

**Chemistry Department
OCCIDENTAL COLLEGE**

SUGGESTED COURSE STUDY FOR 3-2 COMBINED PLAN IN ENGINEERING

Chemical Sequence

(July 2026)

The courses in the chemical sequence prepare students for two years of work leading to the degree of Bachelor of Science at the California Institute of Technology or the School of Engineering at Columbia University. This sequence is appropriate for students planning to pursue Chemical Engineering. Questions about the chemical sequence should be addressed to the Chemistry department chair; students with general questions about the 3-2 Program should contact Prof. Schramm in Physics.

Fall

Year 1:

FYS

Physics 107

Chem. 120/130

+Calculus I

Year 2:

*Core/Language

Chem. 220/221

Physics 230

Math 212/214

Year 3:

*Core/Language

Chem. 300

Chem. 340

Physics 310

Spring

FYS

Physics 110

Chem. 220/240

+Calculus II

*Core/Language

Chem. 221/240

CS 131

Math 212/214

*Chem. 150

*Core/Language

*Chem. 305

[Chem. 201 or 350]

*Econ 101

*Students are advised to choose courses which satisfy more than one Core distribution requirement. If foreign language proficiency is met with fewer than two courses, additional electives may be chosen from any department.

*A minimum of 27 non-technical units (excluding FYS) are required. Econ 101 counts towards this number.

+Prospective 3-2 students must place into Math 110 or above. Please consult the Mathematics Department for details.

1-unit course

‡Econ 101 is required to apply for transfer to Columbia

*Phys 240 may be substituted for Chem. 305.

Recommended electives in mathematics, physics, and computer science are the following courses: *Math 340; 342 Physics 350*
CS 229