## Computer Science

**CS 598  Special Topics in CS**  credit: 2 TO 4 hours.

(C S 497) Lecture course in topics of current interest. See Schedule for current topics. May be repeated. Prerequisite: As specified for each topic offering, see Schedule or departmental course description.

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<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>43665</td>
<td>Lecture-Discussion</td>
<td>ANH</td>
<td>09:30 AM - 10:45 AM</td>
<td>TR</td>
<td>1111 - Siebel Center for Comp Sci</td>
<td>Hirani, A</td>
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Credit Hours: 4 hours
Topic: Calculus on Meshes. Prerequisite: No formal prerequisite except some form of vector calculus. Some familiarity with a scientific computing application area may be useful but is not required.

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<td>09:30 AM - 10:45 AM</td>
<td>MWF</td>
<td>1214 - Siebel Center for Comp Sci</td>
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Credit Hours: 4 hours
Topic: Dynamic Translation and Optimization. Prerequisite: CS 433 or equivalent; CS 426 is recommended.

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<td>40107</td>
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Credit Hours: 4 hours
Topic: Software Testing and Analysis

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Credit Hours: 4 hours
Topic: Machine Learning in Natural Language Processing.

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<td>1103 - Siebel Center for Comp Sci</td>
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Credit Hours: 4 hours
Topic: Algorithms in Geometry and Topology. Prerequisite: CS 473 or equivalent.

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<td>Karahalios, K</td>
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### Social Spaces

**Course Information**

**Credit Hours:** 4 hours  
**Topic:** High-order Multidomain Methods. Prerequisite: CS 450 plus CS 455 or another course in finite element analysis. A course in PDEs, such as Math 442 or 553, could also be helpful.

**Schedule:**  
**Time:** 11:00 AM - 12:15 PM  
**Location:** 1103 - Siebel Center for Comp Sci  
**Instructor:** Prabhakaran, M

### An Excursion into the World of Expanders

**Course Information**

**Credit Hours:** 4 hours  
**Topic:** An Excursion into the World of Expanders.

**Schedule:**  
**Time:** 03:30 PM - 04:45 PM  
**Location:** 1103 - Siebel Center for Comp Sci  
**Instructor:** Parthasarathy, M

### Automata and Logic in Verification

**Course Information**

**Credit Hours:** 4 hours  
**Topics:** Automata and Logic in Verification.

**Schedule:**  
**Time:** 09:00 AM - 11:50 AM  
**Location:** ARR - Siebel Center for Comp Sci  
**Instructor:** Twidale, M

**Restrictions:** Restricted to Doctor of Philosophy.

### Rapid Prototyping and Evaluation Doctoral Seminar

**Course Information**

**Credit Hours:** 4 hours  
**Topics:** Rapid Prototyping and Evaluation Doctoral seminar; other graduate students may enroll with consent of instructor (twidale@uiuc.edu)

**Schedule:**  
**Time:** 05:00 PM - 06:15 PM  
**Location:** 1103 - Siebel Center for Comp Sci  
**Instructor:** Har-Peled, S

**Restrictions:** Restricted to Doctor of Philosophy.

### Randomized Algorithms

**Course Information**

**Credit Hours:** 4 hours  
**Topic:** Randomized Algorithms

**Schedule:**  
**Time:** 12:30 PM - 01:45 PM  
**Location:** 1111 - Siebel Center for Comp Sci  
**Instructor:** Abdelzaher, T

**Restrictions:** Restricted to Doctor of Philosophy.

### Probabilistic Methods for Biological Sequence Analysis

**Course Information**

**Credit Hours:** 4 hours  
**Topic:** Probabilistic Methods for Biological Sequence Analysis. Prerequisite: No background in biology is required. Biological concepts used will be introduced early in the course. The course will involve a research project.

**Schedule:**  
**Time:** 12:30 PM - 01:45 PM  
**Location:** 1111 - Siebel Center for Comp Sci  
**Instructor:** Abdelzaher, T

**Restrictions:** Restricted to Doctor of Philosophy.
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<td>TR</td>
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<td>Zhou, Y</td>
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Credit Hours: 4 hours

Topic: Reliable and Robust Software Systems. Prerequisite: CS 423 or equivalent; CS 433, 425, 421 are desired, but not required.