Electrical Engineering

FALL YEAR 1 SPRING YEAR 1

=MATH 220 (4)
Analytic Geometry and Calculus I
KSC-3

=MATH 221 (4)
Analytic Geometry and Calculus II
PR: MATH 220 ≥ C

=CHM 210 (4)
Chemistry I

=DEN 160 (1)
College of Engineering Orientation

=ENGL 100 (3)
Expository Writing I
KSC-1

=COMM 106 (3)
Public Speaking
KSC-2

=FALL YEAR 2 SPRING YEAR 2

=MATH 340 (4)
Elementary Differential Equations
PR: MATH 221 ≥ C

=ECE 241 (3)
Introduction to Electrical and Computer Engineering

=ECE 511 (3)
Circuit Theory II

=ECE 241 (3)
Introduction to Electrical and Computer Engineering

=ECE 511 (3)
Circuit Theory II

=PHYS 213 (5)
Engineering Physics I
PR/CO: MATH 220

=STAT 510 (3)
Introductory Probability and Statistics I
PR: MATH 221 ≥ C

=EC 410 (4)
Circuit Theory I
PR: MATH 221 ≥ C

=EC 410 (4)
Circuit Theory I
PR: MATH 221 ≥ C

=ECE 410 (4)
Circuit Theory I
PR: MATH 221 ≥ C

=ECE 511 (4)
Circuit Theory II
PR: MATH 340, ECE 410 ≥ C

=PHYS 214 (5)
Engineering Physics II
PR: PHYS 213, PR/CO: MATH 221

=EC 441 (3)
Design of Digital Systems
PR: ECE 241 ≥ C

=ECE 511 (4)
Circuit Theory II
PR: ECE 410 ≥ C

=ECE 511 (4)
Circuit Theory II
PR: ECE 410 ≥ C

=PR/CO: MATH 220

=PR/CO: MATH 221

=PR: MATH 221 ≥ C

=FALL YEAR 3 SPRING YEAR 3

=ECE 431 (3)
Microcontrollers
PR: ECE 241, CIS 209 ≥ C

=ECE 432 (3)
Classification Theory

=ECE 512 (3)
Linear Systems
PR: ECE 410, ECE 540, MATH 340 ≥ C

=KSC-5

=Elective (3)

=Elective (3)

=KSC-6

=KSC-7

=FALL YEAR 4 SPRING YEAR 4

=ECE 590 (3)
Senior Design Experience I
PR: ECE 525, 540 ≥ C

=ECE 591 (2)
Senior Design Experience II
PR: ECE 590 ≥ C

=ECE 530 (3)
Control Systems Design

=ECE 530 (3)
Control Systems Design

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**Electrical Engineering Curriculum Notes**

Students pursuing a B.S. in electrical engineering degree are required to complete one of the subplan options. These options include bioengineering, electronics and communications, and power systems.

For the good and benefit of the student and their future employer, the ECE department enforces a C-prerequisite policy for ECE or BME all courses listed by number in the curriculum and for any in-major ECE or BME technical elective course applied toward the degree. A grade of C or better must be earned in all prerequisites to such a course before enrolling in that course.

**Technical Electives**
Technical electives must be selected to complete one of the option areas.

See list of option areas and required electives at [ece.k-state.edu/academics/undergraduate/electrical-engineering/specialization/](http://ece.k-state.edu/academics/undergraduate/electrical-engineering/specialization/).

No more than 12 credit hours of courses with prefix ECE may be transferred to Kansas State University for credit toward a bachelor's degree in either electrical engineering or computer engineering. Further, those courses selected for transfer credit must be equivalent to courses in the list below and must be such that the prerequisites for the listed course are also satisfied. Any courses transferred must be taken from ABET accredited programs: ECE 210, ECE 241, ECE 410, ECE 525, ECE 557, ECE 581.

**K-State Core**
The K-State Core (KSC) is the university's version of the systemwide general education framework established by the Kansas Board of Regents.

- **KSC requirement 1** – English (6 hours)
- **KSC requirement 2** – Communications (3 hours)
- **KSC requirement 3** – Math and Statistics (3 hours)
- **KSC requirement 4** – Natural and Physical Sciences (4-5 hours)
- **KSC requirement 5** – Social and Behavioral Sciences (6 hours)
- **KSC requirement 6** – Arts and Humanities (6 hours)
- **KSC requirement 7** – Institutional Electives (6 hours)

To view course lists for each requirement, visit [k-state.edu/provost/kstate-core](http://k-state.edu/provost/kstate-core).

*Requires two courses from two different subject areas.*