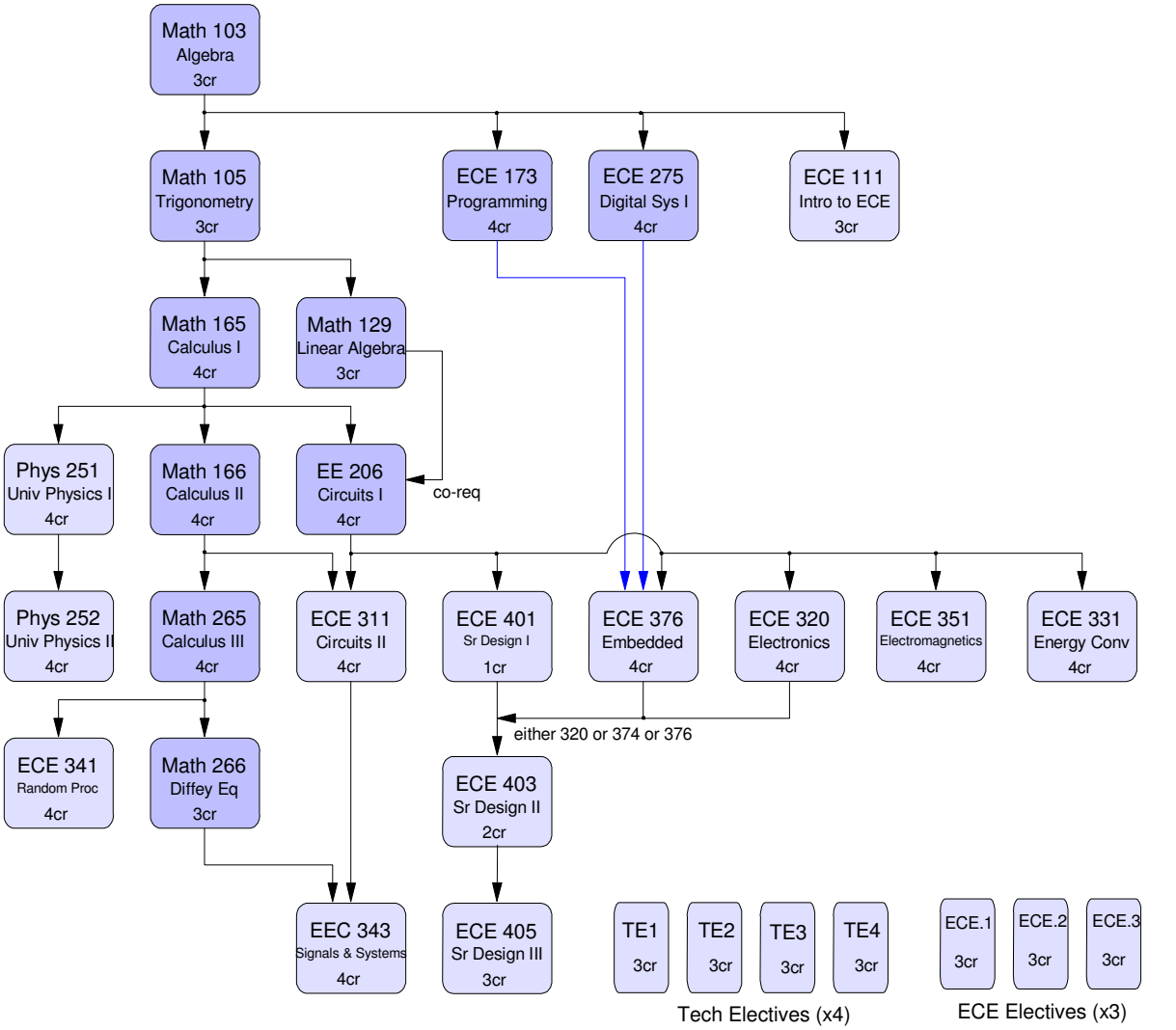
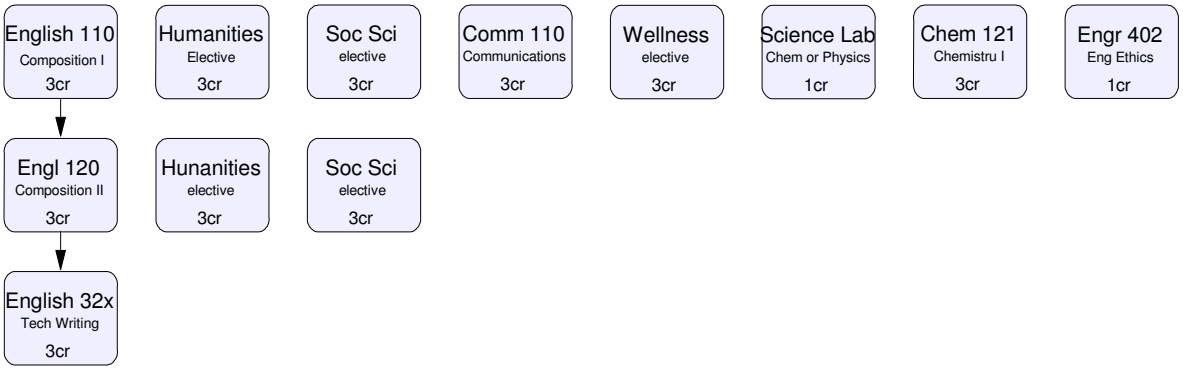
Electrical Engineering

