



## Russ College of Engineering and Technology

The School of Electrical Engineering and Computer Science offers a Bachelor of Science degree program in Computer Science that can be completed in three years (six semesters) by students who begin college calculus-ready and who are willing to follow an accelerated and challenging degree program. This program requires students to complete 20 hours per semester. The following example schedule satisfies all graduation requirements for the Bachelor of Science degree program in Computer Science.

Please note that students could complete courses in the summer sessions to eliminate the need to take 20 hours per semester.

The scheduling scenario below is intended to present an example pattern by which this major can be completed in three years. Those interested in pursuing this option need to work with an academic advisor to develop a specific plan to earn the 120 credit hours required for graduation.

### BS 7260 Computer Science

#### Semester 1: Fall

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
CS 2400 Introduction to Computer Science I	4		
Math 2301: Calculus I	4		C
EE 1024: Introduction to Computer Engineering	4		
CHEM 1510: Fundamentals of Chemistry I	4		
BIOS 1700: Biological Sciences I: Molecules and Cells	3		
Free Elective	1		
Total hours for semester	20		

#### Semester 2: Spring

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
CS 3000: Introduction to Discrete Structures	4	Yes	
MATH 2302: Calculus II	4		C
CS 2401: Introduction to Computer Science II	4		C
PHYS 2501: General Physics	5		
Tier I First-Year Composition (e.g., ENG 1510: Writing and Rhetoric I)	3		
Total hours for semester	20		

**Semester 3: Fall**

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
EE 3613: Computer Organization	3	Yes	
CS 3560: Software Engineering Tools and Practices	3	Yes	
CS 3610: Data Structures	4	Yes	
EE 3954: Microprocessors and Microcontrollers	4	Yes	
EE 3713: Applied Probability and Statistics for Electrical Engineers	3	Yes	
CS 2650: Professional and Ethical Aspects of Computing	2		
Free Electives	1		
Total hours for semester	20		

**Semester 4: Spring**

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
CS 3200: Organization of Programming Languages	3	Yes	
CS 4000: Introduction to Distributed, Parallel, and Web-Centric Computing	3	Yes	
CS Technical Elective I (e.g., CS 4750: Internet Engineering)	4	Yes	
MATH 3200: Applied Linear Algebra	3	Yes	
TIER I Junior English (e.g. ENG 3080J: Writing and Rhetoric II)	3	Yes	
BIOS 1705: Biological Sciences Lab I	1		
ET 1500: Engineering and Technology Career Orientation	0.5		
Free Electives	2.5		
Total hours for semester	20		

**Semester 5: Fall**

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
CS 4420: Operating Systems	3	Yes	
CS 4560: Software Design and Development I	3	Yes	
CS Technical Elective II (CS 4620: Database Systems)	3	Yes	
CS Technical Elective III (CS 4250: Interactive Computer Graphics)	3	Yes	
CS 4040: Design and Analysis of Algorithms	3	Yes	
Tier II (2FA: Fine Arts)	2-3		
Free Electives	2-3		
Total hours for semester	20		

**Semester 6: Spring**

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
CS 4100: Formal Languages and Compilers	3	Yes	
CS 4561: Software Design and Development II	3	Yes	

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
BIOS 1710: Biological Sciences II: Ecology, Evolution, Animal Body Systems	3		
BIOS 1715: Biological Systems II Laboratory	1		
TIER II (2CP Cross Cultural Perspectives)	2-3		
TIER II (2SS Social Sciences)	2-3		
TIER II (2HL Humanities and Literature)	2-3		
Free Electives	1-4		
Total hours for semester	20		