Student's Name: _____ Uni _____

<u>Undergraduate Study Plan</u> Dept. of Chemical Engineering, Columbia University (Revision 3/31/2024 DVE)

1) Fill in this study plan for all courses that you have taken <u>and</u> those courses that you plan to take in the coming semester.
2) Circle the course numbers corresponding to courses you have already completed. Write "IP" next to courses that are currently in progress. Underline courses you intend to take in the coming semester.
3) Where blanks are provided, write in the course number (and name, if requested), and mark as indicated above.
4) If you placed out of, transferred in, or received equivalency for any courses, mark the course number and write "AP," "transfer," "equiv." etc. as appropriate

1. Non-Technical Course Requirements*   <u>Points</u>

   a. University Writing: ENGL CC1010(3)   _____

   b. Economics: ECON UN1105(4) and UN1155(0) Recitation   _____

   c. Art/Music Humanities (choose one): HUMA UN1121(3)   or   HUMA UN1123(3)   _____

2. Core Humanities Requirement* (choose one two-course sequence):
   Sequence 1: Literature Humanities: HUMA CC1001(4) and HUMA CC1002(4)   _____

   Sequence 2: Contemporary Civilization: COCI CC1101(4) and COCI CC1102(4)   _____

   Sequence 3: Choose two Global Core courses from list of approved courses in Columbia College Bulletin (6-8 points)

   Course #:_____   Course #:_____   _____

3. Non-Technical Electives* (List of approved courses in SEAS Bulletin, total 9-11 points)

   Course #:_____   Course #:_____   Course #:_____   _____

*Note: the total credits from sections 1., 2., and 3. must add up to at least 27 credits

4. Engineering Fundamentals
   a. The Art of Engineering: ENGI E1102(4)   _____

   b. Intro to Comp for Eng/App Sci (Python-based): ENGI E1006 (3)   _____

5. Physical Education: PHED UN1001(1) and PHED UN1002(1)   _____

6. Mathematics Requirement

   a. Calculus: MATH UN1101(3)   UN1102(3)   APMA E2000 (4)   _____

   b. ODE (choose one course): MATH UN2030(3) or APMA E2101(3)   _____

   c. Math Elective*:   Course #:_____   _____
*Choose from ORCA 2500, APMA(E3101 , E3102, E4001, E4150, or E4300), MATH UN2010, , STAT GU 4001, or another course approved by the major advisor.

7. Chemistry Requirement (Choose one track) (note: the university division designator for all of these courses is UN)

   Track C1:   1403(4)   1404(4)   1500(3)   2443(4)   _____
                Gen. Chem I Gen. Chem II Chem. Lab   Orgo I.

   Track C2:   1604(4)   1507(3)   2443(4)   _____
                Int. Chem   Int. Chem Lab   Orgo I.

   Track C3:   2045(4)   2046(4)   1507(3)   _____
                Int. Orgo   Int. Orgo   Int. Chem Lab.

8. Natural Science Laboratory (at least 3 pts total)*:   Course #:_____   Course #:_____
*Choose from CHEM UN2493(1.5), CHEM UN2496(1.5), CHEM UN2543(3), CHEM UN2545(3), CHEM UN3085(3), BIOL 2501(3), EEEB 3015 (3), or another course approved by the major advisor.

9. Physics Requirement: (Choose one track)

    Track P1:   PHYS UN1401(3)   UN1402(3)   Lab-UN1493(3)   _____

    Track P2:   UN1601(3.5)   UN1602(3.5)   Lab-UN1493 (3)   _____

    Track P3:   UN2801(4.5)   UN2802(4.5)   Lab-W3081(2)   _____

10. Chemical Engineering Requirements:

	Fall	Spring	Points
First Year	CHEN E1000(1) *Optional for classes of '24 & '25		
Second Year	CHEN E2100(3)	CHEN E3020(3)	
Third Year	CHEN E3110(3) CHEE E3010(3)	CHEN E4230(3)	
Fourth Year	CHEN E4140(3) CHEN E4300(3) CHEN E4500(4)	CHEN E3810(3)	

11. Technical Electives: (7 courses total) (See spreadsheet for eligible courses in each category)
    a. THERMODYNAMICS ELECTIVE course within chemical engineering

    1. Course name:_____   _____

            Course #:_____

    b. TRANSPORT ELECTIVE course within chemical engineering

    1. Course name:_____   _____

            Course #:_____

    c. Technical elective course within chemical engineering (CHEN, CHEE, MECH, APCH, BMCH, or CHAP)

    1. Course name:_____   _____

            Course #:_____

    d. Engineering courses outside chemical engineering (not CHEN, CHEE, or CHAP)

    4. Course name:_____   5. Course name: _____   _____

            Course #:_____   Course #:_____

    e. Advanced Science courses (Chemistry, Physics or Biology content– one must be outside of SEAS)

    6. Course name:_____   7. Course name: _____   _____

            Course #:_____   Course #:_____

12. Additional Courses:

_____   _____   _____   _____   _____   _____

                                                  TOTAL POINTS*:   _____

*Total points must be ≥128 credits for the normal 4 year track, or ≥60 credits for Combined Plan students

_____   _____   _____   _____
Advisor Signature   Date   Student Signature   Date