

Orientation for 3-2 Combined Plan CS Students

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Fall 2026

Advising



I am the CS advisor for Combined Plan students

Email me with questions

sedwards@cs.columbia.edu

Advising



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Your “class dean” at the Center for Student Advising (CSA) can advise on non-CS questions. See [Vergil](#) or [Stellic](#) for the name of yours

I know remarkably little about, e.g., English classes

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The CS Advising Team can help with other bureaucracy

ug-advising@cs.columbia.edu

Time is of the Essence

You have exactly two years here

You must take 60 points at Columbia



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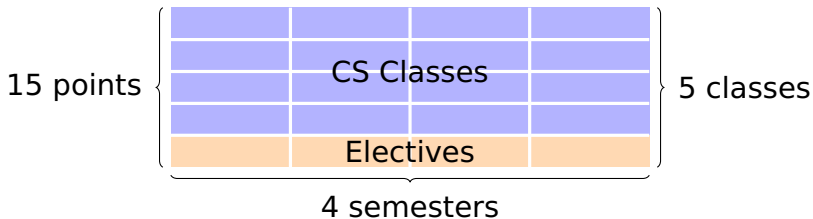
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Typical class is 3 points

$60 \div 3 \div 4 = 5$ classes per semester

“Fifteen (15) to Finish”

Typical load: 4 CS + 1 elective



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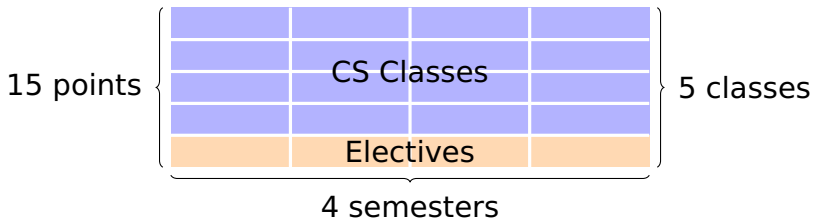
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Flaking out on classes is the top problem of combined plan students; you can't extend your time

The Degree Program Quick Guide

CS website → Academics → Undergraduate Programs →
BS in Computer Science (SEAS)

BS CURRICULUM

SEAS Students who declare a CS major in Fall 2023 and beyond are required to follow the new curriculum. SEAS Students who declared a CS major before Fall 2023 can follow the new CS Curriculum or continue with the old CS Curriculum.

PREREQUISITES

- SEAS Prerequisites and ENGI E1006: Computing for EAS

CS CORE

- The following 6 courses must be taken:
 - COMS W1004 Intro to CS
 - COMS W3134 Data Structures
 - COMS W3157 Advanced Programming
 - COMS W3203 Discrete Math
 - COMS W3261 CS Theory
 - CSEE W3827 Fundamentals of Computer Systems
- Select 1 Linear Algebra course
 - COMS W3251, APMA E3101, APMA E2101, MATH UN2010, or MATH UN2015
- Select 1 Probability course (new)
 - STAT UN201, STAT GU4001, STAT GU4203, IEOR 3658, or MATH UN2015
 - MATH UN2015 can double count for Linear Algebra and Probability requirements. This is the ONLY instance a course can double-count

IMPORTANT NOTES

GTE APPROVALS NOT NEEDED

AREA FOUNDATION COURSES

PROBABILITY REQUIREMENT

NO MORE TRACKS

IMPORTANT EXCEPTIONS

- No more than 6 points of project/thesis courses (COMS W3902, W3998, W4901, W6901) and equivalent project/research courses from other departments can count toward the major.
- COMS W3999 Fieldwork cannot be used as a CS Elective.
- No more than one course from each set below may be applied to the major
 - IEOR E3658, STAT UN201, STAT GU4001, MATH UN2015
 - MATH UN2015, MATH UN2010, APMA E3101, COMS W3251
 - COMS W4771, COMS W4721, STAT GU4241

AREA FOUNDATION COURSES (AFC)

- Select 4 courses from the following list:
 - COMS W4111 Introduction to Databases
 - COMS W4113 Distributed Systems Fundamentals
 - COMS W4115 Programming Languages and Translators
 - COMS W4118 Operating Systems
 - CSEE W4119 Computer Networks
 - COMS W4152 Engineering Software-as-a-Service
 - COMS W4156 Software Engineering
 - COMS W4160 Computer Graphics
 - COMS W4167 Computer Animation
 - COMS W4170 User Interface Design
 - COMS W4181 Security 1
 - CSOR W4231 Analysis of Algorithms
 - COMS W4236 Introduction to Computational Complexity
 - COMS W4701 Artificial Intelligence
 - COMS W4705 Natural Language Processing
 - COMS W4731 Computer Vision
 - COMS W4733 Computational Aspects of Robotics
 - CBMF W4761 Computational Genomics
 - COMS W4771 Machine Learning
 - CSEE W4824 Computer Architecture
 - CSEE W4868 System-on-Chip Platforms

CS ELECTIVES

- 4 COMS courses or jointly listed CS courses such as CSXX/XXCS that are at the 3000- level or higher, and are at least 3-points

GENERAL TECHNICAL ELECTIVES (GTE)

- 4 courses from the following Columbia or Barnard departments that are 3-point courses, and at the 3000 level or above:
 - Any SEAS department
 - Astronomy
 - Biomedical Informatics
 - Biological Sciences
 - Chemistry
 - Earth and Environmental Sciences
 - Ecology, Evolution and Environmental Biology
 - Mathematics
 - Physics
 - Psychology
 - Statistics
 - Economics

QUESTIONS?

