**Mathematics**

**MATH 446  **Applied Complex Variables  credit: 3 OR 4 hours.  
For students who desire a working knowledge of complex variables; covers the standard topics and gives an introduction to integration by residues, the argument principle, conformal maps, and potential fields. Students desiring a systematic development of the foundations of the subject should take MATH 448. 4 hours of credit requires approval of the instructor and department with completion of additional work of substance. Credit is not given for both MATH 446 and MATH 448. Prerequisite: MATH 241.

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<tr>
<th>CRN</th>
<th>Type</th>
<th>Section</th>
<th>Time</th>
<th>Days</th>
<th>Location</th>
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<tr>
<td>53611</td>
<td>Online</td>
<td>EGR</td>
<td>ARRANGED</td>
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<td>Peressini, A</td>
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Credit Hours: 4 hours  
Online  
Restricted to MCS:Computer Sci Online -UIUC, MS:Mechanical Engineerng -UIUC, or NDEG:Grad Nondegree-CE-UIUC.  
Restricted to online non-degree, online MCS, and online MSME students. Academic Outreach restrictions and assessments apply, see http://www.outreach.uiuc.edu. For more details on this course section, please see http://online.engineering.illinois.edu/ descriptions/spring2011.htm  
OCE Tuition $925.00 per Bill Hour, and OCE Fees $50.00 per Bill Hour.

| 38027| Lecture-Discussion | M13   | 09:30 AM - 10:50 AM | TR   | 447 - Altgeld Hall | Wu, J |

Credit Hours: 3 hours  
Open to both undergraduate and graduate students.

| 38028| Lecture-Discussion | M14   | 09:30 AM - 10:50 AM | TR   | 447 - Altgeld Hall | Wu, J |

Credit Hours: 4 hours  
Instructor Approval Required  
Not intended for Undergrad - Urbana-Champaign.  
Instructor approval forms available in 313 Altgeld Hall.