

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 adviser. 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 adviser.

BASIC REQUIREMENTS	General math & science courses	23
	Core courses in major	40
ELECTIVE REQUIREMENTS	Computer science electives	6-8
	Engin spec (COMP design & "cap" courses)	15
	Open electives and LPAP	23
	FWIS and distribution courses	21
Minimum credit required for the B.S.		128

Sample Degree Plan

THIS IS ONE EXAMPLE OF MANY POSSIBLE SCHEDULES.
CONSULT A DIVISIONAL OR DEPARTMENTAL ADVISER TO CUSTOMIZE YOUR DEGREE PLAN.

Of the 128 total degree credits, the B.S. in computer science requires 84-86 credits in general math and science courses, core courses, CS electives, and design and "cap" courses.

FALL			SPRING		
FRESHMAN			FRESHMAN		
15 credits			14 credits		
MATH 101	Single Variable Calculus I	3	MATH 102	Single Variable Calculus II	3
PHYS 101•	Mechanics w/Lab	4*	COMP 182	Algorithmic Thinking	4*
	or 111 or 125		ELEC 220	Fund of Comp Engineering	4*
COMP 140	CompThinking	4*	DIST	Distribution elective	3
	or 130 or 160				
FWIS	Freshman Writing	3			
LPAP	Lifetime Phys Activity elective	1			
SOPHOMORE			SOPHOMORE		
16 credits			18 credits		
MATH 211	Ordinary Differential Equations	3	PHYS 102**	Electricity and Magnetism	4*
	or 212 or 221 or 222			or 112 or 126	
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			JUNIOR		
16 credits			17 credits		
COMP 310	Adv Object-Oriented Prog & Design	4*	COMP 421	Operating Sys & Concurrent Prog	4
MATH 355	Linear Algebra	3	STAT 310	Probability and Statistics	3
	or 354 or CAAM 335			or 312 or ELEC 303	
COMP 382	Reasoning About Algorithms	4*	CORE	COMP elective course	4
CORE	COMP elective course	4	DIST	Distribution elective	3
OPEN	Open elective	1	OPEN	Open elective	3
SENIOR			SENIOR		
15 credits			17 credits		
COMP 412	Compiler Construction	4	SPEC	COMP cap course elective	4
	or 411		SPEC	COMP cap course elective	4
COMP 413	Distributed Program Construction	4	OPEN	Open elective	3
	or 410 or 460		OPEN	Open elective	3
SPEC	COMP cap course elective	4	OPEN	Open elective	3
DIST	Distribution elective	3			

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 or ELEC 303	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 140/130/160	4*	Computational Thinking/Elements of Algorithms and Computation/ 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 413	4	Distributed Program 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 410/413/460)
SPEC	4	COMP cap course elective
SPEC	4	COMP cap course elective
SPEC	3-4	COMP cap course elective

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

• When registering for PHYS 101, you must also register for PHYS 103, the discussion section for 101.

•• When registering for PHYS 102, you must also register for PHYS 104, the discussion section for 102.

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

• When registering for PHYS 101, you must also register for PHYS 103, the discussion section for 101.

•• When registering for PHYS 102, you must also register for PHYS 104, the discussion section for 102.