<table>
<thead>
<tr>
<th>Course Prefix</th>
<th>Course Title</th>
<th>Foundations</th>
<th>Systems</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSE 509</td>
<td>Digital Video Processing</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 510</td>
<td>Database Management System Implementation</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 511</td>
<td>Semi-Structured Data Management</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 512</td>
<td>Distributed Database Systems</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 515</td>
<td>Multimedia and Web Databases</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 520</td>
<td>Computer Architecture II</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>CSE 522</td>
<td>Real-Time Embedded Systems</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 530</td>
<td>Embedded Operating Systems Internals</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 531</td>
<td>Distributed and Multiprocessor Operating Systems</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 534</td>
<td>Advanced Computer Networks</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 535</td>
<td>Mobile Computing</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 536</td>
<td>Advanced Operating Systems</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 539</td>
<td>Applied Cryptography</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>CSE 543</td>
<td>Information Assurance and Security</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 545</td>
<td>Software Security</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 546/591</td>
<td>Cloud Computing</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 548</td>
<td>Advanced Computer Network Security</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 550</td>
<td>Combinatorial Algorithms and Intractability</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>CSE 551/591</td>
<td>Foundations of Algorithms*</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 552</td>
<td>Randomized and Approximation Algorithms</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 555</td>
<td>Theory of Computation</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 556</td>
<td>Game Theory with Applications to Networks</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 561</td>
<td>Modeling and Simulation Theory and Applications</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>CSE 563</td>
<td>Software Requirements and Specification</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 564</td>
<td>Software Design</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 565</td>
<td>Software Verification, Validation and Testing</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 566</td>
<td>Software Project, Process and Quality Management</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 569</td>
<td>Fundamentals of Statistical Learning and Pattern Recognition</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 570</td>
<td>Advanced Computer Graphics I</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 571</td>
<td>Artificial Intelligence</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 572</td>
<td>Data Mining</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 573/591</td>
<td>Semantic Web Mining</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 574</td>
<td>Planning and Learning Methods in AI</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 575</td>
<td>Statistical Machine Learning</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 576</td>
<td>Topics in Natural Language Processing</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 577</td>
<td>Advanced Geometric Modeling I</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 578/591</td>
<td>Data Visualization</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 579</td>
<td>Knowledge Representation and Reasoning</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4XX and 4XX/598 courses do not apply toward the required area courses.

* CSE 598 Design and Analysis of Algorithms and CSE 591 Foundations of Algorithms cannot both be listed on the iPOS.