Email CS Advising: ug-advising@cs.columbia.edu

CS Degree Requirements

CS Core

27 points

All are required:

1. Intro to Computing for Engineers (ENGI 1006)*
2. Intro to CS (COMS 1004)*
3. Data Structures (COMS 3134)*
4. Discrete Math (COMS 3203)*
5. Advanced Programming (COMS 3157)
6. CS Theory (COMS 3261)
7. Fundamentals of Computer Systems (CSEE 3827)
8. Linear Algebra (COMS 3251, ..., or MATH UN2015)
9. Probability (STAT UN1201, ..., or MATH UN2015)

*You completed these elsewhere to enter the 3-2 program; you do not need to take them at Columbia

CS Degree Requirements

CS Core

27 points

Area Foundation Courses (AFC) 12 points

Select 4 from

COMS W4111 Intro. Databases

COMS W4113 Dist. Systems

COMS W4115 Prog Lang Trans

COMS W4118 Operating Systems

CSEE W4119 Computer Networks

COMS W4152 Engineering SaaS

COMS W4156 Software Engin.

COMS W4160 Computer Graphics

COMS W4167 Comp. Animation

COMS W4170 UI Design

COMS W4181 Security 1

CSOR W4231 Analysis Algo.

COMS W4236 Comp. Complexity

COMS W4701 AI

COMS W4705 Natural Lang Proc.

COMS W4731 Computer Vision

COMS W4733 Robotics

CBMF W4761 Comp. Genomics

COMS W4771 Machine Learning

CSEE W4824 Comp. Architecture

CSEE W4868 SoC Platforms

No substitutions

CS Degree Requirements

CS Core

27 points

Area Foundation Courses (AFC) 12 points

Select 4 from

CS Electives

12 points

4 3000+ COMS / CSXX / XXCS courses, 3+ points

COMS 4995 and COMS 6998 are “topics” courses

Each section is a unique topic

You may take multiple 4995s or 6998s with different topics

CS Degree Requirements

CS Core

27 points

Area Foundation Courses (AFC) 12 points

Select 4 from

CS Electives

12 points

4 3000+ COMS / CSXX / XXCS courses, 3+ points

General Tech. Electives (GTE) 12 points

4 3000+ courses from these departments (3+ points)

Any SEAS department

Astronomy

Biomedical Informatics

Biological Sciences

Chemistry

Earth and Environ. Sciences

Eco, Evo. and Env. Biology

Mathematics

Physics

Psychology

Statistics

Economics

Course Names

COMS W 4115 001 Programming Languages and Translators

Section number

3xxx: Introductory undergraduate level
4xxx: Advanced undergraduate, MS, and PhD
6xxx: Graduate level; undergraduates need
instructor permission

“W” and “E” are meaningless

COMS	Computer Science
CSEE	Joint Computer Science and Electrical Engineering
EECS	Joint EE and CS
CSOR	Joint CS and Operations Research

Registering For CS Classes

Join the waitlist

4000- and 6000-level CS Courses are waitlist-only

Most waitlists are managed by the department, yet say “instructor-managed.” Those few managed by the instructor will say so.

Students are enrolled based on **need**, not order in line

3-2 students often get priority because they are under significant time pressure

Registering For CS Classes

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“Open/Full”: you may be able to enroll or join the waitlist

“Blocked”: you likely won't ever be allowed to enroll

Substituting Core CS Classes

You may ask to substitute a CS core class for another CS class if you took the equivalent elsewhere

- ▶ Linear Algebra
- ▶ Probability
- ▶ CS Theory (COMS 3261)
DFAs, NFAs, CFGs, Turing Machines, $O()$, P vs NP
- ▶ Fundamentals of Computer Systems (CSEE 3827)
Digital Design and Computer Architecture
Often separate classes elsewhere
- ▶ Advanced Programming (COMS 3157)
Systems Programming in C/Unix: threads, sockets

Substitutions **do not** affect the 60 point requirement

Submit substitution requests through
<http://mice.cs.columbia.edu> (accounts coming)

For help, email ug-advising@cs.columbia.edu

Double-Majoring and Minorng

In a word: **don't**

3-2 students don't have the time to complete another program's requirements

Future employers and graduate schools don't care

Do well in your CS courses; take electives for the rest

Better to do an independent project with a professor whom you can impress



Stellic

Degree Progress etc.

<https://columbia.stellic.com/>

Internships and International Students

Curricular Practical Training (CPT) is an employment authorization for off-campus internships

Only the International Students & Scholars Office (ISSO) approve CPT applications; CS Advising and I will help

After all approvals, enroll in my section of the Fieldwork (COMS 3999) class, but follow the procedure:

CS website → Advising & Student Services → Fieldwork/CPT FAQs

<https://www.cs.columbia.edu/cpt-faqs/>