## Computer Science

**CS 431  Embedded Systems**  credit: 3 or 4 hours.

A survey of sampled data systems and embedded architecture; key concepts in common embedded system applications; signal processing and control; embedded microprocessor and device interface; time-critical I/O handling; data communications; real-time operating systems and techniques for the development and analysis of embedded real-time software; hands-on laboratory projects. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 241 or ECE 391.

Students must register for one lab and one lecture section.

<table>
<thead>
<tr>
<th>CRN</th>
<th>Type</th>
<th>Section</th>
<th>Time</th>
<th>Days</th>
<th>Location</th>
<th>Instructor</th>
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<tbody>
<tr>
<td>31398</td>
<td>Laboratory</td>
<td>AB1</td>
<td>03:00 PM - 04:50 PM</td>
<td>W</td>
<td>2325 - Siebel Center for Comp Sci</td>
<td>Sha, L</td>
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<td>31401</td>
<td>Laboratory</td>
<td>AB2</td>
<td>05:00 PM - 06:50 PM</td>
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<td>2325 - Siebel Center for Comp Sci</td>
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<tr>
<td>31399</td>
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<td>AB3</td>
<td>05:00 PM - 06:50 PM</td>
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<td>31393</td>
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<td>Lecture</td>
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Lab sections for CS 431 will meet in 2325 Siebel Center.

Credit Hours: 3 hours

Credit Hours: 4 hours

Restricted to Graduate - Urbana-Champaign.