

COMP

Computer Science

WEB LINKS	https://cs.rice.edu/undergraduate-program
FRANK ADVICE	The sample schedule is the best guide, especially for the first few semesters where it's important to take the core courses. But, generally, take the following as early as possible: COMP 140 or 160, 182, 215, and ELEC 220.
ADVICE FOR STUDENTS WITH AP CREDIT	Computer science AP credit does not count toward the major requirements. If you have AP credit for Math, you should take the upper level math requirements earlier.
ALTERNATIVE CURRICULA	There is a lot of flexibility with the timing of the MATH/CAAM/STAT requirements and the upper-level COMP courses.
BS VERSUS BA	The B.S. provides more depth than the B.A. The only difference in courses in the first two years is the physics requirements for a B.S. Students should speak with a major adviser about the choice of degrees as the best choice depends largely on circumstances and objectives.
NOT REQUIRED BUT HIGHLY RECOMMENDED COURSES	Some popular computer science courses include COMP 330, 410, 430, 440.



<p>RESEARCH</p>	<p>Many computer science undergraduates pursue research. The best way to find out about research opportunities is to talk with faculty who work in areas that you are interested in.</p>
<p>INTERNSHIPS</p>	<p>Internships are plentiful in computer science, some of which are posted on the department web site and emailed to majors. Most students have little trouble finding internships if they are interested.</p>
<p>STUDY ABROAD</p>	<p>With advance planning, it's not difficult to study abroad, even if not taking major-related courses while abroad. Most of the project-oriented courses are hard to get transfer credit for, while the mathematical requirements and theoretical courses are fairly easy to get transfer credit for.</p>
<p>PROFESSIONAL ORGANIZATIONS</p>	<p>Rice University Computer Science Club (http://csclub.rice.edu/) CSters (Rice University's Society for Women in Computer Science) (http://csters.rice.edu/) ACM Programming Contest – contact John Greiner (greiner@rice.edu) for info.</p>
<p>INTERESTING COURSES FOR NON-MAJORS</p>	<p>COMP 140, 160, 182, 435, 448</p>

B.A. In Computer Science

Specializations: Not Applicable

Sample Degree Plan

*THIS IS ONE EXAMPLE OF MANY POSSIBLE SCHEDULES.
CONSULT A DIVISIONAL OR DEPARTMENTAL ADVISER 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	
	or 105				or 106		
COMP 140	Comp Thinking or 160	4*		COMP 182	Algorithmic Thinking	4*	
FWIS	Freshman Writing	3		ELEC 220	Fund of Computer Engineering	4*	
OPEN	Open elective	3		DIST	Distribution elective	3	
LPAP	Lifetime Phys Activity elective	1					
SOPHOMORE 16 credits				SOPHOMORE 14 credits			
MATH 211	Ordinary Differential Equations	3		COMP 321	Intro to Computer Systems	4*	
	or 212 or 221 or 222			COMP 322	Principles of Parallel Prog	4*	
COMP 215	Introduction to Program Design	4*		DIST	Distribution elective	3	
DIST	Distribution elective	3		OPEN	Open elective	3	
DIST	Distribution elective	3					
OPEN	Open elective	3					
JUNIOR 16 credits				JUNIOR 13 credits			
COMP 310	Adv Object-Oriented Prog & Design	4*		COMP 421	Operating Sys & Concurrent Prog	4	
MATH 355	Linear Algebra/ Matrix Analysis	3		STAT 310	Probability and Statistics	3	
	or 354 or CAAM 335				or ELEC 303		
COMP 382	Reasoning About Algorithms	4*		CORE	COMP elective course	3	
DIST	Distribution elective	3		OPEN	Open elective	3	
OPEN	Open elective	3					
SENIOR 16 credits				SENIOR 15 credits			
COMP 411	Advanced Prog Languages	4		OPEN	Open elective	3	
	or 412			OPEN	Open elective	3	
CORE	COMP elective course	3		OPEN	Open elective	3	
DIST	Distribution elective	3		OPEN	Open elective	3	
OPEN	Open elective	3		OPEN	Open elective	3	
OPEN	Open elective	2					

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

BASIC REQUIREMENTS	General math & science courses	15
	Core Courses in Major	40
ELECTIVE REQUIREMENTS	Specialization electives	6
	Open electives and LPAP	39
	FWIS and distribution courses	21
Minimum credit required for the B.A.		121

Of the 121 total degree credits, the B.A. in Computer Science requires 61 credits in general math and science courses, core courses and specialization electives.

Major Requirements

NUMBER	CREDIT	TITLE
MATH 101/105	3	Single Variable Calculus I / AP or other credit in Calculus I
MATH 102/106	3	Single Variable Calculus II / AP or other credit in Calculus II
MATH 211/212/221/222	3	Ordinary Differential Equations & Linear Algebra/Multivariable Calculus Honors Calculus III/Honors Calculus IV
MATH 354/355/ CAAM 335	3	Honors Linear Algebra/Linear Algebra/Matrix Analysis
STAT 310/312 ELEC 303	3	Probability & Statistics/Probability & Statistics for Engineers/Applied Probability Fundamentals of Computer Engineering
ELEC 220	4*	Elements of Algorithms and Computations/Computational
COMP 130/140/160	4*	Thinking/Intro to Computer Game Creation Algorithmic Thinking
COMP 182	4*	Introduction to Program Design
COMP 215	4*	Advanced Object - Oriented Programming And Design
COMP 310	4*	Intro to Computer Systems
COMP 321	4*	Principles Of Parallel Programming
COMP 322	4*	Reasoning About Algorithms
COMP 382	4	Advanced Programming Languages/Compiler Construction
COMP 411/412	4	Operating Systems and Concurrent Programming
COMP 421	4	COMP 300 or above
COMP Elective	3-4	COMP 300 or above
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