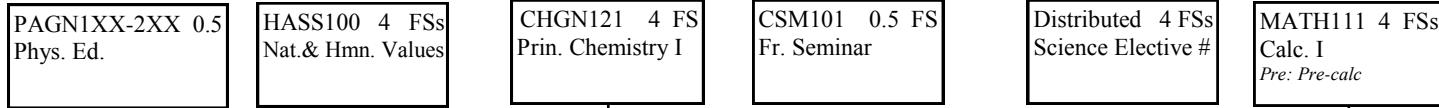


DEPARTMENT OF MECHANICAL ENGINEERING

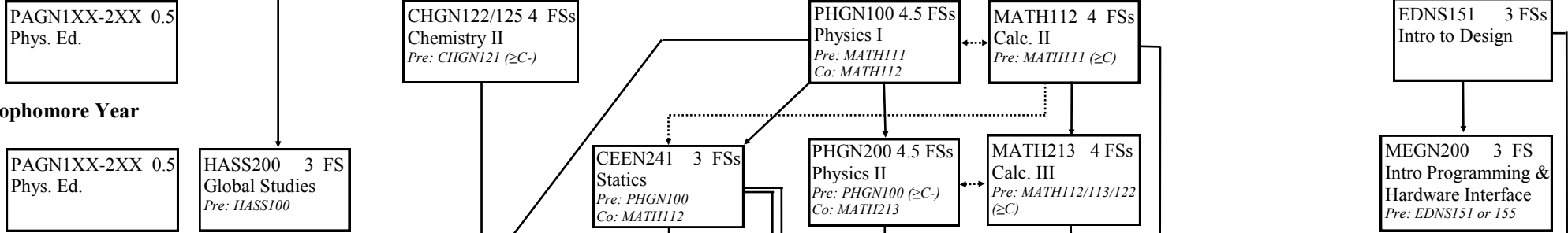
COLLEGE OF ENGINEERING & COMPUTATIONAL SCIENCES

