Computer Science

CS 438  **Communication Networks**  credit: 3 OR 4 hours.
Layered architectures and the OSI Reference Model; design issues and protocols in the transport, network, and data link layers; architectures and control algorithms of local-area, point-to-point, and satellite networks; standards in networks access protocols; models of network interconnection; overview of networking and communication software. Same as ECE 438. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 241 or ECE 391; one of ECE 313, MATH 461, MATH 463.

<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>36061</td>
<td>Lecture-Discussion</td>
<td>X3</td>
<td>03:00 PM - 04:20 PM</td>
<td>MW</td>
<td>1015 - Electrical &amp; Computer Eng Bldg</td>
<td>Borisov, N</td>
</tr>
</tbody>
</table>

Credit Hours: 3 hours
Restricted to Undergrad - Urbana-Champaign.

<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>57772</td>
<td>Lecture-Discussion</td>
<td>X4</td>
<td>03:00 PM - 04:20 PM</td>
<td>MW</td>
<td>1015 - Electrical &amp; Computer Eng Bldg</td>
<td>Borisov, N</td>
</tr>
</tbody>
</table>

Credit Hours: 4 hours
Restricted to Graduate - Urbana-Champaign.