Electrical Engineering B.S. (106-109 Credits)

This is a recommended course sequence based on the current University Catalog for this degree and illustrates how the degree could be completed in as little as eight semesters. Actual plans for individual students will vary based on transfer credits, semester start, advisor recommendations and academic needs. See "Be Advised" section for additional notes and requirements specific to this major.



Scan QR code for program requirements, course descriptions, and learning outcomes in the University Catalog.

Semester 1	Credits
MATH 221	4
ECE 210	3
GENG 101	3
Goal Area	4
Total Semester Credits	14
Semester 3	Credits
MATH 327	4
PHYS 235	5
ECE 201	3
ECE 220	4
Total Semester Credits	16
Semester 5	Credits
Statistics Elective	3
ECE 301	4
ECE 314	4
ECE 320	4
Goal Area	3
Total Semester Credits	18
Semester 7	Credits
Senior Elective	3-4
Depth Elective	3
Breadth Elective	3
ECE 461 or 462	3
Goal Area	6
Total Semester Credits	18-19

Semester 2	Credits
MATH 222	4
PHYS 234	5
GENG 102	3
Goal Area	3
Total Semester Credits	15
Semester 4	Credits
MATH 320 or MATH 321 or PHYS 346	3-4
ECE 202	4
GENG 380	3
CHEM 210	4
CSCI 201	3
Total Semester Credits	17-18
Semester 6	Credits
Junior Elective	3-4
ECE 316	4
ECE 323	4
ECE 391	4
Total Semester Credits	15-16
Semester 8	Credits
Depth Elective	3
Breadth Elective	3
ECE 461 or 462	3
Goal Area	3
Goal Area	3
Total Semester Credits	15



BE ADVISED...

- 1. Electrical Engineering Electives (21-23 credits)
 - a. Statistics Elective (3 credits): STAT 353 or STAT 417.
 - b. Junior Elective (3-4 credits): Select one course from MME201, MME 211, MME 224, MME243, PHYS 328, PHYS 329, PHYS 333, PHYS 334, PHYS 435, PHYS 436, PHYS 445, ECE 390, any 400 level ECE course.
 - c. Depth Elective (6 credits): Select one sequence from the following
 - i. Electronics: ECE 411 and ECE 482
 - ii. Power: ECE 411 and ECE 412
 - iii. Digital: ECE 421 and ECE 422 or ECE 423 or ECE 424
 - iv. Systems: Select two courses from ECE 424, ECE 431, ECE 432, ECE 433, ECE 451, ECE 452, ECE 471, ECE 473, ECE 474
 - d. Breadth Elective (6 credits): Select two courses from ECE 411, ECE 412, ECE 421, ECE 422, ECE 423, ECE 424, ECE 431, ECE 440, ECE 451, ECE 471, ECE 482
 - e. Senior Elective (3-4 credits): Select one course from PHYS 435, PHYS 436, MATH 411, MATH 421, MATH 423, MATH 427, MATH 452, MATH 455, STAT 447, CSCI 330, CSCI 331, CSCI 421, CSCI 450, MME 352, MME 450, any 400 level ECE courses.
 - f. No elective courses can double count.
- 2. Students fulfill the University's Upper Division Writing Requirement by successfully completing GENG 380.
- 3. Required to complete GENG 101, GENG 102, ECE 201, ECE 220, ENGL 191, MATH 221, MATH 222, PHYS 234, PHYS 235, and CHEM 210 with a grade point average (GPA) of at least 2.0. C or better in GENG 102, ECE 201, and ECE 220 is required.
- 4. The Bachelor of Science in Electrical Engineering, offered by the Electrical and Computer Engineering Department, are accredited by the Engineering Accreditation Commission (EAC) of ABET, http://www.abet.org.
- 5. All SCSU students must complete a minimum of 120 credits to graduate.
- 6. All SCSU students must have at least 40 credits of 300/400 level courses to graduate.
- 7. All SCSU students must complete a minimum of 40 credits of Liberal Education courses AND meet the requirements of all 10 goal areas, including RIGR and Diversity.
- 8. Apply for graduation one semester before you plan to graduate.

The degree map does not substitute for professional advising. Review your degree audit report and see your advisor each semester.

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