CHEMICAL ENGINEERING

Name: ______________________
Advisor: _____________________

CHEMICAL ENGINEERING-BMBC
2022-2023 Biomedical/Biochemical Option
130 Semester Hours

**Required Prerequisites**
(May be satisfied by course credit or placement exam)

- **Year 1**
  - 17 hours
  - ENGR 1111: Introduction to Engineering
  - CHEM 1314: General Chemistry I
  - MATH 1513: College Algebra
  - MATH 1813: Preparation for Calculus
  - MATH 2144: Calculus I
  - ENGR 1412: Engr Computer Programming
  - ENGR 2144: Introduction to Engineering Thermodynamics
  - PHYS 2144: General Physics I
  - HIST 1103: American History
  - BIOL 1111 & 1113: Introductory Bio and Lab

- **Year 2**
  - 18 hours
  - CHEM 1515: General Chemistry II
  - Gen Ed Elective H / S / I / D
  - CHEM 2023: Intro to ChEng Thermodynamics
  - CHE 2033: Intro to CHE Process Eng
  - CHE 2581: CHE Sophomore Seminar
  - ENGL 1113: Composition I
  - ENGL 1213: Composition II
  - ENGL 1213: Composition II
  - ENSC 2113: Statics
  - STAT 4033: Engineering Statistics

- **Year 3**
  - 16 hours
  - CHEM 3053: Organic Chemistry I
  - BIOC 3653: Survey of Biochemistry
  - CHEM 3153: Biochemistry
  - CHEM 3112: Biochemistry Lab
  - CHEM 2023: Intro to CHE Process Eng
  - STAT 4073: Engineering Statistics

- **Year 4**
  - 19 hours
  - BIOC 3723: Analytical Biochemistry Lab
  - BIOC 3653: Survey of Biochemistry
  - MATH 2233: Differential Equations
  - MATH 2153: Calculus II
  - MATH 2163: Calculus III
  - MATH 2163: Calculus III
  - MATH 2233: Differential Equations
  - MATH 2163: Calculus III

**NOTE:** This flow chart is for planning purposes only. Official degree requirements can be found in the Academic Catalog 2022-2023. (catalog.okstate.edu)
Requirements for (CHEN) Chemical Engineering

Students must meet the following requirements to take 3000 level CHE courses:

- Complete at least 60 college level semester credit hours (SCH).
- 12 SCH must be from OSU, 9 of which must be STEM courses (ENGR1111 is not considered STEM).
- Completion with a "C" or better in all green courses: MATH 2144, 2153, 2163, 2233; PHYS 2014, 2114; CHEM 1515, 3053, and (3153 & 3112) or (BIOC 3653 & 3723); ENSC 3233; CHE 2023, 2033, 2581; ENGR 1412; STAT 4033 or 4073; and ENGL 1113 (if a "C" is earned in ENGL 1113, then ENGL 1213 is also required).

Students must meet the following requirements to advance to the next level of courses:

- A "C" or better in CHE 3013, 3113, 3123, 3333, 3473, 4002; ENSC 2613, 3231; ENGR 2421.

Students must meet the following requirements for graduation:

- A 2.0 GPA average in all CHE, CHEM, ENGR, and ENSC courses.
- Completion of all green courses with a "C" or better.
- General Education Courses
- Degree Requirements
- Upper Level CHE Courses

See Course Catalog for specific course prerequisites

Completion with a grade of "C" or better.