2018-19 Curriculum Flowchart

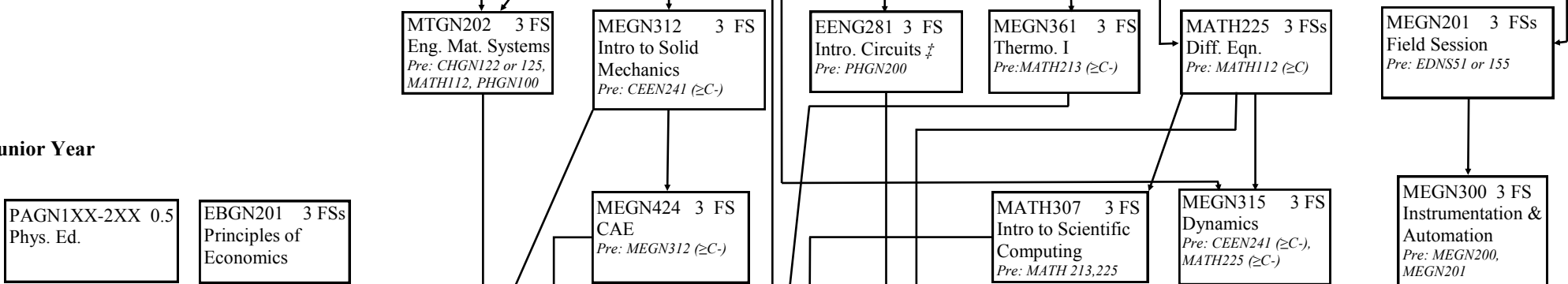
Freshman Year



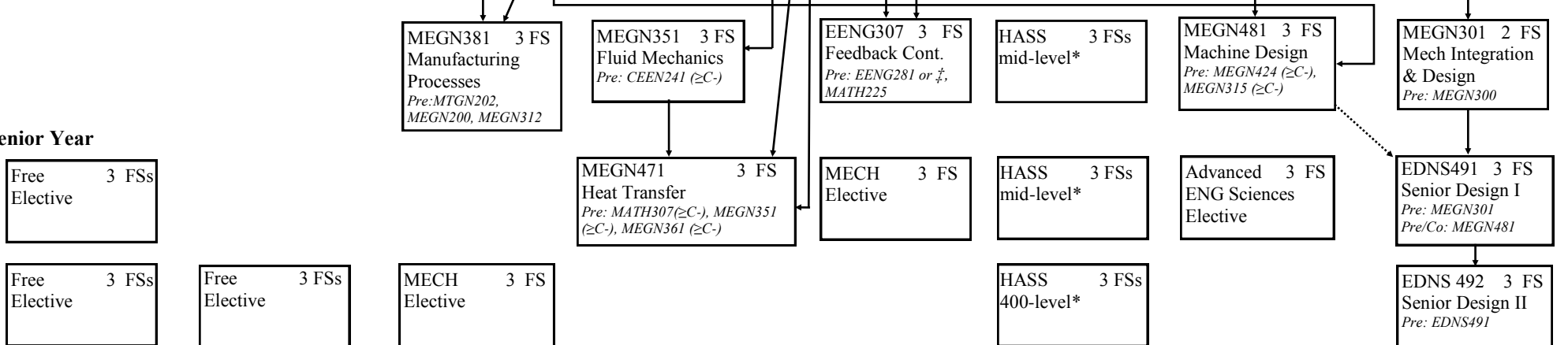
Sophomore Year



Junior Year



Senior Year



* See 2018-19 Undergraduate Catalog for list of acceptable courses.

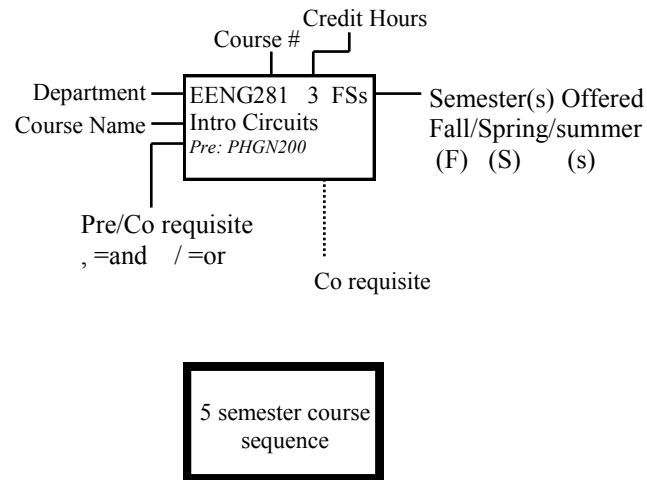
≠ PHGN215 can be substituted for specified prerequisite.

CBEN110, GEGN101, or CSCI 101&102 may be taken for the Distributed Science

Mechanical Electives

The list of approved Mechanical Engineering electives appears below. Students are required to take three of these courses and at least **one** must be from **Advanced Engineering Sciences**. In addition to these courses, any graduate course taught by a member of the Mechanical Engineering faculty will also be counted as a Mechanical Engineering Elective.

Legend



Advanced Engineering Sciences (must take at least 1)

- MEGN412 Advanced Mechanics of Materials
- MEGN416 Engineering Vibrations
- MEGN461 Thermodynamics II
- MEGN451 Fluid Mechanics II

Mechanical Engineering Electives (must take at least 2; can also choose a second course from the Advanced Engineering Sciences list)

- CEEN405 Numerical Methods for Engineers
- CEEN406 Finite Element Methods for Engineers
- EBGN321 Engineering Economics
- EENG389 Fundamentals of Electrical Machinery
- EENG390 Energy & Electricity
- EENG417 Modern Control Design
- EDNS401 Projects for People
- MEGN330 Intro. to Biomechanical Engineering
- MEGN430 Musculoskeletal Biomechanics
- MEGN435 Modeling & Simulation of Human Movement
- MEGN436 Computational Biomechanics
- MEGN441 Intro. to Robotics
- MEGN466 Intro. to Internal Combustion Engines
- MEGN469 Fuel Cell Science & Technology
- MEGN485 Manufacturing Optimization Network Models
- MEGN486 Linear Optimization
- MEGN487 Nonlinear Optimization
- MEGN488 Integer Optimization
- MEGN493 Engineering Design Optimization
- MEGN498 Special Topics in Mechanical Engineering
- MEGN5XX Any MEGN500+ level course
- MTGN311 w/ Lab Structure of Materials
- MTGN445 w/ Lab Mechanical Behavior of Materials
- MTGN450 Statistical Control of Materials Processes
- MTGN463 Polymer Engineering
- MTGN464 w/ Lab Forging and Forming
- MTGN475 w/ Lab Metallurgy of Welding
- NUGN520 Reactor Thermal Hydraulics
- PHGN300 Modern Physics
- PHGN350 Intermediate Mechanics
- PHGN419 Principles of Solar Energy Systems

Flowchart based on the 18-19 Undergraduate Catalog