

## Engineering (B.S.E.)

*This document is a tool approved by the department as a complete and accurate checklist for 2020-21 Catalogue. Students who are meeting requirements with other courses than listed below must ask their advisor to file the waiver/substitution form (<http://www.cornellcollege.edu/registrar/gb-resources-faculty>). Students are expected to complete the major and minor requirements that were in effect at the time of Spring registration for their second year of courses. Transfer students who are admitted with sophomore or higher standing satisfy the requirements in effect when they begin their first course at Cornell. Students who have withdrawn from Cornell and are later readmitted follow the requirements in effect at the time of their readmission. Exceptions may be made by the department concerned in response to the student's petition, provided that such changes are feasible for and agreeable to the department.*

A student may become a candidate for the Bachelor of Science in Engineering once the student has:

- completed 7 courses with a GPA of at least 2.0
- been granted course credit with a grade of at least C- (or been granted exemption or credit by exam) in EGR 131, PHY 161 or PHY 162, MAT 120, MAT 121 or MAT 122, and one other EGR course that counts towards the Engineering major.

### General Requirements for the B.S.E. Degree:

\_\_\_\_\_ A minimum of 31 course credits. No more than two 100-level courses may be taken in the senior year without the permission of the Academic Standing Committee. No more than two All-College Independent Study course credits (280/380, 290/390/490, 296/396/496) may be counted toward satisfying the minimum credit requirement for this degree. No more than two full credits in 500-level adjunct courses may be counted toward satisfying the minimum 31 credits.

\_\_\_\_\_ A cumulative grade point average of 2.0 or higher.

\_\_\_\_\_ A major in Engineering

\_\_\_\_\_ First-Year Seminar (FYS)

\_\_\_\_\_ First-Year Writing Course (W)

### Distribution Requirements:

\_\_\_\_\_ **Eight** courses outside Mathematics and Statistics, Engineering, Computer Science, and the Natural Sciences, including the following general education requirements (not counting the FYS or FYW)

\_\_\_\_\_ **One Fine Arts course chosen from the following disciplines: Art, English, Music, Dance and Theatre**

\_\_\_\_\_ Two Humanities courses chosen from two of the following disciplines: English, Foreign Language, History, Philosophy, Religion, Art History, Music, Theatre, or Education

\_\_\_\_\_ **One Social Science course chosen from the following disciplines: Anthropology, Economics and Business, Education, Kinesiology, Politics, Psychology, or Sociology.**

\_\_\_\_\_ Credit in French, German, Greek, Japanese, Latin, Russian, or Spanish 102; international students whose native language is other than English satisfy this requirement through completion of or exemption from the English as a Second Language program

**Engineering Major:** A minimum of 20 course credits distributed in the following areas:

a. NATURAL SCIENCE:

\_\_\_\_\_ PHY 161

\_\_\_\_\_ PHY 162

\_\_\_\_\_ CHE 121 or 161

\_\_\_\_\_ One additional science course chosen from one of the following departments or majors: Biology, Chemistry, Environmental Studies, Geology, or Physics. All of the courses used to fulfill the requirement must be designated Science, Laboratory Science, or Mathematics and be acceptable for the minimal major in the offering department.

b. MATHEMATICS:

\_\_\_\_\_ Completion of the calculus sequence (through MAT 122),

\_\_\_\_\_ MAT 221

\_\_\_\_\_ MAT 236

c. COMPUTER SCIENCE:

\_\_\_\_\_ CSC 140

d. ENGINEERING\*: A minimum of twelve EGR courses, including:

1. \_\_\_\_\_ EGR 131

2. \_\_\_\_\_ EGR 231

3. \_\_\_\_\_ EGR 235

4. \_\_\_\_\_ EGR 270

5. \_\_\_\_\_ EGR 271

6. \_\_\_\_\_ EGR 311

7. 3 \_\_\_\_\_ **Four additional 300-level courses**

8. 3 \_\_\_\_\_

9. 3 \_\_\_\_\_

10. 3 \_\_\_\_\_

11. \_\_\_\_\_ One EGR elective (any level)

12. \_\_\_\_\_ **EGR 385 (Capstone course)**

\*cannot include Independent Studies