Civil & Environmental
Engineering
Graduate Programs

Did you know?

• You can do a Master of Science in Civil & Environmental Engineering full-time or part-time, with a thesis, project or coursework-only!
• A Masters degree program consists of 30 credits.
• Did you graduate from UML engineering with a GPA over 3.0 within the past five years? We'll waive the application fee and the GRE requirement!
• You can start by taking courses as a non-matriculated student and then transfer up to 12 credits in towards your full or part-time graduate degree.
• Doctoral programs - both PhD and D.Eng - are available in Civil & Environmental Engineering.
• Teaching and/or Research Assistantships available for full-time grad students!
• We have externally funded research - over $8 million in research expenditures annually within the college!
• Other Graduate options include the Masters in Education, MBA and new Masters in Innovation and Technological Entrepreneurship.

Start Building Your Future Career

Quality! - Courses are taught by well qualified full-time faculty or adjunct faculty from industry
Value! - $1678 tuition + fees per 3 credit on-campus course for Massachusetts residents
*Courses offered through Continuing Ed—$1485 tuition & fees per 3 credit course.
Convenience! - We're close to Boston

Sign up for a course for the fall as a non-matriculated student, or apply for the degree program

Information on CEE Offerings:
Prof. Clifford Bruell
Web: civil.uml.edu
Department Chair
978-934-2280
Clifford_Bruell@uml.edu

Graduate School Info:
Prof. Chronis Stamatiadis
www.uml.edu/grad
Graduate Coordinator
Graduate Coordinator
978-934-2390
Chronis_Stamatiadis@uml.edu

Continuing Education Info:
Prof. Clifford Bruell
continuinged.uml.edu
Env. Studies Coordinator
978-934-2474
Clifford_Bruell@uml.edu

Fall 2009 Civil & Environmental Graduate Course Offerings
Civil & Environmental Engineering

Courses are scheduled in the late afternoon and evening to provide study opportunities for students with full-time employment.

Fall 2009 Graduate Classes
All courses 6pm-8:50pm unless noted in blue

<table>
<thead>
<tr>
<th>Day</th>
<th>Course Title</th>
<th>Instructor</th>
</tr>
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<tbody>
<tr>
<td>Monday</td>
<td>14.529.201 Engineering with Geosynthetics</td>
<td>Hourani</td>
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<tr>
<td></td>
<td>14.562.201 Physical and Chemical Hydrogeology</td>
<td>Brueell</td>
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<tr>
<td></td>
<td>14.475.201 Construction Management</td>
<td>Mojahed</td>
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<tr>
<td></td>
<td>22.513.201 Finite Element Analysis I</td>
<td>Sherwood</td>
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<tr>
<td></td>
<td>87.504.201 Geographic Information Systems</td>
<td>Brown</td>
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<tr>
<td>Tuesday</td>
<td>14.537.201 Experimental Soil Mechanics</td>
<td>Kurup</td>
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<tr>
<td></td>
<td>14.541.201 Traffic Engineering</td>
<td>Hussein</td>
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<tr>
<td></td>
<td>14.543.201 Traffic Principles for Intelligent Transport Systems 2:30-3:45p TTh</td>
<td>Gartner</td>
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<tr>
<td></td>
<td>18.535.041 Global Environmental Science</td>
<td>Miller</td>
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<tr>
<td>Wednesday</td>
<td>14.536.201 Soil Engineering</td>
<td>Paikowsky</td>
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<tr>
<td></td>
<td>14.550.201 Behavior of Structures</td>
<td>Faraji</td>
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<tr>
<td></td>
<td>14.570.001 Wastewater Ttmt &amp; Storm Water Mgmt</td>
<td>Moeller</td>
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<tr>
<td></td>
<td>14.573.201 Solid Waste Engineering</td>
<td>Brueell</td>
</tr>
<tr>
<td></td>
<td>18.527.201 Environmental Law</td>
<td>Geiser</td>
</tr>
<tr>
<td>Thursday</td>
<td>14.511.201 Inspection &amp; Monitoring of Civil Infrastructure</td>
<td>Yu</td>
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<tr>
<td></td>
<td>14.567.201 Environmental Aquatic Chemistry</td>
<td>Zhang</td>
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<td></td>
<td>14.583.201 Stochastic Concepts</td>
<td>Stamatiadis</td>
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<td>18.572.201 Energy &amp; Environment</td>
<td>Golomb</td>
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<td></td>
<td>18.581.041 Understanding the MA Contingency Plan</td>
<td>Fitzgerald</td>
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Spring 2010 Graduate Classes

