Class Schedule - Fall 2017

Electrical and Computer Engineering

ECE 498  **Special Topics in ECE**  credit: 0 TO 4 hours.
Subject offerings of new and developing areas of knowledge in electrical and computer engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. 0 to 4 undergraduate hours. 0 to 4 graduate hours. May be repeated in the same or separate terms if topics vary.

<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>68862</td>
<td>Lecture</td>
<td>AM3</td>
<td>12:30 PM - 01:50 PM</td>
<td>TR</td>
<td>3017 - Electrical &amp; Computer Eng Bldg</td>
<td>Miller, A</td>
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</tbody>
</table>

Credit Hours: 3 hours
Applied Cryptography
Prerequisites: ECE 422 / CS 461 (Introduction to computer security) or equivalent - Or ECE 428 / CS 425 (Distributed Systems) or equivalent. Cryptography is a powerful toolbox for building secure systems --- not just for private communication, but also for building fault tolerant protocols, for securely outsourcing computation to untrusted services, and more. The goal of this course is to introduce the concepts of modern cryptography, including a combination of theoretical foundations (how do we precisely state security guarantees and assumptions, and prove that a protocol is designed correctly?) and practical techniques (how do we combine secure primitives to make effective systems?). This course is intended for senior undergraduate students with an interest in applying cryptographic techniques to building secure systems, and for graduate students with an interest in cryptography or systems security. Cryptography is briefly introduced in ECE 422 / CS 461 “Intro to Computer Security” and in ECE 423 / CS 463 “Advanced Computer Security,” however this course goes into detail of their fundamental underlying techniques, security models, and practical implementations.

| 68863| Lecture| AM4     | 12:30 PM - 01:50 PM| TR   | 3017 - Electrical & Computer Eng Bldg | Miller, A  |

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Applied Cryptography
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