

Department of Computer Science
OCCIDENTAL COLLEGE

**SUGGESTED COURSE STUDY FOR 3-2 COMBINED PLAN IN ENGINEERING
Computer Science Sequence**

(August 2017)

The courses in the computer science 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. Questions about this sequence should be addressed to Prof. Jeff Miller in Computer Science; students with general questions about the 3-2 Program should contact Prof. Alec Schramm in Physics.

Fall

Spring

Year 1:

CSP
Physics 110
+Calculus I
CS 131

CSP
Physics 117
+Calculus II
CS 229

Year 2:

*Foreign Language
#Core
Physics 120
%Math 210

*Foreign Language II
#Core
CS 239
%Math 212/214

Year 3:

CS 317
%Math 212/214
Physics 310
#Core/Elective

Chem 120 or 130
Math 340
#Core
‡Econ 101

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

#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.

%Prospective 3-2 students must take Math 210, 212 and 214 rather than CS 149 and 307.

‡Econ 101 is required to qualify for Columbia's guaranteed admission

Recommended electives in mathematics and computer science are the following courses:

CS 313: Graphics
CS 349: Robotics
CS 383: Computer Security
CS 337: Programming Languages & Compilers
CS 379: Operating Systems

Math 150: Statistical Data Analysis
Math 322: Number Theory
Math 350: Mathematical Logic
Math 352: Complexity and Computability
Math 370: Numerical Analysis
Math 380: Combinatorics