Class Schedule - Spring 2019

Electrical and Computer Engineering

ECE 443  **LEDs and Solar Cells**  credit: 4 hours.
This course explores the energy conversion devices from fundamentals to system-levels including electronic structure of semiconductors; quantum physics; compound semiconductors; semiconductor heterostructures and low dimensional quantum structures; energy transfer between photons and electron-hole pairs; photon emission and capture processes; radiative and non-radiative processes; light extraction and trapping; emission and absorption engineering; electrical and optical modelling via numerical and TCAD simulation tools; hands-on characterization of modern light emitting diodes and solar cells. 4 undergraduate hours. 4 graduate hours. Prerequisite: ECE 340.

<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>69248</td>
<td>Laboratory</td>
<td>CB1</td>
<td>12:00 PM - 01:50 PM</td>
<td>M</td>
<td>1003 - Electrical &amp; Computer Eng Bldg</td>
<td>Bayram, C</td>
</tr>
<tr>
<td>69249</td>
<td>Laboratory</td>
<td>CB2</td>
<td>12:00 PM - 01:50 PM</td>
<td>T</td>
<td>1003 - Electrical &amp; Computer Eng Bldg</td>
<td>Bayram, C</td>
</tr>
<tr>
<td>69250</td>
<td>Laboratory</td>
<td>CB3</td>
<td>09:00 AM - 10:50 AM</td>
<td>W</td>
<td>1003 - Electrical &amp; Computer Eng Bldg</td>
<td>Bayram, C</td>
</tr>
<tr>
<td>69251</td>
<td>Laboratory</td>
<td>CB4</td>
<td>11:00 AM - 12:50 PM</td>
<td>W</td>
<td>1003 - Electrical &amp; Computer Eng Bldg</td>
<td>Bayram, C</td>
</tr>
<tr>
<td>69252</td>
<td>Laboratory</td>
<td>CB5</td>
<td>12:00 PM - 01:50 PM</td>
<td>R</td>
<td>1003 - Electrical &amp; Computer Eng Bldg</td>
<td>Bayram, C</td>
</tr>
<tr>
<td>69253</td>
<td>Laboratory</td>
<td>CB6</td>
<td>09:00 AM - 10:50 AM</td>
<td>F</td>
<td>1003 - Electrical &amp; Computer Eng Bldg</td>
<td>Bayram, C</td>
</tr>
<tr>
<td>69254</td>
<td>Laboratory</td>
<td>CB7</td>
<td>11:00 AM - 12:50 PM</td>
<td>F</td>
<td>1003 - Electrical &amp; Computer Eng Bldg</td>
<td>Bayram, C</td>
</tr>
<tr>
<td>69255</td>
<td>Lecture</td>
<td>CL1</td>
<td>02:00 PM - 02:50 PM</td>
<td>MWF</td>
<td>3020 - Electrical &amp; Computer Eng Bldg</td>
<td>Bayram, C</td>
</tr>
</tbody>
</table>