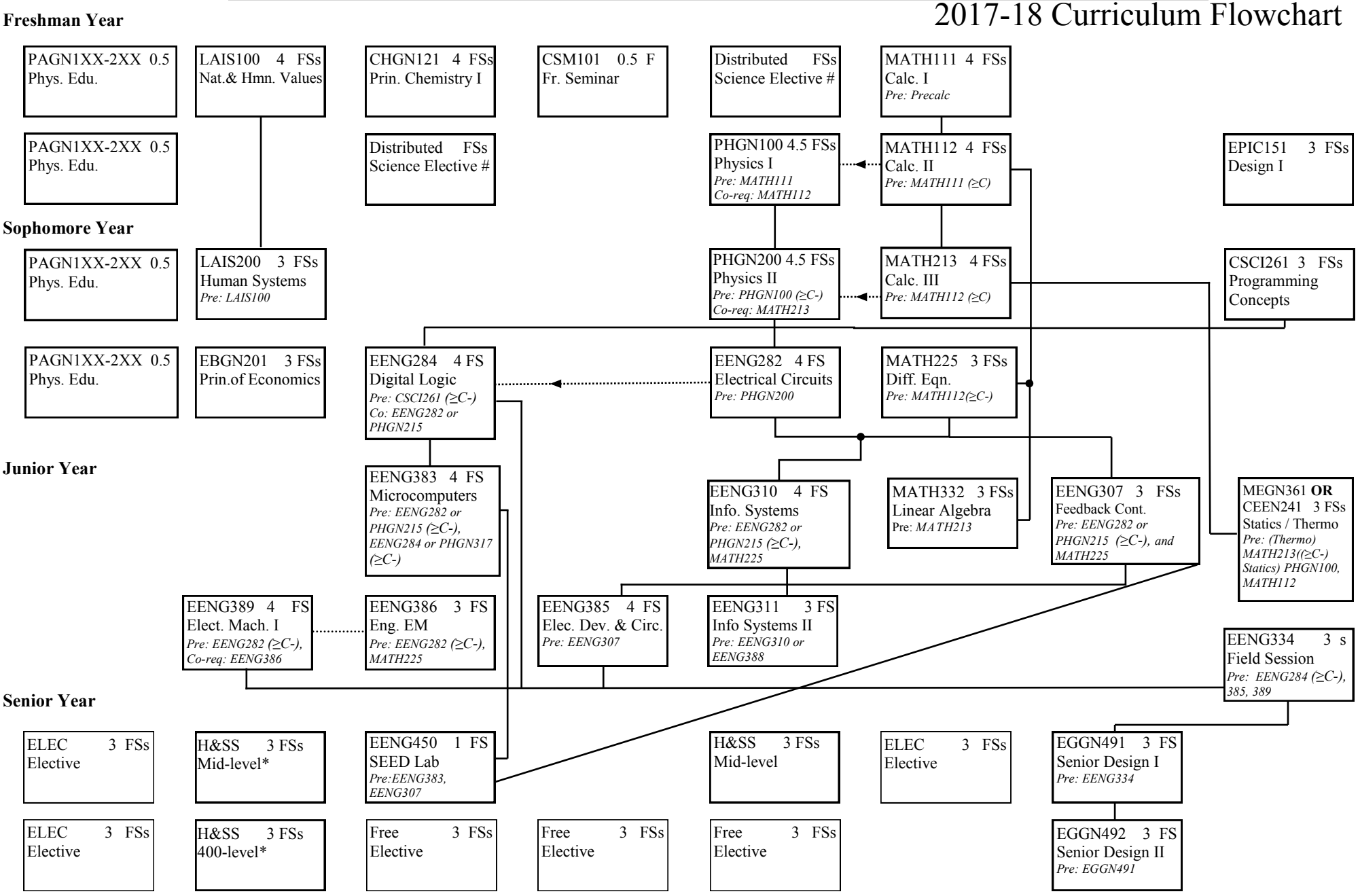
DEPARTMENT OF

COLORADO SCHOOL OF MINES
EARTH • ENERGY • ENVIRONMENT

ELECTRICAL ENGINEERING

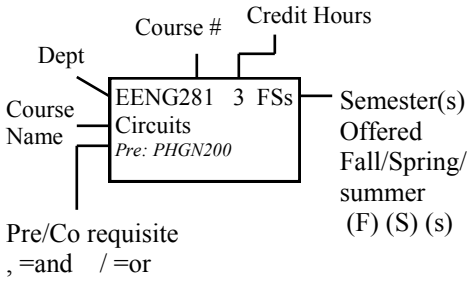
2017-18 Curriculum Flowchart



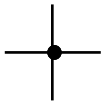
* See 2017-2018 Undergraduate Catalog for list of acceptable courses

CBEN110, CHGN122 or CHGN125, CSCI101 or GEGN101 may be taken for Distributed Science

Legend



Shows lines crossing and connecting together



Concurrent Enrollment Allowed
(Arrow points toward course with pre/co requisite requirement)

Electrical Engineering Emphasis Areas & EE Electives

Electrical Engineering students are required to take nine credits of electrical engineering electives. Taking all nine credit hours in one of the four emphasis areas is encouraged; however, not required.

Information System Science and Controls

Course	Course Title	Credit Hours	Semester(s) Offered
EENG411	Digital Signal Processing	3	Sp
EENG413	Analog & Digital Comm Systems	4	Check Trailhead
EENG417	Modern Control Design	3	F
EENG427	Wireless Communications	3	F
EENG437	Intro to Computer Vision	3	
MEGN441	Intro to Robotics	3	F, Sp

Energy Systems and Power Electronics

Course	Course Title	Credit Hours	Semester(s) Offered
EENG470	Intro to High Power Electronics	3	F
EENG472	Practical Design of Small Renewable Energy Systems	3	Check Trailhead
EENG480	Power Systems Analysis	3	F
EENG481	Analysis and Design of Advanced Energy Systems	3	Sp
EENG489	Computational Methods in Energy Systems & Power	3	Sp

Antenna and Wireless Communication

Course	Course Title	Credit Hours	Semester(s) Offered
EENG425	Introduction to Antennas	3	Check Trailhead
EENG427	Wireless Comm Systems	3	F
EENG429	Active RF & Microwave Devices	3	
EENG430	Passive RF & Microwave Devices	3	F

Digital Integrated Circuits and Electronics

Course	Course Title	Credit Hours	Semester(s) Offered
EENG411	Digital Signal Processing	3	Sp
EENG421	Semiconductor Physics & Design	3	F
EENG423	Introduction to VLSI Design	3	Sp
PHGN435	Interdisciplinary Microelectronics Processing Laboratory	3	Sp

Electrical Engineering- General *(*

Course	Course Title	Credit Hours	Semester(s) Offered
CEEN405	Numerical Methods for Engineers	3	Check Trailhead
CSCI341	Computer Organization	3	F, Sp
CSCI410	Elements of Comp Systems	3	Sp
CSCI440	Parallel Computing for Scientists & Engineers	3	F
CSCI442	Operating Systems	3	F, Sp
MATH335	Intro to Mathematical Statistics	3	Sp
MATH455	Partial Differential Equations	3	F, Sp
MEGN330	Introduction to Biomechanical Engineering	3	F
PHGN300	Modern Physics I	3	F
PHGN320	Modern Physics II: Quantum	4	Sp
PHGN440	Solid State Physics	3	F
PHGN441	Solid State Physics Applications & Phenomena	3	Check Trailhead
PHGN462	Electromagnetic Waves & Optical Physics	3	F