

Sample Pathway to Bachelor of Science in Engineering: Computer Engineering (125 credits) **Fall 2023**

Semester 1	Semester 2	NOTES
<input type="checkbox"/> CHEM 134 + CHEM 134L (4) <i>Chemistry I</i> (MATH 105* or higher) <input type="checkbox"/> ENGR 100 + ENGR 100L (3) <i>Intro to Engr</i> (MATH 105* or higher) <input type="checkbox"/> MATH 115 (4) <i>Calculus I</i> (MATH 105 'C-' or placement by exam) DDC GECT <input type="checkbox"/> DDC course (3) GEHA	<input type="checkbox"/> ECE 273 + ECE 273R + ECE 273L (4) <i>Digital Systems</i> (Math 115*) <input type="checkbox"/> MATH 116 (4) <i>Calculus II</i> (MATH 115 'C-') <input type="checkbox"/> PHYS 150 + PHYS 150L (4) <i>Physics I</i> (Math 115*: recommended as prereq) DDC GENS <input type="checkbox"/> COMP 105 (3) <i>Composition I</i> (COMP 099 or placement by exam) DDC GEWO <input type="checkbox"/> DDC course (3) GEHA	<ul style="list-style-type: none"> 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. For DDC requirements, please see the University's guidelines
Semester 3	Semester 4	Notes
<input type="checkbox"/> MATH 215 (4) <i>Calculus III</i> (MATH 116 'C-') <input type="checkbox"/> PHYS 151 + PHYS 151L (4) <i>Physics II</i> (PHYS 150, MATH 116*) DDC GENS <input type="checkbox"/> ECE 270 + ECE 270R (4) <i>Computer Methods</i> (ENGR 100, Math 115*) <input type="checkbox"/> DDC course (3) GESB/GEIN <input type="checkbox"/> ECON 201 or 202 (3) <i>Macroeconomics or Microeconomics</i> (MATH 105) DDC GESB	<input type="checkbox"/> ECE 210 + ECE 210R + ECE 210L (4) <i>Circuits</i> (MATH 116 'C-', PHYS 151*) <input type="checkbox"/> MATH 228 (4) <i>Diff Equ w/ Linear Algebra</i> (Math 116 'C-') <input type="checkbox"/> ECE 276 (4) <i>Discrete Math</i> (Math 116 'C-') <input type="checkbox"/> COMP 270 (3) <i>Technical Writing</i> (COMP 105 or placement by exam, 35 completed credits) DDC GEWO	<ul style="list-style-type: none"> Each student's pathway is unique and may differ slightly from this one 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.

* denotes a corequisite course

Courses listed in parentheses () are prerequisites for the listed course

Semester 5	Semester 6	CE Elective Courses
<input type="checkbox"/> ECE 3731 (4) <i>Microprocessors & Embedded Systems</i> (ECE 273, ECE 270) <input type="checkbox"/> ECE 311 + ECE 311L (4) <i>Electronic Circuits I</i> (ECE 210, CHEM 134, COMP 270*) <input type="checkbox"/> ECE 370 (4) <i>Adv Soft Techniques in Computer Engr</i> (ECE 270, ECE 273*) <input type="checkbox"/> IMSE 317 (3) <i>Engineering Prob & Stats</i> (Math 116 'C-')	<input type="checkbox"/> ECE 375 (4) <i>Intro to Comp Architecture</i> (ECE 270, ECE 273, ECE 276*, ECE 3731*) <input type="checkbox"/> ECE 471 (4) <i>Comp Networks / Data Comm</i> (ECE 3731, IMSE 317) <input type="checkbox"/> ECE 473 (4) <i>Embedded Systems</i> (ECE 3731) <input type="checkbox"/> Professional Elective (4) ENCP (check individual courses for pre-reqs)	<p>TECHNICAL ELECTIVES (15)</p> <p>PROFESSIONAL ELECTIVES (7 or 8 cr minimum) (ENCP)</p> <p>ECE 3171, ECE 387, ECE 413, ECE 428, ECE 433, ECE 434, ECE 435, ECE 438, ECE 467, ECE 4881, ENGR 492, ENGR 493</p> <p>Notes: Students receive credit for only one from ECE 3171, ECE 317, and ECE 3801.</p>
Semester 7	Semester 8	
<input type="checkbox"/> ECE 475 (4) <i>Comp Hardware Org / Design</i> (ECE 375) <input type="checkbox"/> ECE 478 (4) <i>Operating Systems</i> (ECE 370, IMSE 317) <input type="checkbox"/> Professional Elective (4) ENCP (check individual courses for pre-reqs) <input type="checkbox"/> ECE 4982 (2) <i>CE Design I</i> (ECE 3731, ECE 375, Senior standing, & at least one of the following: ECE 471, 473, 475, 478)	<input type="checkbox"/> ENT 400 (3) <i>Entrepreneurial Thinking & Behavior</i> (Junior Standing) DDC GEIN <input type="checkbox"/> DDC course (3) GESB <input type="checkbox"/> Approved Elective (3) ENCT (check individual courses for pre-reqs) <input type="checkbox"/> Approved Elective (4) ENCT (check individual courses for pre-reqs) <input type="checkbox"/> ECE 4984 (2) <i>CE Design II</i> (ECE 4982) DDC GECE	<p>APPROVED ELECTIVES (ENCT)</p> <p>ECE 3171, ECE 319, ECE 385, ECE 387, ECE 414, ECE 415, ECE 428, ECE 433, ECE 434, ECE 435, ECE 4361 [or 436], ECE 438, ECE 4432 [or 443], ECE 4431, ECE 446, ECE 450, ECE 460, ECE 467, ECE 480, ECE 4881, ECE 491, ECE 4951, ENGR 350, ENGR 399, ENGR 492, ENGR 493, IMSE 3005, IMSE 381, IMSE 421, IMSE 4425, IMSE 4545, ME 230, ME 260 OR ME 265</p> <ul style="list-style-type: none"> Review Professional, Approved Elective courses, prerequisites, corequisites, course credit and schedule in DegreeWorks, the Undergrad Catalog and Browse Classes.

* denotes a corequisite course

Courses listed in parenthesis () are prerequisites for the listed course