

FLOWCHART

BSEE Requirements

(Curriculum Redesign for 126-129 credits)

Updated: 01.28.25 dt

First Year

Fall

Spring

Second Year

Fall

Spring

Third Year

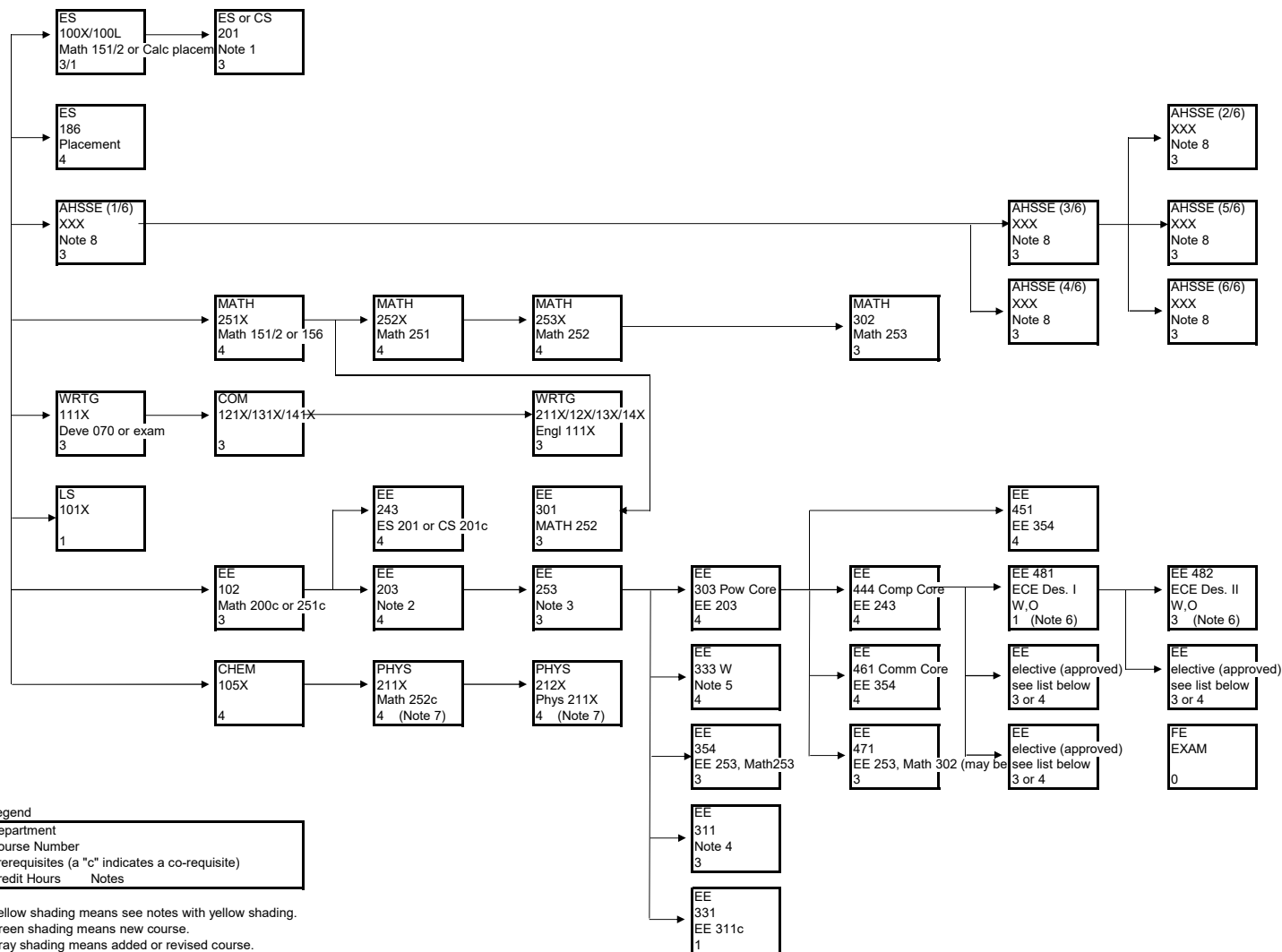
Fall

Spring

Fourth Year

Fall

Spring



Legend

Department	
Course Number	
Prerequisites (a "c" indicates a co-requisite)	
Credit Hours	Notes

Yellow shading means see notes with yellow shading.
Green shading means new course.
Gray shading means added or revised course.

Notes

- ES 201 pre/co-requisites: Math 151, 152 or Math 251c
CS 201 pre/co-requisites: CS 103 or H.S. programming, Math 251c
- EE 203 pre/co-requisites: EE 102; Math 251, 252c
- EE 253 pre/co-requisites: EE 203; ES 201; Math 252
- EE 311 pre/co-requisites: EE 253; Math 253; Phys 212; Math 302c
- EE 333 pre/co-requisites: EE 253; WRTG 111X; WRTG 211X/12X/13X/14Xc
- ECE Design I and II prerequisites include: EE 354, EE 444, COJO 131X/141X, WRTG 111X, and WRTG 211X/12X/13X/14X
- It is possible to take Chem 105, Phys 211X, 212X, 213X for the Natural Sciences requirement
- AHSSE = Arts, Humanities, Social Sciences and Ethics courses (6 courses)
1 Arts, 1 Humanities, 2 Soc Sciences, 1 Art or Hum or SS, 1 Ethics
One of the AHSSE courses needs to be an Alaska Native 3 credit course if using Catalog Year 2019-2020 or newer

Math Sequence

251 Calculus I
252 Calculus II
253 Calculus III
302 Differential Equations

Updated: 09.02.22, rww

Alaska Native Themed Courses (also satisfy 1 AHSSE requirement)

	ANS/FLPA F161X
Arts	ANS F202X
	ANS/ACNS/MUS F233X
	ANL F141X
	ANL F142X
Humanities	ANL F251X
	ANL F255X
	ANS F111X
Social Science	ANS F242X
	ECON F111X*

* Recommend ECON F111X if it fits in schedule.

Approved EE Electives (Offered on a rotating basis.)

EE 334	Electronic Circuit Design	4
EE 404	Electric Power Systems Analysis	4
EE 406	Electric Power Prot. and Ctrl. Systems	4
EE 408	Power Electronics Design	4
EE 412	Electromagnetic Waves & Devices	3
EE 443*	Computer Engr Analysis and Design	4
EE 464	Advanced Communications Systems	4

Graduate level EE and upper level and graduate CS courses may be used as electives upon approval.

EE 607	Electric Motor Drives	3
EE 609	Ren. & Sus. Energy Systems	3
EE 611	Waves	3
EE 646	Wireless Sensor Networks	3
EE 654	UAS Systems Design	3
EE 656	Aerospace Systems Design	3
EE 662	Digital Communications Theory	3
EE 663	Computational Electromagnetics	3
EE 671	Digital Control Systems	3

* EE 443 offered every spring for BScPcE students but can also serve as an approved EE elective for BSEE students.