Proposed Fall 2024 Course Requirements

rev February 1, 2024



University Requirements



ECE Electives (pick 4)

- Any ECE 4xx course, excluding ECE 494 and 496

Technical Electives (pick 3)

ECE 374 Computer Organization	CSCI 467 Algorithm Analysis	MATH 481 Fourier Analysis
ECE 4xx Didactic 4xx ECE Course	CSCI 474 Operating Systems	MATH 483 Partial Differential Eq
ECE 494 Ind Study (max 6 cr)	CSCI 475 Operating Systems Design	MATH 488 Numerical Analysis I
ECE 496 Field Experience (max 3cr)	CSCI 477 Object-Oriented Systems	MATH 489 Numerical Analysis II
ABEN 456 Biobased Energy	CHEM 122/122L Chemistry II & Lab	ME 221 Engineering Mechanics I
BIOL 150/150L Biology I and Lab*	CHEM 341/341L Organic Chem & Lab	ME 222 Engineering Mechanics II
BIOL 220/220L Human Anatomy +Lab	CHEM 342/342L Organic Che II & Lab	ME 223 Mechanics of Materials
BIOL 221/221L Human Anatomy +Lab	ENGR 310 Entrepreneurship	ME 350 Thermodynamics
BIOL 315/315L Genetics + Lab	IME 440 Engineering Economy	ME 470 Renewable Energy
CE 309/310 Fluid Mechanics + Lab	IME 456 Project Management	PHYS 350 Modern Physics
CE/ME 486 Nanotechnology	IME 461 Quality Assurance & Control	PHYS 360 Modern Physics II
CSCI 161 Computer Science II	MATH 270 Intro to Abstract Math	PHYS 413 Lasers
CSCI 222 Discrete Mathematics	MATH 420 Abstract Algebra I	PHYS 415 Elements of Photonics
CSCI 336 Theoretical Comp Sci II	MATH 421 Abstract Algebra II	PHYS 485 Quantum Mechanics
CSCI 366 Files for D-Base Systems	MATH 429 Linear Algebra 3	STAT 450 Stochastic Processes
CSCI 372 Comparative Languages	MATH 450 Real Analysis I	STAT 451 Bayesian Statistics
CSCI 426 Intro to Artificial Intelligence	MATH 451 Real Analysis II	STAT 468 Probability & Math Stats II
CSCI 458 Microcomputer Graphics	MATH 452 Complex Analysis	ZOO 460 Animal Physiology
CSCI 459 Computer Networks	MATH 480 Applied Differential Eq	

Math Minor

- Math 165 / 166 / 265 / 266
- Plus 6 more credits (Math 270 / 3xx / 4xx) excluding Math 327 and 376
- C or higher required in all math courses

Computer Science Minor

- CSCI 160 / 161 / 213
- Plus 7 credits CSCI courses (at least 3cr must be 3xx or higher)

Physics Minor

- Physics 251 / 252 / 252L / 350
- Plus 6 credits Physics 3xx / 4xx

Note on Humnities and Social Science Elective

- Must include at least one global perspective
- Must include at least one cultural diversity