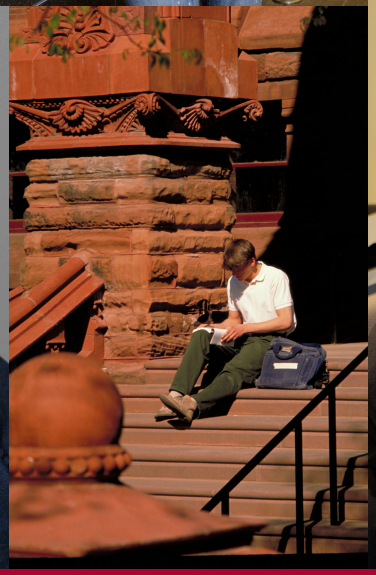
Welcome to Penn CIS!



Penn CIS Faculty

Undergraduate Program Advising

- Dr. Stephanie Weirich (Levine 510)
  Professor and Undergraduate Chair, CIS

- Ms. Jackie Caliman (Levine 308)
  Associate Director for the Undergraduate Program in CIS

- Ms. Amy Calhoun (Moore 170)
  Associate Director of Integrated Studies (DMD & CMPE)

- SEAS Office of Academic Programs
  Towne 111

Overview of Degree Programs

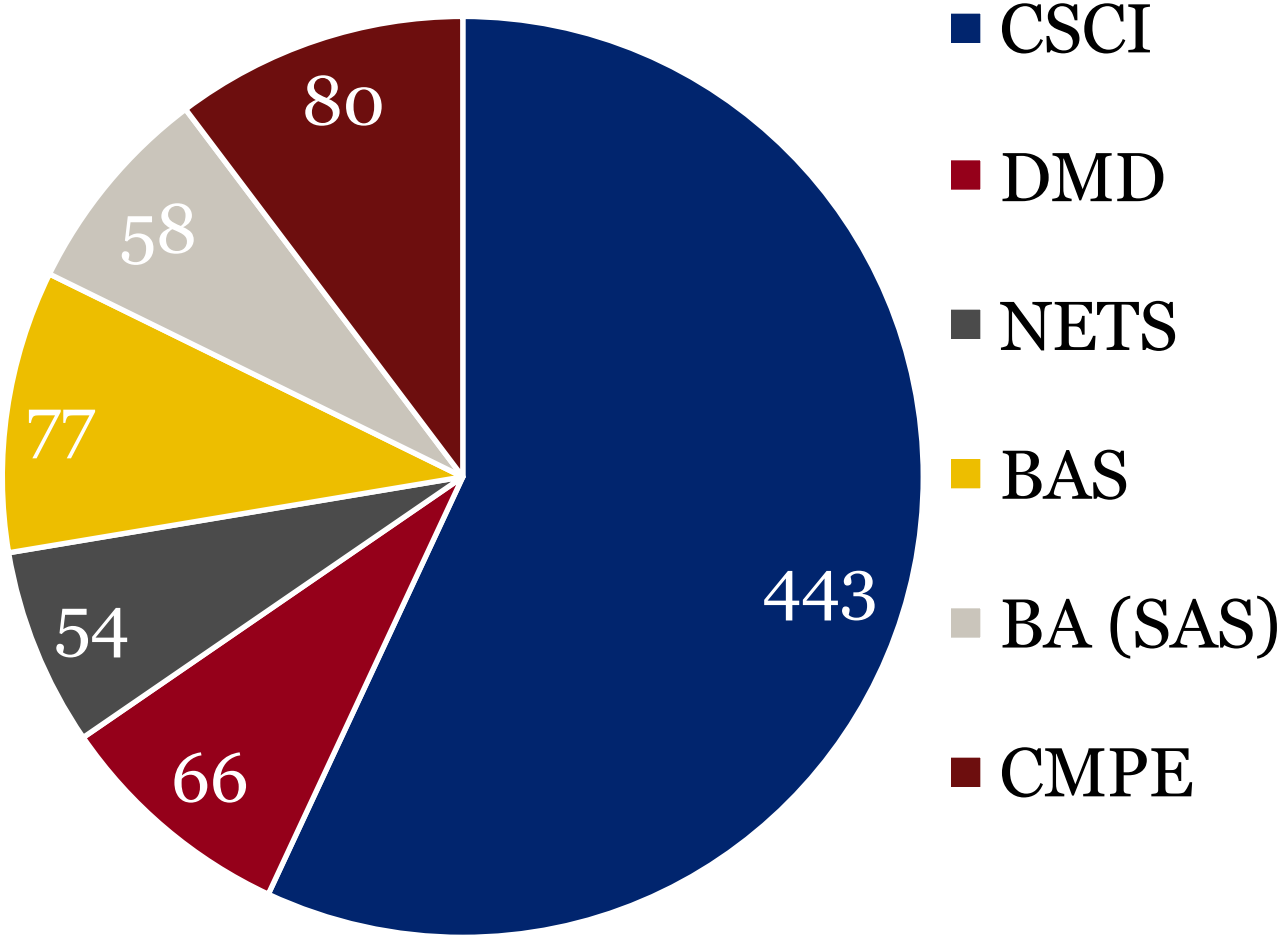
- Bachelors of Science in Engineering (BSE)
  - CSCI: Computer Science
  - DMD: Digital Media & Design
- Bachelors of Applied Science (BAS)
  - ASCS: Computer Science (intended for dual degrees)
  - ASCB: Computational Biology
  - ASCC: Computer & Cognitive Science
- Joint with Electrical & Systems Engineering
  - CMPE: Computer Engineering
  - NETS: Networked & Social Systems Engineering

Joint Programs outside SEAS

- With SAS:
  - Computer and Cognitive Science (dual degree)
  - BA in Computer Science (must be a double major)
  - Logic and Computation (SAS major)

- With the Wharton School:
  - M&T: Management and Technology
  - "Honors" dual-degree with any SEAS degree (often CSCI)

Undergraduates by Major



778 = total undergraduate enrollment (Fall 16)

about 30% women

Undecided?

