

Sample Pathway to Bachelor of Science in Engineering: Electrical and Computer Engineering, 141 total credits (2026)

SEMESTER 1	SEMESTER 2	NOTES
<ul style="list-style-type: none"> <li><input type="checkbox"/> <b>ENGR 100 + ENGR 100L (3) <i>Intro to Engr</i></b> (MATH 105* or higher)</li> <li><input type="checkbox"/> <b>CHEM 134 + CHEM 134L (4) <i>Chemistry I</i></b> (MATH 105* or higher, H.S. chemistry)</li> <li><input type="checkbox"/> <b>MATH 115 (4) <i>Calculus I</i></b> (MATH 105 'C-' or placement by exam) s DDC GECT</li> <li><input type="checkbox"/> <b>DDC course (3) GEHA</b></li> <li><input type="checkbox"/> <b>COMP 105 (3) <i>Composition I</i></b> (COMP 099 or placement by exam) DDC GEWO</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> <b>ECE 273 + ECE 273R + ECE 273L (4) <i>Digital Systems</i></b> (Math 115*)</li> <li><input type="checkbox"/> <b>MATH 116 (4) <i>Calculus II</i></b> (MATH 115 'C-')</li> <li><input type="checkbox"/> <b>PHYS 150 + PHYS 150L (4) <i>Physics I</i></b> (Math 115*: recommended as prereq) s DDC GENS</li> <li><input type="checkbox"/> <b>COMP 270 (3) <i>Technical Writing</i></b> (COMP 105 or placement by exam, 35 completed credits) DDC GEWO</li> <li><input type="checkbox"/> <b>DDC course (3) GEHA</b></li> </ul>	<ul style="list-style-type: none"> <li>• The sample pathways were created with Fall and Winter semester enrollment in mind. Summer semesters can be used to lessen the workload, and/or participate in co-op or research.</li> <li>• For DDC requirements, please see the University's <a href="#">guidelines</a></li> <li>• A course may fulfill multiple requirements; however, credit is only applied once. Using one course to fulfill multiple requirements may result in a deficiency in total credits.</li> <li>• Please see your advisor.</li> </ul>
SEMESTER 3	SEMESTER 4	EECE Electives 6
<ul style="list-style-type: none"> <li><input type="checkbox"/> <b>MATH 215 (4) <i>Calculus III</i></b> (MATH 116 'C-')</li> <li><input type="checkbox"/> <b>PHYS 151 + PHYS 151L (4) <i>Physics II</i></b> (PHYS 150, MATH 116*)</li> <li><input type="checkbox"/> <b>ECE 270 + ECE 270R (4) <i>Computer Methods</i></b> (ENGR 100, Math 115*)</li> <li><input type="checkbox"/> <b>DDC course (3) GEIN</b></li> <li><input type="checkbox"/> <b>DDC course (3) GESB</b></li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> <b>ECE 210 + ECE 210R + ECE 210L (4) <i>Circuits</i></b> (MATH 116 'C-', PHYS 151*)</li> <li><input type="checkbox"/> <b>MATH 228 (4) <i>Diff Equ w/ Linear Algebra</i></b> (Math 116 'C-')</li> <li><input type="checkbox"/> <b>IMSE 317 (3) <i>Engineering Prob &amp; Stats</i></b> (Math 116 'C-')</li> <li><input type="checkbox"/> <b>ECON 201 or 202 (3) <i>Macroeconomics or Microeconomics</i></b> (MATH 105) DDC GESB</li> <li><input type="checkbox"/> <b>ECE / MATH 276 (4) <i>Discrete Math</i></b>(MATH 116 'C-')</li> </ul>	<p><b>PROFESSIONAL ELECTIVES</b> Choose 3-4 credit hours from the following:</p> <p>ECE 237, ECE 319, ECE 414, ECE 415, ECE 4361, ECE 435, ECE 439, ECE 4432, ENGR 492, ENGR 493 (1-3)</p>

