<table>
<thead>
<tr>
<th>Course Title</th>
<th>Liquid Transport Phenomena in Porous Media</th>
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<tbody>
<tr>
<td>Course Unit Code</td>
<td>CEE 534</td>
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<tr>
<td>Type of Course Unit</td>
<td>Optional</td>
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<tr>
<td>Level of Course Unit</td>
<td>2nd and 3rd cycles</td>
</tr>
<tr>
<td>Year of Study</td>
<td>MSc, MEng, PhD</td>
</tr>
<tr>
<td>Semester when the Course Unit is Delivered</td>
<td>Spring</td>
</tr>
<tr>
<td>Number of ECTS Credits Allocated</td>
<td>8</td>
</tr>
<tr>
<td>Name of Lecturer(s)</td>
<td>I. Ioannou</td>
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</tbody>
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### Learning Outcomes of the Course Unit
Students are expected to become familiar with the basic principles governing liquid (especially water) flow in porous media. Emphasis will be placed upon the understanding of the physical properties of porous materials and the methods of measuring these properties. The course also focuses on practical problems related to water movement in porous construction materials and relevant research works.

### Prerequisites
There are no prerequisites for this course.

### Co-requisites
There are no prerequisites for this course.

### Course Contents
- Porosity and Porous media, Saturated and Unsaturated Flow, One dimensional flow, Sorptivity, Sharp Front Theory, Applications of Sharp Front Theory, Evaporation and Drying, Salt crystallization, Rising damp.

### Required Reading

### Recommended Reading
N/A

### Planned Learning Activities
Lectures and Lab Test Demos

### Teaching Methods
Lectures (3 hours/week)

### Assessment Methods and Criteria
Final exam, Abstract and presentation of published journal paper, term project.

### Language of Instruction
Greek

### Work Placement(s)
N/A