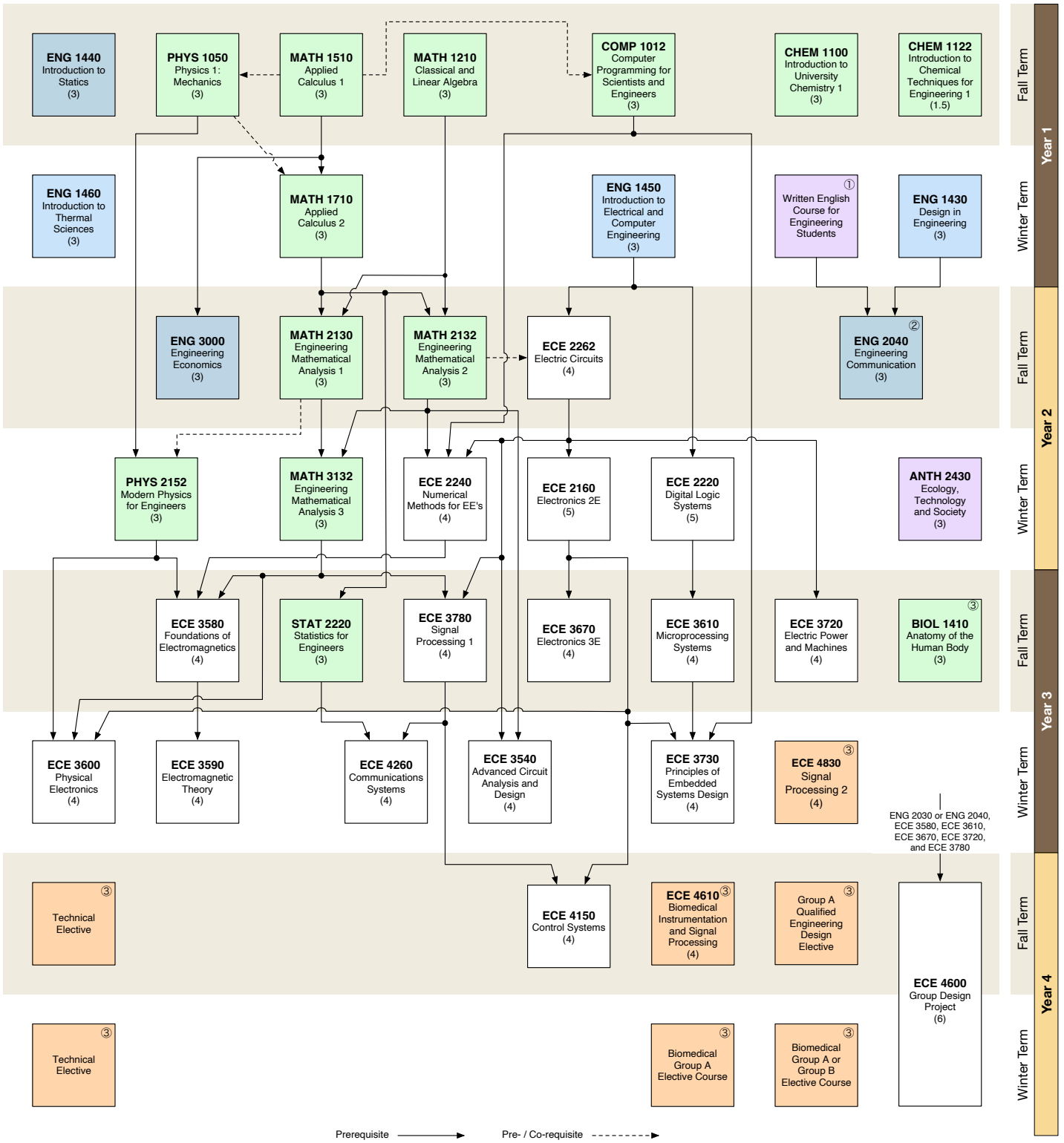
2025 – 2026 Electrical Engineering Course Flow Chart
Biomedical Focus Area – Model 4 Year Program



① The written English requirement is satisfied by completing three (3) credit hours from the list of approved *Written English Courses for Engineering Students* listed in the *Academic Calendar* (see *Price Faculty of Engineering, Faculty Academic Regulations*).

② Students must take either of:

- *ENG 2030 Engineering Communication: Strategies for the Profession*
- *ENG 2040 Engineering Communication: Strategies, Practice, and Design*

③ Technical and Natural Science Electives:

- Seven (7) technical electives and one (1) Natural Science are required to complete the program. Six (6) electives form the *Biomedical Focus Area*, with BIOL 1410 satisfying the Natural Science elective requirement.
  The two (2) remaining electives may be selected from either the *Group A* or *Group B* electives lists of the Electrical Engineering Standard Program.
- Technical electives may be taken at anytime, subject to prerequisites.

This flow chart is intended as a guide, and only applies for the current academic year. It should not be used as a guide for subsequent years. Errors may be present in this document. Students should refer to information in the *Academic Calendar*.

Additional required elective courses which may be completed in any term.

Complementary Studies Elective

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Electrical Engineering Focus Areas

Students wishing to pursue more focused studies in an Electrical Engineering subject/research area have the choice of doing so through a recognized Focus Area. Courses taken towards a Focus Area take the place of some or all of the Technical Electives required in the Electrical Engineering program.

Biomedical Focus Area

Requirements:

To complete the focus area, students are required to take a total of six (6) courses as indicated below. Of these, five (5) replace general technical electives and one (1) is in place of the Natural Science Elective in the Electrical Engineering program. To complete the program requirements two (2) additional courses must be selected from the technical electives listed in the Electrical Engineering Standard Program.

PRESCRIBED BIOMEDICAL COURSES: (All are required)

ECE 4610 Biomedical Instrumentation and Signal Processing
ECE 4830 Signal Processing 2
BIOL 1410 Anatomy of the Human Body
One (1) additional course from the list of *Group A Qualified Design Elective Courses* found in the Electrical Engineering Standard Program

BIOMEDICAL GROUP A ELECTIVE COURSES*: (1 required)

ECE 4860 Biomedical Optics
PHYS 3220 Medical Physics and Physiological Measurement
PHYS 4300 Microfluidics for Biology

BIOMEDICAL GROUP B ELECTIVE COURSES*:

BIOL 1412 Physiology of the Human Body
MBIO 1220 Essentials of Microbiology
BIOE 3320 Engineering Properties of Biological Materials
BIOE 4610 Design of Assistive Technology Devices

* One course *must* be selected from *Group A*, with a second course selected from either *Group A* or *Group B*.