## Computer Science

### CS 461  **Computer Security I**  credit: 3 OR 4 hours.

Fundamental principles of computer and communications security and information assurance: ethics, privacy, notions of threat, vulnerabilities, and risk in systems, information warfare, malicious software, data secrecy and integrity issues, network security, trusted computing, mandatory and discretionary access controls, certification and accreditation of systems against security standards. Security mechanisms: authentication, auditing, intrusion detection, access control, cryptography, security protocols, key distribution. Same as ECE 422. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 241 or ECE 391.

<table>
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<tr>
<th>CRN</th>
<th>Type</th>
<th>Section</th>
<th>Time</th>
<th>Days</th>
<th>Location</th>
<th>Instructor</th>
</tr>
</thead>
</table>
| 49546 | Lecture  | A3      | 08:30 AM - 09:45 AM| MW   | 1310 - Digital Computer Laboratory | Bobba, R
|       |          |         |                    |      |                              | Nicol, D    |

Credit Hours: 3 hours

| 49547 | Lecture  | A4      | 08:30 AM - 09:45 AM| MW   | 1310 - Digital Computer Laboratory | Bobba, R
|       |          |         |                    |      |                              | Nicol, D    |

Credit Hours: 4 hours

Restricted to Graduate - Urbana-Champaign.

| 50456 | Online   | ONL     | ARRANGED -         |      |                              | Bobba, R
|       |          |         |                    |      |                              | Nicol, D    |

Restricted to MS: Civil Engr - Online - UIUC, MCS:Computer Sci Online -UIUC, MS:Mechanical Engineerng -UIUC, NDEG:Grad Nondegree-CE-UIUC, or NDEG:Undergrad Nondeg-CE-UIUC.

Restricted to online non-degree, online MCS, online MSME and online MS CE students. Counts toward a certificate in Computer Science. Online & Continuing Education (OCE) restrictions and assessments apply, see http://www.oce.illinois.edu. For more details on this course section, please see http://online.dev.engr.illinois.edu/current-students/course-information/fall-2013-credit-course-offerings.

OCE Tuition $1017.00 per Bill Hour, and OCE Fees $50.00 per Bill Hour.