

Computer Science Bachelor's Degree Requirements

The B.A. is designed to allow students more flexibility in choosing electives outside of computer science. To receive a B.A., a student must complete the Math and Science, CS Core, and CS Electives portions of the curriculum totaling 58 or more credit hours, with an overall total of at least 120 credit hours.

The B.S. is designed for students who are interested in a more in-depth study of computer science in order to further prepare themselves for a professional career in the computing industry. To receive a B.S., a student must complete all four parts of the curriculum totaling 80 or more credit hours, with an overall total of at least 128 credit hours.

Math and Science (B.A.: 6 courses, 18 hours; B.S.: 8 courses, 25–26 hours)

Introductory calculus:	MATH 101–102
Advanced calculus:	MATH 211–212 or MATH 221–222
Probability:	STAT 331 or 310
Linear algebra:	MATH 355, MATH 354, or CAAM 335
Physics:	PHYS 101–102, 111–112, or 125–126 (required for B.S. only)

CS Core (B.A. and B.S.: 9 courses, 34 hours)

Introductory CS:	COMP 140, 160, or 170
Programming:	COMP 211
Hardware:	ELEC 220
Systems:	COMP 221
Discrete math:	COMP 280
Algorithms:	COMP 314
Programming languages:	COMP 311 or 412
Operating systems:	COMP 421
Theory:	COMP 481 or 482

CS Electives (B.A. and B.S.: 2 courses, 6–8 hours)

Two additional upper-level (300 or higher) COMP courses.

Cap (B.S.: 4–5 courses, 15 or more hours)

A *coherent* set of courses in some computer science specialization and including a design component (one of COMP 402, 410, or 460). This may include courses in any department. Students may design areas of specialization with the approval of their departmental advisor.

Research and Independent Study Courses An independent study course of at least 3 credit hours (COMP 390, COMP 490, COMP 491, HONS 470, or HONS 471) mentored by a CS faculty member may be used as a CS Elective or in a Cap. At most one independent study course may be used for satisfying CS major requirements.

Substitutions MATH 111 and 112 may together replace MATH 101. For students with calculus backgrounds, but no corresponding credit, higher-level Math courses may replace the introductory Math courses. Any substitutions must be approved by a departmental advisor.

Additional Information Please also refer to the department's academic advisors and to the advising information at <http://compsci.rice.edu/academics.cfm>.

Last modified: 13 Feb 2008.