PLEASE NOTE: Grades of 'C' or better are required for all E.E. courses.

MAJOR REQUIREMENTS:

A. Complete the following: (40)
- E.E. 102 (3)____
- E.E. 333 (4)____(W)
- E.E. 203 (4)____
- E.E. 334 (4)____
- E.E. 204 (4)____
- E.E. 343 (4)____
- E.E. 303 (4)____
- E.E. 353 (3)____
- E.E. 311 (3)____
- E.E. 354 (3)____
- E.E. 331 (1)____
- E.E. 471 (3)____

B. Complete at least 6 credits of Technical elective. At least 1 course must come from the following:
- E.E. 434 (4)____(W,O)
- E.E. 464 (4)____(W,O)
- E.E._______( )____(elective)
  (Any upper division EE course EXCEPT 341 or 342.)

C. Complete the following: (16-19)
- E.S. 101 (3)____
- E.S. 201 or CS 201 (3)____
- E.S. 208 (4)____
  OR ES 209 (3)____ AND ES 210 (3)____
- E.S. 331,341,346 OR
  ESM 334 (3/4)____
  ESM 450 (3)____(W)

D. Complete 1 concentration: (11-12)

Communications:
- E.E. 412 (3)____
- E.E. 432 (1)____
- E.E. 461 (4)____
- E.S. 331,341,346 OR
  ES/ME 334 (3/4)____+

Power & Control:
- E.E. 404 (4)____
- E.E. 406 (4)____
- E.S. 331,341,346 OR
  ES/ME 334 (3/4)____+
  +Course may not satisfy the same requirement under "C"

Computer Engineering:
- E.E. 443 (4)____
- E.E. 451 (4)____
- E.E. 461 (4)____

E. Complete the Fundamentals of Engineering Exam:_____________

COMPLETE 2 DESIGNATED (W) COURSES AND 1 DESIGNATED (O) COURSE OR 2 COURSES DESIGNATED (O/2) AT THE UPPER DIVISION LEVEL:

--(W) --(W) --(W)
--(O) OR --(O/2)
--(O/2)

UPPER DIVISION CREDITS: (39)

Transfer Credits ________
UAF Credits (24)* ________
TOTAL TO DATE: ________
*a minimum of 24 UAF credits

Credits for core/general requirements: 62
Credits required for major: 73-77
Total credits required for degree: 135

6/20/2011
# Electrical Engineering Degree Plan

## First Year: Fall
- Engl 111X Intro to Academic Writing 3
- Math 200X Calculus I 4
- ES 101 Intro to Engineering 3
- Chem 105 General Chemistry I 4
- Perspectives Core (1 of 6) 3

Total: 17

## First Year: Spring
- Comm 131X or 141X Oral Communication 3
- Math 201X Calculus II 4
- EE 102 Intro to Electrical Engineering 3
- Chem 106 General Chemistry II 4
- Perspectives Core (2 of 6) 3

Total: 17

## Second Year: Fall
- Math 202X Calculus III 4
- Phys 211X General Physics I 4
- ES 201 or CS 201 3
- EE 203 Fund of Elec Engineering I 4
- Engl 211X or 213X 3

Total: 18

## Second Year: Spring
- Math 302 Differential Equations 3
- Phys 212X General Physics II 4
- ES 208 Mechanics 4
- EE 204 Fund of Elec Engineer II 4
- LS 101X Library Info and Research 1

Total: 16

## Third Year: Fall
- EE 333 Physical Electronics 4
- EE 353 Circuit Theory I 3
- Approved Math elective** 3
- Perspectives Core (3 of 6) 3

Option 1: Communications
- EE 311 Applied Eng. Electromagnetics 3
- EE 331 High Frequency Lab 1

Option 2: Power and Control
- EE 303 Electrical Machinery 4

Option 3: Computer Engineering
- EE 343 Digital Syst. Analysis & Design I 4

Total: 17

## Third Year: Spring
- EE 334 Electronic Circuit Design 4
- EE 354 Engineering Signal Analysis 3
- Perspectives Core (4 of 6) 3
- EE 471 Fund of Automatic Controls 3

Option 1: Communications
- EE 412 Electromagnetic Waves & Devices 3
- EE 432 Electromagnetics Lab 1

Option 2: Power and Control
- EE 404 Electrical Power Systems 4

Option 3: Computer Engineering
- EE 443 Digital Syst. Analysis & Design II 4

Total: 17

## Fourth Year: Fall
- Perspectives Core (5 of 6) 3

Option 1: Communications
- Approved Engineering Science elective*** 3
- EE 303 Electrical Machinery 4
- EE 343 Digital Syst. Analysis & Design I 4
- EE 461 Communications Systems 4

Option 2: Power and Control
- Approved Engineering Science elective*** 3
- EE 311 Applied Eng. Electromagnetics 3
- EE 331 High Frequency Lab 1
- EE 406 Electrical Power Engineering 4
- EE 343 Digital Syst. Analysis & Design I 4

Option 3: Computer Engineering
- EE 303 Electrical Machinery 4
- EE 311 Applied Eng. Electromagnetics 3
- EE 331 High Frequency Lab 1
- EE 451 Digital Signal Processing 4
- EE 461 Communications Systems 4

Total: 18-19

## Fourth Year: Spring
- ESM 450 Economic Analysis and Operations 3
- Perspectives Core (6 of 6) 3
- Approved Engineering Science elective*** 3
- Approved EE Elective 3-4
- Approved EE Design Elective 3-4
- Take State of Alaska Engineer-in-Training Exam

Total: 15-17

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* Perspectives on the Human Condition and ES 201 may be interchanged if student's mathematics preparation allows.

** Mathematics elective to be chosen from the following advanced topics: linear algebra and matrices, probability and statistics, partial differential equations, numerical analysis, advanced calculus or complex variables.

*** Engineering science elective to be chosen from ES 331, ME 334, ES 341 and ES 346.