**Computer Science**

**CS 591  ** Advanced Seminar  credit: 0 TO 4 hours.
Seminar on topics of current interest as announced in the Class Schedule. Approved for S/U grading only. May be repeated in the same or separate terms if topics vary. Prerequisite: As specified for each topic offering, see Class Schedule or departmental course description.

<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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<tr>
<td>35941</td>
<td>Lecture-Discussion</td>
<td>ACT</td>
<td>ARRANGED -</td>
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<td>ARR - Siebel Center for Comp Sci</td>
<td>Adve, V Misailovic, S Padua, D</td>
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<td>35943</td>
<td>Lecture-Discussion</td>
<td>CCR</td>
<td>05:00 PM - 06:20 PM</td>
<td>W</td>
<td>1304 - Siebel Center for Comp Sci</td>
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<td>46417</td>
<td>Lecture-Discussion</td>
<td>FM</td>
<td>03:30 PM - 04:20 PM</td>
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<td>Gunter, E Viswanathan, M</td>
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<td>35974</td>
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<td>HCI</td>
<td>11:00 AM - 11:50 AM</td>
<td>T</td>
<td>ARR - Siebel Center for Comp Sci</td>
<td>Kirlik, A</td>
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<td>43828</td>
<td>Lecture-Discussion</td>
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<td>05:00 PM - 05:50 PM</td>
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<td>-</td>
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Credit Hours: 1 hours
Advanced Compiler Technology
Restricted to Graduate - Urbana-Champaign.
Topic: Advanced Compiler Technology. Prerequisite: CS 426.

Credit Hours: 1 hours
Cloud Computing Research
Restricted to Graduate - Urbana-Champaign.
Topic: Cloud Computing Research.

Credit Hours: 1 hours
Formal Methods Seminar
Restricted to Graduate - Urbana-Champaign.

Credit Hours: 1 hours
Human-Computer Interaction
Restricted to Graduate - Urbana-Champaign.
Topic: Seminar in Human-Computer Interaction. Undergrad student must have permission of the instructor to register. This seminar will meet in 4405 SC.

Credit Hours: 1 hours
Distributed Systems Seminar
Instructor Approval Required
Restricted to Graduate - Urbana-Champaign.
Topic: Advanced Seminar in Distributed Systems. Prerequisite: CS 598IG or CS 425 or any basic course on distributed systems.
<table>
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<tr>
<th>Course Code</th>
<th>Type</th>
<th>Section</th>
<th>Time</th>
<th>Day</th>
<th>Location</th>
<th>Instructor</th>
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<td>41977</td>
<td>Lecture</td>
<td>PHD</td>
<td>11:00 AM - 11:50 AM</td>
<td>M</td>
<td>0216 - Siebel Center for Comp Sci</td>
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<td>71012</td>
<td>Seminar</td>
<td>QC</td>
<td>02:00 PM - 02:50 PM</td>
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<td>41614</td>
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<td>F</td>
<td>100 - Materials Science &amp; Eng Bld</td>
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Credit Hours: 1 hours

Scientific Computing Seminar
Restricted to Graduate - Urbana-Champaign.

Credit Hours: 1 hours

PHD Orientation Seminar
Restricted to Computer Science major(s). Restricted to Graduate - Urbana-Champaign.
Topic: Orientation for new PhD students.

Credit Hours: 1 hours

Quantum Computing Seminar
Restricted to Graduate - Urbana-Champaign.
Topic: "Introduction to Quantum Computing for Computer Scientists and Engineers" Description: This cs591 seminar is a reading seminar where we will go through an introductory reading material on quantum computing to introduce basic quantum concepts, algorithms and applications to graduate students in Computer Science and Engineering. Through various papers we will introduce quantum systems, some basic quantum theory concepts, including states and their dynamics, architecture concepts including concepts of qubits and quantum gates, selected quantum algorithms, quantum communication principles, quantum entanglement concepts and application of quantum systems to cryptography. Each student will be expected to present and discuss at least one paper during the semester and read/participate in discussion of other papers in the reading list. Prerequisite: Required – None; Preferably - At least one undergraduate physics course, background in linear algebra and basic matrix analysis, and undergraduate CS courses such as theory of algorithms (CS 473), and at least one of the security (CS/ECE 461), systems (CS/ECE 425) and networks (CS/ECE 438) courses.

Credit Hours: 1 hours

Security Reading Seminar
Restricted to Graduate - Urbana-Champaign.
Topic: Security Reading Seminar. Prerequisite: A prior course in security or CS423 or consent of instructor.

Credit Hours: 1 hours

Software Engineering Seminar
Instructor Approval Required
Restricted to Graduate - Urbana-Champaign.
Topic: Software Engineering Research Seminar. This seminar is about software engineering research, not focusing on practice. Most meetings discuss recent or seminal research papers. If interested in the seminar, please sign up to the soft-eng mailing list from http://wiki.cites.illinois.edu/wiki/display/SoftEng

Credit Hours: 1 hours
### 67467 Discussion/Recitation TXT ARRANGED - Zhai, C

Credit Hours: 2 hours  
Text Mining Seminar  
Topic: Text Information Management and Analysis  
Text data are rich in semantic content and often contain valuable information such as human opinions and preferences. They play an important role in all big data applications. Text mining is the process of converting big unstructured text data into actionable knowledge to support user tasks and decision making. CS 591txt is a seminar on current topics in the text mining field, which is closely related to data mining, natural language processing, information retrieval, and machine learning. Students will read, discuss, and analyze the latest research in text mining techniques and applications.