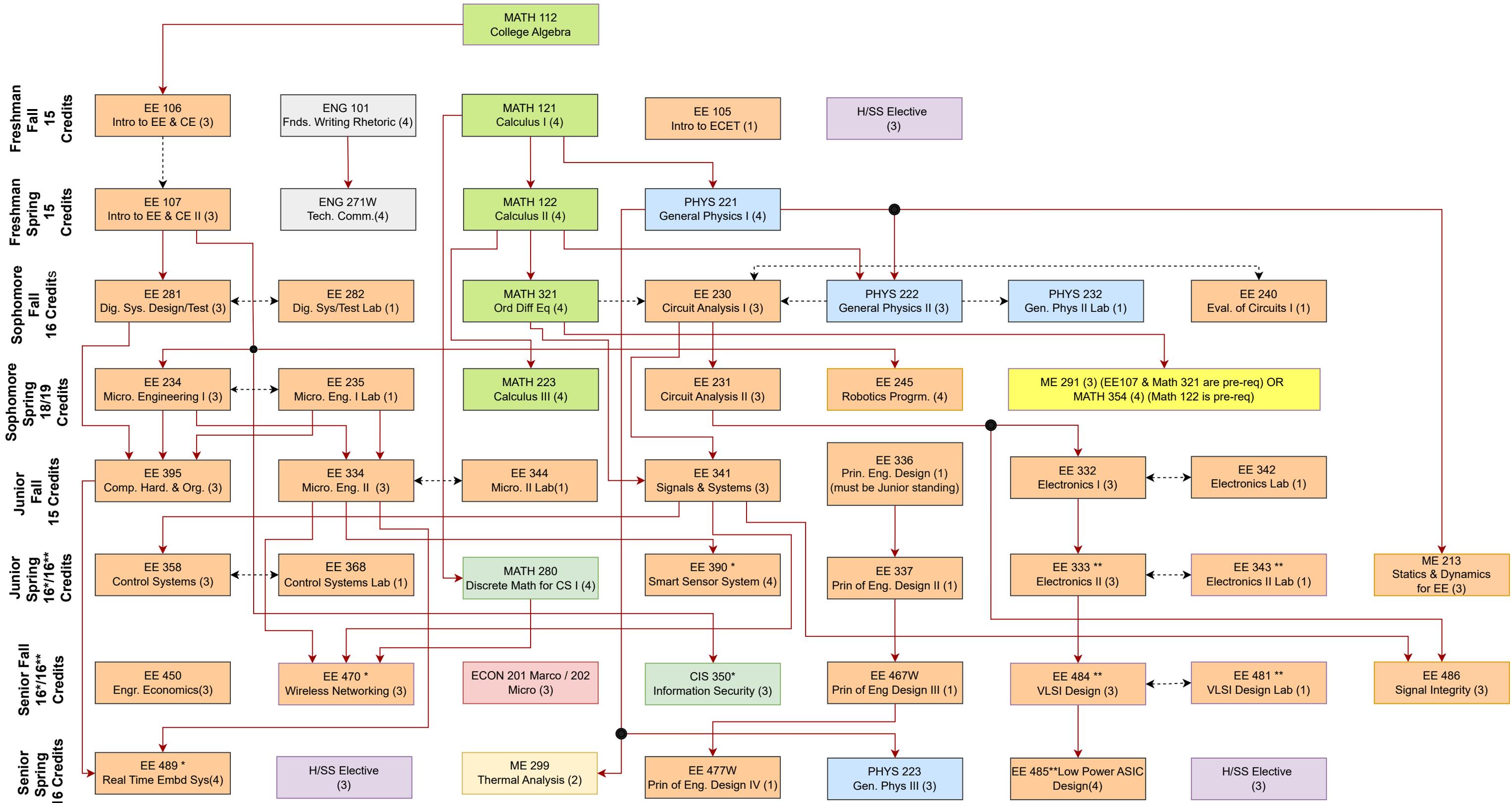# B.S Computer Engineering (BSCpE) Pathway (2023/2024)

* for EMBEDDED & IOT FOCUS   **** for APPLICATION SPECIFIC IC DESIGN FOCUS**

MATH 112 College Algebra

Freshman Fall — 15 Credits

- EE 106 — Intro to EE & CE (3)
- ENG 101 — Fnds. Writing Rhetoric (4)
- MATH 121 — Calculus I (4)
- EE 105 — Intro to ECET (1)
- H/SS Elective (3)

Freshman Spring — 15 Credits

- EE 107 — Intro to EE & CE II (3)
- ENG 271W — Tech. Comm.(4)
- MATH 122 — Calculus II (4)
- PHYS 221 — General Physics I (4)

Sophomore Fall — 16 Credits

- EE 281 — Dig. Sys. Design/Test (3)
- EE 282 — Dig. Sys/Test Lab (1)
- MATH 321 — Ord Diff Eq (4)
- EE 230 — Circuit Analysis I (3)
- PHYS 222 — General Physics II (3)
- PHYS 232 — Gen. Phys II Lab (1)
- EE 240 — Eval. of Circuits I (1)

Sophomore Spring — 18/19 Credits

- EE 234 — Micro. Engineering I (3)
- EE 235 — Micro. Eng. I Lab (1)
- MATH 223 — Calculus III (4)
- EE 231 — Circuit Analysis II (3)
- EE 245 — Robotics Progrm. (4)
- ME 291 (3) (EE107 & Math 321 are pre-req) OR MATH 354 (4) (Math 122 is pre-req)

Junior Fall — 15 Credits

- EE 395 — Comp. Hard. & Org. (3)
- EE 334 — Micro. Eng. II (3)
- EE 344 — Micro. II Lab(1)
- EE 341 — Signals & Systems (3)
- EE 336 — Prin. Eng. Design (1) (must be Junior standing)
- EE 332 — Electronics I (3)
- EE 342 — Electronics Lab (1)

Junior Spring — 16*/16** Credits

- EE 358 — Control Systems (3)
- EE 368 — Control Systems Lab (1)
- MATH 280 — Discrete Math for CS I (4)
- EE 390 * — Smart Sensor System (4)
- EE 337 — Prin of Eng. Design II (1)
- EE 333 ** — Electronics II (3)
- EE 343 ** — Electronics II Lab (1)
- ME 213 — Statics & Dynamics for EE (3)

Senior Fall — 16*/16** Credits

- EE 450 — Engr. Economics(3)
- EE 470 * — Wireless Networking (3)
- ECON 201 Marco / 202 Micro (3)
- CIS 350* — Information Security (3)
- EE 467W — Prin of Eng Design III (1)
- EE 484 ** — VLSI Design (3)
- EE 481 ** — VLSI Design Lab (1)
- EE 486 — Signal Integrity (3)

Senior Spring — 16 Credits

- EE 489 * — Real Time Embd Sys(4)
- H/SS Elective (3)
- ME 299 — Thermal Analysis (2)
- EE 477W — Prin of Eng. Design IV (1)
- PHYS 223 — Gen. Phys III (3)
- EE 485** Low Power ASIC Design(4)
- H/SS Elective (3)

Line and Node Legend

- - - → Pre-req & Concurrency
- ← - - → Co-requisite
- ⌐ Prerequisite
- ● Node

Color Legend

- ECET courses
- Math
- Physics
- Computer Science
- English
- ME or MATH
- ECON
- ME
- General Education