Computer Science

CS 421 Programming Languages & Compilers  credit: 3 OR 4 hours.
Structure of programming languages and their implementation. Basic language design principles; abstract data types; functional languages; type systems; object-oriented languages. Basics of lexing, parsing, syntax-directed translation, semantic analysis, and code generation. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 233 or CS 240; CS 374; one of MATH 225, MATH 415, MATH 416, ASRM 406.

<table>
<thead>
<tr>
<th>CRN</th>
<th>Type</th>
<th>Section</th>
<th>Time</th>
<th>Days</th>
<th>Location</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>65906</td>
<td>Online</td>
<td>A3</td>
<td>ARRANGED -</td>
<td>-</td>
<td>-</td>
<td>Beckman, M</td>
</tr>
</tbody>
</table>
|       | Credit Hours: 3 hours  
Restricted to Undergrad - Urbana-Champaign.  
This is an online overflow section for Undergrads. You are responsible for all homeworks, quizzes, and exams. Please check instructor website for information regarding course requirements. For up-to-date information about CS course restrictions, please see the following link: http://go.cs.illinois.edu/CSregister |
| 65907 | Online        | A4      | ARRANGED -      | -    | -                 | Beckman, M |
|       | Credit Hours: 4 hours  
Restricted to Computer Science or Bioinformatics major(s). Restricted to Graduate - Urbana-Champaign. Not intended for MCS:Computer Sci Online -UIUC, MCS:Computer Sci Online -UIUC, or NDEG:Computer Science Onl-UIUC.  
This is an online overflow section for Undergrads. You are responsible for all homeworks, quizzes, and exams. Please check instructor website for information regarding course requirements. For up-to-date information about CS course restrictions, please see the following link: http://go.cs.illinois.edu/CSregister |
| 30128 | Lecture-Discussion | D3     | 02:00 PM - 03:15 PM | TR   | 1404 - Siebel Center for Comp Sci | Beckman, M |
|       | Credit Hours: 3 hours  
Restricted to Undergrad - Urbana-Champaign.  
For up-to-date information about CS course restrictions, please see the following link: http://go.cs.illinois.edu/CSregister |
| 40087 | Lecture-Discussion | D4     | 02:00 PM - 03:15 PM | TR   | 1404 - Siebel Center for Comp Sci | Beckman, M |
|       | Credit Hours: 4 hours  
Restricted to Computer Science or Bioinformatics major(s). Restricted to Graduate - Urbana-Champaign. Not intended for MCS:Computer Sci Online -UIUC, MCS:Computer Sci Online -UIUC, or NDEG:Computer Science Onl-UIUC.  
For up-to-date information about CS course restrictions, please see the following link: http://go.cs.illinois.edu/csregister |