- Curriculum Deferred (C.D.) Students
  - Feel free to ask advice from any of us.

- You will be assigned a permanent advisor when you declare a major.

- Even if you *have* declared a major, it is not hard to switch.

CSCI Core Curriculum

- CIS 110: Introduction to Computer Programming
- CIS 120: Programming Languages & Techniques I
- CIS 121: Programming Languages & Techniques II

Programming

- CIS 160: Mathematical Foundations for Computer Science
- CIS 262: Automata, Computability, and Complexity
- CIS 320: Introduction to Algorithms

Theory

- CIS 240: Introduction to Computer Architecture
- CIS 371: Computer Organization and Design
- CIS 380: Computer Operating Systems

Systems

- CIS 400/401: Senior Design Project

(Exact requirements vary with the degree program)

Specialized CIS Course Offerings

- **DMD**
  - CIS 460: Intro. to Computer Graphics Techniques
  - CIS 461: Computer Graphics
  - CIS 462: Computer Animation

- **NETS**
  - NETS 112: Networked Life
  - NETS 150: Market & Social Systems on the Internet
  - NETS 212: Scalable and Cloud Computing
  - NETS 312: Theory of Networks
  - NETS 412: Algorithmic Game Theory

- **CMPE**
  - CIS 350: Software Engineering
  - CIS 441: Embedded Software

All of these can serve as CIS electives for all majors…

Other CIS Course Offerings

- **Electives**
  - Machine Learning, AI, Natural language processing
  - Compilers, advanced programming
  - Distributed / Embedded Systems

- **Mini Courses (CIS 19x)**
  - C++ / Python / Haskell / Rust
  - iPhone / Ruby on Rails / Javascript
  - Unix Skills

- **Graduate Courses (CIS 5xx)**
  - Advanced versions of systems, algorithms, architecture, …
  - Security, programming language foundations, …

www.cis.upenn.edu

SEAS Undergraduate Student Handbook

www.seas.upenn.edu/undergraduate/handbook/

Penn CIS Faculty

(1) Engage with Faculty

- Penn's CIS faculty is filled with world class researchers in all areas across computer science
- One of the best parts of being a professor is interacting with bright students like you
- How?
  - participate in class
  - explore research opportunities
    e.g. Undergraduate Summer Research
  - senior design project
  - talk to us in the hall, find us in the office, or send e-mail

(2) Learn From Your Peers

- In your classes:
  - By working in project teams
  - By forming study groups
- In student organizations:
  - Dining Philosophers
  - Women in Computer Science (WICS)
  - Penn SIGGRAPH
  - PennApps
- While teaching:
  - By being a TA
  - By becoming a tutor

Dining Philosophers

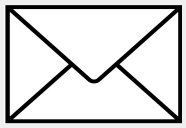
- If you like Computer Science, this is the club for you!
- Three committees:
  - **Hacking & Learning** -- plan workshops, host tech talks & build mentorship programs for students across the computer science spectrum
  - **Entrepreneurship & Jobs** - host events to inform students about the careers and opportunities and work with prominent tech companies to build a strong rapport between SEAS CS students and industry
  - **Social** - organize events for the CIS@Penn community to get to know each other with each other outside of the classroom
- Don't have to be on a committee to join the club
- More information
  - Dining Philosophers FB page
  - CIS@Penn FB group
  - dinphil@gmail.com
  - dp.seas.upenn.edu

Penn WiCS

WOMEN IN CS
University of Pennsylvania

How can we make Penn better for women in CS?

- FemmeHacks (all-women hackathon)
- Passion projects (we fund your inventions!)
- Meet-ups and hang-outs (free food)
- CSterhood (mentorship program)
- Get you jobs (Google, Apple, you name it)


pennwics@gmail.com


wics.cis.upenn.edu

PennApps

- Largest University-run hackathon
- Fall 2016 – September 9th-11th
- Spring 2015 had participants from 147 universities, 24 states and 11 countries
- Over $40k in sponsored prizes
- Penn students can still register
- No experience necessary

(3) Be broad & explore

- Within the Engineering School
  - Departmental Colloquia
  - Interdisciplinary groups like the GRASP laboratory
- Around Campus
  - Classes from around the university
  - Less formal learning experiences (e.g. Preceptorials)
  - Campus Clubs and Organizations
  - Gym facilities / IM sports / Athletics
- In Philadelphia
  - Restaurants / Music / Museums / Culture / …

(4) Succeed!

- Work hard!
- Have fun!
- Take care of yourself.
- We're here to help.

What Next? Lunch!

1. Pick up a boxed lunch in the Levine Lobby
2. Freshmen advisors have tables with their names on them
   - not all of them could be here
   - there may not be enough room for all advisees at one table
   - there are other faculty around
   - feel free to ask any of us for advice
3. DMD students should go to the Graphics Lab (Moore 103)
4. Dr. Mintz advisees upstairs in the mezzanine
5. NETS is in 512