

B.S. In Computer Science

Specializations: One design course and any coherent set of 3-4 CS-related courses with a minimum of 15 credits that is approved by an academic advisor. Examples are posted on the Undergraduate Academics section of www.compsci.rice.edu/undergrad. COMP specializations designed by students must be approved by an academic advisor.

BASIC REQUIREMENTS	General Math & Science Courses Core Courses in Major	22-23 39
ELECTIVE REQUIREMENTS	Computer Science Electives Engin Spec (COMP design & "cap" courses) Open Electives and LPAP FWIS and Distribution Courses	6-8 15 19-22 24
Minimum credit required for the B.S.		128

Sample Degree Plan

THIS IS ONE EXAMPLE OF MANY POSSIBLE SCHEDULES.

CONSULT A DIVISIONAL OR DEPARTMENTAL ADVISOR TO CUSTOMIZE YOUR DEGREE PLAN.

FALL			SPRING		
FRESHMAN 14 credits			FRESHMAN 14 credits		
MATH 101	Single Variable Calculus I	3	MATH 102	Single Variable Calculus II	3
PHYS 101	Mechanics w/Lab or 111 or 125	3*	COMP 182	Algorithmic Thinking	4*
COMP 140	Computational Thinking or 160	4*	ELEC 220	Fund of Comp Engineering	4*
FWIS	Freshman Writing	3	DIST	Distribution elective	3
LPAP	Lifetime Phys Activity elective	1			
SOPHOMORE 16 credits			SOPHOMORE 18 credits		
MATH 211	Ordinary Differential Equations or 212 or 221 or 222	3	PHYS 102	Electricity and Magnetism or 112 or 126	4*
COMP 215	Introduction to Program Design	4*	COMP 321	Intro to Computer Systems	4*
DIST	Distribution elective	3	COMP 322	Principles of Parallel Prog	4*
DIST	Distribution elective	3	DIST	Distribution elective	3
OPEN	Open elective	3	OPEN	Open elective	3
JUNIOR 17 credits			JUNIOR 17 credits		
COMP 310	Adv Object-Oriented Prog & Design or 354 or CAAM 335	4*	COMP 421	Operating Sys & Concurrent Prog or 312 or 331	4
MATH 355	Linear Algebra/ Matrix Analysis or 354 or CAAM 335	3	STAT 310	Probability and Statistics	3
COMP 382	Reasoning About Algorithms	3	CORE	COMP elective course	4
CORE	COMP elective course	4	DIST	Distribution elective	3
OPEN	Open elective	3	OPEN	Open elective	3
SENIOR 15 credits			SENIOR 17 credits		
COMP 411	Advanced Prog Languages or 412	4	SPEC	COMP cap course elective	4
COMP 410	Software Eng. Methodology or 402 or 460	4	SPEC	COMP cap course elective	4
SPEC	COMP cap course elective	4	DIST	Distribution elective	3
DIST	Distribution elective	3	OPEN	Open elective	3
			OPEN	Open elective	3

* In addition to class hours, these courses have a regularly scheduled lab that must fit into your schedule.

Of the 128 total degree credits, the BS in computer science requires 82-85 credits in general math and science courses and core, and specialization area courses.

Major Requirements

NUMBER	CREDIT	TITLE
MATH 101	3	Single Variable Calculus I
MATH 102	3	Single Variable Calculus II
MATH 211/212/221/222	3	Ordinary Differential Equations & Linear Algebra/Multivariable Calculus/ Honors Calculus III/Honors Calculus IV
MATH 355/354/ CAAM 335	3	Linear Algebra/Honors Linear Algebra/ Matrix Analysis
STAT 310/312/331	3	Probability & Statistics/Probability & Statistics for CEVE/Applied Probability
PHYS 101/111/125	3-4*	Mechanics w/Lab/General Physics w/Lab
PHYS 102/112/126	4*	Electricity & Magnetism w/Lab/General Physics II w/Lab
ELEC 220	4*	Fundamentals of Computer Engineering
COMP 140/160	4*	Intro To Computational Thinking/Intro to Computer Game Creation
COMP 182	4*	Algorithmic Thinking
COMP 215	4*	Introduction to Program Design
COMP 310	4*	Advanced Object - Oriented Programming And Design
COMP 321	4*	Introduction to Computer Systems
COMP 322	4*	Principles Of Parallel Programming
COMP 382	3	Reasoning About Algorithms
COMP 411/412	4	Advanced Programming Languages/Compiler Construction
COMP 421	4	Operating Systems and Concurrent Programming
COMP Elective	3-4	COMP 300 or above
COMP Elective	3-4	COMP 300 or above
SPEC Design	4	COMP design course (COMP 402/410/460)
SPEC	4	COMP cap course elective
SPEC	4	COMP cap course elective
SPEC	3	COMP cap course elective

* In addition to class hours, these courses have a regularly scheduled lab that must fit into your schedule.