

Electrical Engineering Technical Elective Summary

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8 Technical Electives:

1 Free Elective

- ❖ Can be anything the student chooses, as long as it is not duplicating another class

1 Lower Division Technical Elective

- ❖ EE 101 Basic Electronics (or similar lower level course)
 - CHE 102 General Chemistry, 5cr, F, Sp, Su
 - CHE 108 General Chemistry for Engineers 4cr, Sp
 - BIO 200 Evolutionary Biology, 5cr, F, Su
 - BIO 201 Cell Biology, 5cr, Sp, Su
 - CSE 115 Introduction to Computer Science for Majors 1, 4cr, F, Sp, Su
 - CSE 116 Introduction to Computer Science for Majors 2, 4cr, F, Sp, Su
 - CSE 191 or MTH 191 Introduction to Discrete Mathematics, 4cr, F, Sp
 - CSE 250 Algorithms and Data Structures, 4cr, F, Sp

6 Upper Division Technical Electives: Refer to elective sequences provided by department or design your own allowing for the following:

- ❖ Two courses must have Significant Design Content; see department for current listing.
- ❖ Two Restricted Technical Electives
 - The student must choose two of the following:
 - EE 3**, EE 4**, not from EE 312, given EE 352 requirement
 - CSE 3**, CSE 4**
 - MAE 340 Systems Analysis, 4cr, Sp (prereq: EE 202, EAS 208; coreq: MAE 376)
 - MAE 443 Continuous Control Systems, 3cr, F (prereq: MAE 340)
 - MAE 444 Digital Control Systems, 3cr, Sp (prereq: MAE 443)
- ❖ Two Unrestricted Technical Electives
 - The student must make sure the class chosen does not duplicate an EE class already in the program.
 - Select from EAS 3**, EAS 4**, ASE 3**, ASE 4**, CE 3**, CE 4**, CIE 3**, CIE 4**, CSE 3**, CSE 4**, EE 3**, EE 4**, IE 3**, IE 4**, MAE 3**, MAE 4**, BIO 3**, BIO 4**, CHE 3**, CHE 4**, GLY 3**, GLY 4**, MTH 3**, MTH 4**, PHY 3**, PHY 4**
 - Not from
 - EAS 308 Engineering Statistics, due to policy regarding duplicate credit with EAS 305
 - EE 312 Basic Electronic Instrumentation Laboratory, given EE 352 requirement
 - MTH 411 Probability Theory, given EAS 305 requirement
 - MTH 412 Introduction to Statistical Inference, given EAS 305 requirement
 - (However, for students doing a math minor: MTH 411 can be used in place of EAS 305 and MTH 412 may fulfill an unrestricted technical elective if **both** are taken.)
 - PHY 403 Electricity & Magnetism 1, given EE 324 requirement
 - PHY 404 Electricity & Magnetism 2, given EE 324 requirement
 - (However, for students doing a physics minor: PHY 403 can be used in place of EE 324 and PHY 404 may fulfill an unrestricted technical elective if **both** are taken)

- Most common non-EE/CSE courses
 - MTH 309 Introduction to Linear Algebra, 4cr, F, Sp, Su
 - EAS 480 Technical Communications for Engineers, 3cr, F, Sp
 - EAS 483 Engineering Procedure Writing, 3cr, Sp
 - IE 320 Engineering Economy, 3cr, Sp, Su
 - PHY 301 Intermediate Mechanics I, 3cr, F
 - PHY 302 Intermediate Mechanics II, 3cr, Sp