Core Courses

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Semester Hours</th>
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</thead>
<tbody>
<tr>
<td>CPE 551</td>
<td>Digital Signal Processing</td>
<td>3</td>
</tr>
<tr>
<td>CPE 555</td>
<td>Control Systems</td>
<td>3</td>
</tr>
<tr>
<td>CPE 560</td>
<td>Embedded Design</td>
<td></td>
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<tr>
<td></td>
<td>With Microprocessors</td>
<td>3</td>
</tr>
<tr>
<td>CPE 635</td>
<td>Advanced Circuit Theory</td>
<td>3</td>
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</tbody>
</table>

Elective Courses

CPE 503 Computational Methods (3 Hours)
CPE 515 Advanced Logic Design (3 Hours)
CPE 520 Advanced Engineering Analysis I (3 Hours)
CPE 521 Advanced Engineering Analysis II (3 Hours)
CPE 530 VLSI Design (3 Hours)
CPE 531 VLSI Testing and Design for Testability (3 Hours)
CPE 532 Digital Integrated Circuit Design (3 Hours)
CPE 536 Solid State Electronics (3 Hours)
CPE 539 Lasers (3 Hours)
CPE 544 Electromagnetic Field Analysis (3 Hours)
CPE 556 Systems Theory (3 Hours)
CPE 557 Robotics (3 Hours)
CPE 571 Engineering Foundations of Biomedical Engineering (3 Hours)
CPE 573 Biomedical Instrumentation (3 Hours)
CPE 575 Biomaterials (3 Hours)
CPE 655 Advanced Control Systems (3 Hours)
CPE 693 Advanced Topics in Engineering (Variable 1 to 4 Hours)
CPE 695 Scientific Writing Seminar (1 Hour)
CPE 696 Seminar (1 Hour)
CPE 697 Internship (1-3 Hours)
CPE 698 Independent Study (1-4 hours)
CPE 699 Thesis Research (1-6 Hours)