

SCS Concentrations (for SCS students)

The School of Computer Science (SCS) offers concentrations for SCS students in various aspects of computing to provide greater depth to their education. Computer Science majors can substitute an SCS concentration for the minor requirement. Artificial Intelligence and Computational Biology majors can complete an SCS concentration if they wish, but it is not required for these degrees.

Note: At the present time, SCS concentrations are coded to look like minors on an official transcript.

SCS Concentrations are currently available to SCS students only and assume these students have taken most/all of the CS core: 15-122/15-150/15-210/15-213/15-251. SCS students may not pursue a minor within SCS; instead they can pursue the related concentration. For example, instead of pursuing the Software Engineering minor, these SCS students could pursue the Software Engineering concentration.

Consult the SCS undergraduate concentrations website (<https://www.cs.cmu.edu/undergraduate-concentrations>) for information about these concentrations as they are approved. For SCS students, consult with your academic advisor for more information about available concentrations and requirements.

- Algorithms and Complexity (<http://coursecatalog.web.cmu.edu/schools-colleges/schoolofcomputerscience/scs-concentrations/algorithms-complexity-concentration/>)
- Computational Biology (<http://coursecatalog.web.cmu.edu/schools-colleges/schoolofcomputerscience/scs-concentrations/computational-biology-concentration/>)
- Computer Graphics (<http://coursecatalog.web.cmu.edu/schools-colleges/schoolofcomputerscience/scs-concentrations/computer-graphics-concentration/>)
- Computer Systems (<http://coursecatalog.web.cmu.edu/schools-colleges/schoolofcomputerscience/scs-concentrations/computer-systems-concentration/>)
- Human-Computer Interaction (<http://coursecatalog.web.cmu.edu/schools-colleges/schoolofcomputerscience/scs-concentrations/human-computer-interaction-concentration/>)
- Language Technologies (<http://coursecatalog.web.cmu.edu/schools-colleges/schoolofcomputerscience/scs-concentrations/language-technologies-concentration/>)
- Machine Learning (<http://coursecatalog.web.cmu.edu/schools-colleges/schoolofcomputerscience/scs-concentrations/machine-learning-concentration/>)
- Principles of Programming Languages (<http://coursecatalog.web.cmu.edu/schools-colleges/schoolofcomputerscience/scs-concentrations/principles-programming-languages-concentration/>)
- Robotics (<http://coursecatalog.web.cmu.edu/schools-colleges/schoolofcomputerscience/scs-concentrations/robotics-concentration/>)
- Security and Privacy (<http://coursecatalog.web.cmu.edu/schools-colleges/schoolofcomputerscience/scs-concentrations/security-privacy-concentration/>)
- Software Engineering (<http://coursecatalog.web.cmu.edu/schools-colleges/schoolofcomputerscience/scs-concentrations/software-engineering-concentration/>)
- Societal Computing (<http://coursecatalog.web.cmu.edu/schools-colleges/schoolofcomputerscience/scs-concentrations/societal-computing-concentration/>)