

2007-08 CATALOG

COMPUTER ENGINEERING

B.S. Degree Requirements
135 Credits

GENERAL REQUIREMENTS

COMMUNICATION:- (9)

Engl 111X (3)____
Engl 211X or 213X (3)____
Comm 131X or 141X (3)____

PERSPECTIVES ON THE HUMAN CONDITION:- (18-22)

Complete the 6 courses listed **OR** 4 of those listed plus 2 semester length courses in a single AK Native or other non-English language or three semester length courses (9 credits) in American Sign Language.

Anth 100X/Soc 100X (3)____
Econ/PS 100X (3)____
Hist 100X (3)____
Art/Mus/Thr 200X or Hum 201X or
ANS 202X (3)____
Engl/FL 200X (3)____
BA 323X or Comm 300X or Just 300X or
Nrm 303X or Phil 322X or PS 300X (3)____
Language option as listed above:
_____() _____() _____()

MATHEMATICS:- (18)

Math 200X (4)____ Math 302 (3)____
Math 201X (4)____ Math 307 (3)____
Math 202X (4)____

NATURAL SCIENCE:- (16)

Chem 105X (4)____
Phys 211X (4)____ Phys 212X (4)____
Chem 106X or Phys 213X (4)____

LIBRARY & INFO SKILLS:- (0-1)

LS competency test ____ OR
LS 100X or 101X (1)____

UPPER DIVISION CREDITS:- (39)

Transfer Credits ____
UAF Credits (24)* ____
TOTAL TO DATE: ____
TO BE COMPLETED: ____

*a minimum of 24 UAF credits

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

_____(W) _____(W)
_____(O) OR _____(O/2) _____(O/2)

*Designates only grades of "C" or better may be used to fulfill this requirement.

*MAJOR REQUIREMENTS

1. Complete the following:- (72)

CS 201 (3)____
CS 202 (3)____
CS 301 (3)____
CS 311 (3)____
CS 321 (3)____
CS 331 (3)____
EE 102 (3)____
EE 203 (4)____
EE 204 (4)____
EE 311 (3)____
EE 331 (1)____
EE 333 (4)____(W)
EE 334 (4)____
EE 343 (4)____ (was EE 442)
EE 443 (4)____
EE 444 (4)____ (W, O)
EE 463 (3)____
ES 101 (3)____
ESM 450 (3)____(W)

2. Complete 9 300/400-level credits of approved electives. The following are recommended:

CS 302 (3)____ CS 481 (3)____
CS 381 (3)____ EE 353 (3)____
CS 402 (3)____(W,O) EE 354 (3)____
CS 411 (3)____ EE 434 (4)____(W,O)
CS 421 (3)____ (W) EE 451 (4)____
CS 431 (3)____ (W) EE 461 (4)____
CS 441 (3)____ EE 464 (4)____(W,O)
CS 471 (3)____ (W)

3. Complete 3 credits of approved engineering science from the following:

ES 208 (4)____
ES 331 (3)____
ES 334 (3)____
ES 341 (4)____
ES 346 (3)____

4. Complete the Fundamentals of

Engineering Exam: _____

Credits for core/general requirements:	62
Credits required for major:	84
Total credits required for degree	135

BACHELOR OF SCIENCE IN COMPUTER ENGINEERING

First Year: Fall

ENGL 111X –Methods of Comm	3
Math 200X - Calculus I	4
ES 101 – Intro to Engineering	3
CHEM 105-General Chemistry	4
Perspectives on Human Condition	3
	17

First Year: Spring

COMM 131X or COMM 141X	3
MATH 201X-Calculus	4
EE 102 - Introduction to Electrical Engineering	3
CHEM 106-General Chemistry	4
Perspectives on the Human Condition	3
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Second Year: Fall

MATH 202X-Calculus	4
PHYS 211-General Physics	4
ENGL 211X or 213X	3
CS 201 - Computer Science I	3
EE 203 - Fundamentals of Electrical Engineering	4
	18

Second Year: Spring

MATH 302-Differential Equations	3
PHYS 212-General Physics	4
EE 204 - Fundamentals of Electrical Engineering	4
CS 202 - Computer Science II	3
Perspectives on Human Condition	3
LS 101X-Library Info and Research	1
	18

Third Year: Fall

EE 333W - Physical Electronics	4
EE 343 - Digital Systems Analysis and Design	4
CS 301 - Assembly Language Programming	3
CS 311 – Data Structures and Algorithms	3
Perspectives on Human Condition	3
	17

Third Year: Spring

EE 334 - Electronic Circuit Design	4
EE 443 – Computer Engineering Analysis & Design	4
CS 321 – Operating Systems	3
CS 331 – Programming Languages	3
Perspectives on Human Condition	3
	17

Fourth Year: Fall

Math 307 –Discrete Mathematics	3
EE 311 – Applied Engineering Electromagnetics	3
EE 331 – High Frequency Lab	1
Approved Engineering Science Elective	3
EE 444WO – Embedded Systems Design	4
Approved EE or CS Elective	3
	17

Fourth Year: Spring

ESM 450-Econ. Analysis & Operations	3
EE 463 – Communication Networks	3
Perspectives on Human Condition	3
Approved EE or CS Elective	3
Approved EE or CS Elective	3
Approved EE Elective	3-4
Take Alaska Engineer-int-Training Exam	18-19