>
<td>MASTER OF CIVIL AND ENVIRONMENTAL ENGINEERING (MCEE) DEGREE IN THE FIELD OF ENVIRONMENTAL ENGINEERING</td>
<td>30</td>
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Degree Requirements

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
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<tr>
<td>CEVE 501</td>
<td>CHEMISTRY FOR ENVIRONMENTAL ENGINEERING AND SCIENCE</td>
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<td>CEVE 502</td>
<td>SUSTAINABLE DESIGN</td>
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<tr>
<td>CEVE 509</td>
<td>HYDROLOGY AND WATER RESOURCES ENGINEERING</td>
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<td>CEVE 511</td>
<td>ATMOSPHERIC PROCESSES</td>
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<td>CEVE 534</td>
<td>FATE AND TRANSPORT OF CONTAMINANTS IN THE ENVIRONMENT</td>
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<td>CEVE 536</td>
<td>ENVIRONMENTAL BIOTECHNOLOGY AND BIOREMEDIATION</td>
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<td>CEVE 601</td>
<td>SEMINAR</td>
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<td>CEVE 602</td>
<td>SEMINAR</td>
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<tr>
<td>CEVE 450 / ESCI 450</td>
<td>REMOTE SENSING</td>
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<tr>
<td>CEVE 504</td>
<td>ATMOSPHERIC PARTICULATE MATTER</td>
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<td>CEVE 505 / ENGI 505</td>
<td>ENGINEERING PROJECT MANAGEMENT AND ECONOMICS</td>
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<tr>
<td>CEVE 508</td>
<td>INTRODUCTION TO AIR POLLUTION CONTROL</td>
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<td>CEVE 510</td>
<td>PRINCIPLES OF ENVIRONMENTAL ENGINEERING</td>
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<td>CEVE 518</td>
<td>CONTAMINANT HYDROGEOLOGY</td>
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<td>CEVE 520</td>
<td>ENVIRONMENTAL REMEDIATION RESTORATION</td>
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<td>CEVE 533 / CHEM 533</td>
<td>NANOSCIENCE AND NANOTECHNOLOGY</td>
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<td>CEVE 535</td>
<td>PHYSICAL CHEMICAL PROCESSES FOR WATER QUALITY CONTROL</td>
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<tr>
<td>CEVE 544</td>
<td>ENVIRONMENTAL MICROBIOLOGY AND MICROBIAL ECOLOGY</td>
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<td>CEVE 550</td>
<td>ENVIRONMENTAL ORGANIC CHEMISTRY</td>
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<td>CEVE 592</td>
<td>MODELING AND ANALYSIS OF NETWORKED SYSTEMS</td>
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<td>STAT 485</td>
<td>ENVIRONMENTAL STATISTICS AND DECISION MAKING</td>
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<td>ANTH 532</td>
<td>THE SOCIAL LIFE OF CLEAN ENERGY</td>
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<td>CEVE 406 / ENST 406</td>
<td>INTRODUCTION TO ENVIRONMENTAL LAW</td>
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<td>CEVE 507</td>
<td>ENERGY AND THE ENVIRONMENT</td>
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<tr>
<td>CEVE 528 / ENGI 528</td>
<td>ENGINEERING ECONOMICS</td>
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Total Credit Hours for the MCEE Degree in the field of Environmental Engineering

30
CEVE 529 / ENGI 529 ETHICS AND ENGINEERING LEADERSHIP
EBIO 580 SUSTAINABILITY DEVELOPMENT AND REPORTING
ECON 437 / ENST 437 ENERGY ECONOMICS
NSCI 511 SCIENCE POLICY, AND ETHICS
NSCI 610 / ENGI 610 MANAGEMENT FOR SCIENCE AND ENGINEERING

MCEE Final Project
CEVE 590 MCEE SPECIAL STUDY 1 2 Total Credit Hours 30

Footnotes and Additional Information
1 The professional masters final project is overseen by a Civil and Environmental department faculty member.

Policies for the MCEE Degree in the field of Environmental Engineering
Department of Civil and Environmental Engineering Graduate Program Handbook
The General Announcements (GA) is the official Rice curriculum. As an additional resource for students, the department of Civil and Environmental Engineering publishes a graduate program handbook, which can be found here: http://gradhandbooks.rice.edu/2017_18/Civil_Environmental_Engineering_Graduate_Handbook.pdf.

Admission
Applicants pursuing graduate education in environmental engineering or hydrology should have a BS or BA in related areas of science and engineering and preparation in mathematics, science, and engineering or related courses. A BS degree in engineering or a degree in natural science is preferred.

Admission into a professional program is granted separately from admission in a research and thesis program. Professional degree programs terminate when the degree is awarded. Students who wish to continue graduate study after completing a professional program must apply for admission into a research program.

Transfer Credit
For Rice University’s policy regarding transfer credit, see Transfer Credit (ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-non-thesis-masters-degrees). Some departments and programs have additional restrictions on transfer credit. Students are encouraged to meet with their academic program’s advisor when considering transfer credit possibilities.

Departmental Transfer Credit Guidelines
Students pursuing the MCEE degree in the field of Civil Engineering or Environmental Engineering should be aware of the following departmental transfer credit guidelines:

• No more than 2 courses (6 credit hours) of transfer credit from U.S. or international universities of similar standing as Rice may apply towards the degree.

• Request for transfer credit will be considered by the program director (and/or the program’s official transfer credit advisor) on an individual case-by-case basis.

For additional information, please see the Civil and Environmental Engineering website: http://ceve.rice.edu/

Opportunities for the MCEE Degree in the field of Environmental Engineering
• Rice Global Forum (RGF): is a group of industry professionals plus Rice faculty who gather regularly to discuss topics that define their interests. They sponsor the Engineering Competition each year and give out scholarships that are derived from membership dues. The scholarships are geared toward professional master's and terminal research master's (MS) students.

• George R. Brown School of Engineering Scholarships for Professional Master's Degrees in Engineering: was established by the Dean of the School of Engineering to encourage outstanding Rice undergraduate engineering students to pursue a professional master's degree at Rice.

For additional information, please see the Civil and Environmental Engineering website: http://ceve.rice.edu/