**Technical Electives and Selected Core: 33 Hours Total**

<table>
<thead>
<tr>
<th>Technical Electives</th>
<th>Other Tech Electives</th>
</tr>
</thead>
<tbody>
<tr>
<td>VLSI (Very Large Scale Integrated Circuits) &amp; Computer-Aided Design</td>
<td></td>
</tr>
<tr>
<td>ECE 720 (3)</td>
<td>ECE 721 (3)</td>
</tr>
<tr>
<td>Microprocessor Based Systems</td>
<td></td>
</tr>
<tr>
<td>ECE 765 (3)</td>
<td></td>
</tr>
<tr>
<td>Digital Design and Computer Architecture</td>
<td></td>
</tr>
<tr>
<td>ECE 667 (3)</td>
<td>ECE 762 (3)</td>
</tr>
<tr>
<td>Computer Interfacing and Protocols, Computer Networks</td>
<td></td>
</tr>
<tr>
<td>ECE 766 (3)</td>
<td>CS&amp;E 677 (3)</td>
</tr>
<tr>
<td>Robotics and Control for Automation</td>
<td></td>
</tr>
<tr>
<td>ECE 551 (3)</td>
<td>ECE 755 (3)</td>
</tr>
<tr>
<td>Neural Networks, Artificial Intelligence</td>
<td></td>
</tr>
<tr>
<td>ECE 779 (3)</td>
<td>CS&amp;E 630 (3)</td>
</tr>
<tr>
<td>Digital Signal Processing/Imagery Processing</td>
<td></td>
</tr>
<tr>
<td>ECE 600 (3)</td>
<td>ECE 609 (2)</td>
</tr>
<tr>
<td>Applied Software Engineering</td>
<td></td>
</tr>
<tr>
<td>ECE 668 (3)</td>
<td>ECE 767 (3)</td>
</tr>
<tr>
<td>Semiconductors</td>
<td></td>
</tr>
<tr>
<td>ECE 637 (4)</td>
<td>ECE 730 (3)</td>
</tr>
<tr>
<td>Communication Theory</td>
<td></td>
</tr>
<tr>
<td>ECE 501 (3)</td>
<td>ECE 702 (3)</td>
</tr>
<tr>
<td>Numerical Analysis</td>
<td></td>
</tr>
<tr>
<td>ECE 759 (3)</td>
<td>CS&amp;E 541 (3)</td>
</tr>
</tbody>
</table>

**Total:** 33 Hours Total

**Notes:**

- 12 hours must be selected from the list below;
- 15 hours must be ECE (can include ECE courses taken from list, tech elecs, and EES core not in CES core [311, 312, 327, 341, 432, 447])

---

**Technical Electives for CES Students:**

- One GEC must be a SOCIAL diversity course.
- One GEC must be an ETHICS course.
- 12 hours must be selected from the list below;
- 15 hours must be ECE (can include ECE courses taken from list, tech elecs, and EES core not in CES core [311, 312, 327, 341, 432, 447])

---

**Selected Core**

- 0-9 hours may be taken from this list:
  - Bio 113 (5), Chem 122 (5) or 125 (4), Chem 231 or 251 (3), Geo Sci 121 (5), ME 250 (4), ME 410 (4), ME 420 (4), ME 430 (4), MIE 401 or ME 500 (4)

---

**GEN ED CURRICULM (38 HRS)**

**Pre-admission Condition**

- Met ☐
- Not Met ☐

**One GEC must be a Social Diversity Course.**

**One GEC must be an Ethics Course.**

**English & Comm Skills (13)**

- English 110 (5)
- 2nd Wrting Crs (5)
- ECE 582 (3)

- Students must take 25 hours across Social Sciences, Historical Study, and Arts & Humanities with a minimum of 5 hours and maximum of 10 hours per category.

**Social Sciences (5-10 hrs)**

**Historical Study (5-10 hrs)**

**Arts & Humanities (5-10 hrs)**

---

**Notes:**

- 25 ECE hrs
- 48 hrs?
- 45 ECE hrs
- New to OSU:
- 0-9 hours may be taken from this list:
  - ME 430 (4), MSE 401
  - Bio 113 (5), Chem 122 (5), Chem 231 or 251 (3), Geo Sci 121 (5), ME 250 (4), ME 410 (4), ME 420 (4), ME 430 (4), MIE 401 or ME 500 (4)
- One GEC must be a Social Diversity Course.
- One GEC must be an Ethics Course.
- 12 hours must be selected from the list below;
- 15 hours must be ECE (can include ECE courses taken from list, tech elecs, and EES core not in CES core [311, 312, 327, 341, 432, 447])
- 12 hours must be selected from the list below;
- 15 hours must be ECE (can include ECE courses taken from list, tech elecs, and EES core not in CES core [311, 312, 327, 341, 432, 447])

---

**Hours Req’d for Degree:**

**Total Proposed Hours:**

**Transfer students:**

**45 ECE hrs?**

---

**Final CPHR:**

**Final MGPA:**

---

**OK to Graduate?** Yes ☐ No ☐

---

**Program Approved:**

---

**Advisor’s Signature**

**Date**