MS Environmental Engineering – for students who started prior to fall 2019

The Master’s of Science in Environmental Engineering (MSENE) Program requires students complete 27 units (9 courses). These must include the 3 CORE courses, 4 courses from either the Air or Water concentration (below), and 2 electives.

**Core Courses**

- ENE 512: Environmental Fluid Mechanics
- ENE 505: Energy and the Environment
- CE 505: Data Management

Choose either Air or Water concentration (4 courses)

<table>
<thead>
<tr>
<th>Air Track</th>
<th>Water Track</th>
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<tbody>
<tr>
<td><strong>ENE 426</strong>: Particulate Air Pollutants: Properties/Behavior/Measurement</td>
<td><strong>ENE 599 (ENE 562)</strong>: Aquatic Chemistry Taught by Prof. McCurry</td>
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<tr>
<td><strong>ENE 527</strong>: Climate Change and Atmospheric Aerosols</td>
<td><strong>CE 523</strong>: Physicochemical Processes in Environmental Engineering</td>
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<tr>
<td><strong>ENE 535</strong>: Air Pollution Management: Exposure, Health Effects and Risk</td>
<td><strong>CE 553</strong>: Biological Processes in Environmental Engineering</td>
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<tr>
<td>Pick one: <strong>CE 523</strong>*, <strong>CE 553</strong>*, <strong>CE 516</strong></td>
<td>Pick one: <strong>ENE 426</strong>, <strong>ENE 527</strong>, or <strong>ENE 535</strong></td>
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*Note: CE 453: Water Quality Control, or equivalent, is a prerequisite for CE 463L, CE 523 and CE 553.

Note: Air Concentration students must take ENE 428: Air Pollution Fundamentals in lieu of one of the electives if they have not already taken the course, or its equivalent, as an undergraduate.

Note: CE 453: Water Quality Control is considered a pre-requisite for the Water Concentration; if not taken prior to coming to USC, it must be taken in the first year and is not counted toward the degree.
**Electives**

Beyond the required courses (above) the rest of your course work should be selected from the pre-approved electives to reach the minimum of 28 units to complete this degree.

**CE 451:** Water Resources Engineering (Spring only)
**CE 484:** Water Treatment Design (Fall only)
**CE 485:** Wastewater Treatment Design (Spring only)
**CE 503:** Microbiology for Environmental Engineers (Spring only)
**CE 516:** Geohydrology (Fall only)
**CE 599:** Complex Systems Safety and Resiliency
**ENE 502:** Environmental and Regulatory Compliance (Spring only)
**ENE 510:** Water Quality Management and Practice (Spring only)

**NOTE:** At least 2/3 of the units applied to the degree must be at the 500-level or above.

Other courses may be selected for elective credit only after consultation and pre-approval from CEE Student Services (ceedept@usc.edu)

*CE 520a duplicates credit for CE 520*