SEMESTER 5	SEMESTER 6	
<ul style="list-style-type: none"> <li>□ <b>ECE 3731</b> (4) <i>Microprocessors &amp; Embedded Systems</i> (ECE 273, ECE 270)</li> <li>□ <b>ECE 311 + ECE 311L</b> (4) <i>Electronic Circuits I</i> (ECE 210, CHEM 134, COMP 270*)</li> <li>□ <b>ECE 385</b> (3) <i>Elec Materials &amp; Devices</i> (CHEM 134, ECE 311*)</li> <li>□ <b>ECE 3171</b> (4) <i>Analog &amp; Discrete Signals &amp; Systems</i> (MATH 228, ECE 311*)</li> <li>□ <b>DDC course</b> (3) GESB</li> </ul>	<ul style="list-style-type: none"> <li>□ <b>ECE 450</b> (4) <i>Analog &amp; Dig Comm Sys</i> (IMSE 317, ECE 3171)</li> <li>□ <b>ECE 460 + ECE 460L</b> (4) <i>Automatic Control Systems</i> (ECE 3171)</li> <li>□ <b>ECE 370</b> (4) <i>Adv Soft Techniques in Computer Engr</i> (ECE 270, ECE 273*)</li> <li>□ <b>ENT 400</b> (3) <i>Entrepreneurial Thinking &amp; Beh.</i> (Junior standing) DDC GEIN <b>or ENGR 400</b> (3) Appl Business Tech for Engr (Senior Standing) DDC GEIN</li> <li>□ <b>Professional Elective</b> (3)</li> </ul>	<p><b>APPROVED ELECTIVES (4-6)</b> Choose 3-4 credit hours from the following:  ECE 413, ECE 4881, ENGR 299, ENGR 399, ENGR 492, ENGR 493, ENGR 499</p> <p>Check design/tech courses' prerequisites, corequisites, course credit and schedule in <a href="#">DegreeWorks</a>, the <a href="#">Undergrad Catalog</a> and <a href="#">Browse Classes</a></p>
SEMESTER 7	SEMESTER 8	
<ul style="list-style-type: none"> <li>□ <b>ECE 471</b> (4) <i>Comp Networks / Data Comm</i> (ECE 3731, IMSE 317)</li> <li>□ <b>ECE 375</b> (4) <i>Intro to Comp Architecture</i> (ECE 270, ECE 273, ECE 276*, ECE 3731*)</li> <li>□ <b>ECE 4951</b> (3) <i>System Design &amp; Micro.</i> (ECE 311, ECE 3731)</li> <li>□ <b>ECE 473</b> (4) <i>Embedded Systems</i> (ECE 3731)</li> <li>□ <b>ECE 4981/4982</b> (2) <i>Senior Design I</i> <b>ECE 4981:</b> (ECE 3731, ECE 3171, Senior Standing, &amp; at least one of the following: ECE 414, 415, 450, 460, 480, 4951) DDC GECE, GEWI <b>ECE 4982:</b> (ECE 3731, ECE 375, Senior standing, &amp; at least one of the following: ECE 471, 473, 475, 478)</li> </ul>	<ul style="list-style-type: none"> <li>□ <b>ECE 475</b> (4) <i>Comp Hardware Org / Design</i> (ECE 375)</li> <li>□ <b>ECE 478</b> (4) <i>Operating Systems</i> (ECE 370, IMSE 317)</li> <li>□ <b>ECE 480 + ECE 480L</b> (4) <i>Intro to Digital Signal Processing</i> (ECE 3171, MATH 228)</li> <li>□ <b>Approved Elective</b> (3)</li> <li>□ <b>ECE 4983/4984</b> (2) <i>Senior Design II</i> <b>ECE 4983:</b> (ECE 4981) s DDC GECE, GEWI <b>ECE 4984:</b> (ECE 4982) s DDC GECE, GEWI</li> </ul>	