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<th>Day</th>
<th>Course Title</th>
<th>Instructor</th>
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<tr>
<td>Monday</td>
<td>14.595.201 Hazardous Waste Site Remediation</td>
<td>Brueell</td>
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<td></td>
<td>14.558.201 Bridge Design</td>
<td>Huckabee</td>
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<tr>
<td>Tuesday</td>
<td>14.540.201 Urban Transportation Planning</td>
<td>Hussein</td>
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<tr>
<td></td>
<td>14.572.041 Marine and Coastal Processes</td>
<td>Fiorillo</td>
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<tr>
<td></td>
<td>14.5xx.201 Structural Stability</td>
<td>Yu new!</td>
</tr>
<tr>
<td>Wednesday</td>
<td>14.5xx.201 Green &amp; Sustainable Civil Engineering</td>
<td>Lee new!</td>
</tr>
<tr>
<td></td>
<td>14.527.201 Geotech. &amp; Env. Site Characterization</td>
<td>Kurup</td>
</tr>
<tr>
<td>Thursday</td>
<td>14.533.201 Advanced Foundation Engineering</td>
<td>Paikowsky</td>
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<tr>
<td></td>
<td>14.5xx.201 Transp. Economics &amp; Project Evaluation</td>
<td>TBA new!</td>
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<tr>
<td></td>
<td>14.561.201 Physical Chemical Treatment Processes</td>
<td>Zhang</td>
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<tr>
<td></td>
<td>18.581.041 Understanding the MA Contingency Plan</td>
<td>Fitzgerald</td>
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<tr>
<td></td>
<td>18.571.201 Air Pollution Phenomenology</td>
<td>Golomb</td>
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Graduate Information

M.S. in Civil & Environmental Engineering

Requirements: 30 credit hours which can include a 6 credit thesis, 3 credit project or coursework only

Concentration Areas:
- Environmental Engineering
- Geoenvironmental Engineering
- Geotechnical Engineering
- Structural Engineering
- Transportation Engineering

M.S. in Environmental Studies
The M.S. in Environmental Studies is designed for students with non-engineering backgrounds.

Concentration Areas:
- Environmental Engineering Sciences
- Atmospheric Sciences (Thesis Required)

Graduate Certificate Program:
- Sustainable Infrastructure for Developing Nations

D.Eng. and Ph.D. in Civil & Environmental Engineering

Requirements:
- 63 credit hours of graduate level courses total
- 42 credit hours of graduate coursework
- 21 credit hours of doctoral dissertation
- For the DEng degree, 9 of the 42 coursework credits are Management courses

Teaching & Research Assistantship Stipend/Waiver Information:
(for full year, double the amounts shown)

<table>
<thead>
<tr>
<th>Item</th>
<th>half-time (in-state)</th>
<th>TA/RA per semester (in-state)</th>
<th>full-time (out-of-state)</th>
<th>TA/RA per semester (out-of-state)</th>
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<tbody>
<tr>
<td>stipend</td>
<td>$3252</td>
<td>$3252</td>
<td>$6,504</td>
<td>$6,504</td>
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<tr>
<td>tuition &amp; fees waiver</td>
<td>$3261</td>
<td>$5228</td>
<td>$5761</td>
<td>$9695</td>
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<tr>
<td>total TA/RA value per semester</td>
<td>$6513</td>
<td>$8480</td>
<td>$12,265</td>
<td>$16,199</td>
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</table>

Education Costs - Full time (9 credits) per semester:
In-state: $5034, Out of state: $9365
New England Regional & New England Proximity: $7380

Department Faculty Members

Environmental

Clifford J. Bruell, Professor & Department Chair
B.S. Lowell Technological Institute, M.S. Univ. Lowell, Ph.D. Univ. of Connecticut

Kenneth Lee, Associate Professor
B.S., M.S., Ph.D., University of California Irvine, P.E.

Xiaoqi (Jackie) Zhang, Associate Professor
B.S. Tongji University, Shanghai, M.S. Tsinghua University, Beijing, Ph.D. Univ. of Cincinnati

Geotechnical

Pradeep Kurup, Professor
B.S. Kerala University, India, M.Tech. India Institute of Technology, Madras, Ph.D. Louisiana State Univ., P.E.

Samuel G. Paikowsky, Professor
B.S., M.S. Technion—Israel Institute of Technology, Sc.D. Massachusetts Institute of Technology

John M. Ting, Professor & Dean of Engineering

Structural

Susan Faraji, Professor
B.S. Arya-Mehr University of Technology, M.S. Northeastern Univ., Ph.D. University of Massachusetts Amherst

Donald G. Leitch, Professor, Undergrad Coordinator & Exec. Officer
B.S. Lehigh University, M.S. (University of Colorado), P.E.

Tzu-Yang Yu, Assistant Professor
B.S National Yunlin University of Science & Technology, M.S., Ph.D. Massachusetts Institute of Technology

Transportation

Nathan H. Gartner, Professor
B.S., M.S., Sc.D. Technion—Israel Institute of Technology

Chronis Stamatiadis, Associate Professor & Graduate Coordinator
B.S. Aristotlean University, Thessaloniki, M.S., Ph.D. Michigan State University