COMPUTER SCIENCE - GENERAL EMPHASIS REQUIREMENTS (BA/BS)

Code	Title	Units
Major Requirements [1]		
Software Development Fundamentals:		
COMPSCI 172	INTRODUCTION TO JAVA	3
or COMPSCI 174	INTRODUCTION TO C++	
COMPSCI 220	INTERMEDIATE JAVA	3
or COMPSCI 221	INTERMEDIATE PROGRAMMING IN C#	
or COMPSCI 222	INTERMEDIATE C++	
COMPSCI 223	DATA STRUCTURES	3
Core Courses:		
COMPSCI 271	COMPUTER ORGANIZATION AND ASSEMBLY PROGRAMMING	3
COMPSCI 366	DATABASE MANAGEMENT SYSTEMS	3
COMPSCI 412	EMBEDDED SYSTEMS	3
COMPSCI 433	THEORY OF ALGORITHMS	3
COMPSCI 476	SOFTWARE ENGINEERING	3
Computer Science Technical Electives: Select 6 to 12 units [2]		**6-12**
Any undergraduate COMPSCI courses numbered 300 or higher		
Any graduate COMPSCI courses numbered 700 or higher [3]		
Optional Mathematics and Statistics Electives: Select 0 to 6 units		**0-6**
MATH 355	MATRICES AND LINEAR ALGEBRA	
MATH 450	GRAPH THEORY	
MATH 471	NUMERICAL ANALYSIS	
STAT 342	APPLIED STATISTICS	
Total Units		**36**

1. An approved minor is required for this major.
2. Students pursuing a BSE degree with a second major in Computer Science may also select SECNDED 442 as a technical elective, with Computer Science department consent. Students seeking licensure to teach computer science are required to take this course.
3. Graduate courses (500+) may have additional requirements prior to enrollment by undergraduate students. See the Seniors Taking Graduate Courses Policy for further information. Undergraduate students taking graduate courses are not generally permitted to enroll in COMPSCI 789, COMPSCI 793, COMPSCI 798, or COMPSCI 799.

Code	Title	Units
Unique Requirements		
MATH 250	APPLIED CALCULUS SURVEY FOR BUSINESS AND SOCIAL SCIENCES	5
or MATH 253	CALCULUS AND ANALYTIC GEOMETRY I	
COMPSCI 215	DISCRETE STRUCTURES	3
or MATH 280	DISCRETE MATHEMATICS	
ENGLISH 370	ADVANCED COMPOSITION	3
or PWP 371	WRITING IN THE SCIENCES	
or PWP 372	TECHNICAL AND PROFESSIONAL WRITING	

First Year

Fall	Units	Spring	Units
ENGLISH 101[1]	3	ENGLISH 102	3
MATH 142[2]	4	MATH 151	3
General Education Elective	3	COMPSCI 172 or 174	3
CORE 130	3	CORE 140	3
INTRAUNV 104	1	General Education Elective	3
PEGNRL 192	1		
	15		**15**

Second Year

Fall	Units	Spring	Units
COMPSCI 220, 221, or 222	3	COMPSCI 271	3
MATH 250 or 253	5	COMPSCI 223	3
Lab Science (GL) course	4	COMPSCI 215 or MATH 280	3
CORE 110	3	U.S. Racial/Ethnic Diversity Course (DV)	3
		General Education Elective	3
	15		**15**

Third Year

Fall	Units	Spring	Units
COMPSCI 366	3	COMPSCI 412	3
Computer Science 300/400 elective	3	Computer Science 300/400 elective	3
CORE 390	3	Lab Science (GL) course	4
Minor Course	3	COMM 110	3
Minor Course	3	Minor Course	3
	15		**16**

Fourth Year

Fall	Units	Spring	Units
COMPSCI 433	3	COMPSCI 476	3
Computer Science 300/400 elective	3	Computer Science 300/400 elective	3
ENGLISH 370, PWP 371, or PWP 372	3	Minor Course	3
Minor Course	3	Minor Course	3
Minor Course	3	Minor Course	3
	15		**15**

Total Units: 121

1. The math and English courses you will take during your first year will depend on ACT/SAT subscores or UW System placement exam scores. All students are encouraged to complete placement testing prior to attending Warhawks SOAR. https://www.uww.edu/testing/placement-testing
2. This program may also be completed as a Bachelor of Arts (BA) degree in the College of Letters and Sciences, but will require additional coursework. The BA degree emphasizes preparation in the arts, world languages, humanities and social sciences.

First Year Planning Notes: Learning Communities are a great option for first-year students to live and study with peers who share similar interests. Computer Science student may be interested in the Thinking in Code Learning Community. http://uww.edu/fye/learning-community.

Joining a university-sponsored club and actively participating is strongly encouraged. Some clubs that may be of particular interest to students with a Computer Science major include: ISACA, GAMED, ACM, and Robotics.

Second Year Planning Notes: The Undergraduate Research Program (URP) is a high-impact practice that gives students the opportunity to apply their knowledge outside of the classroom and dive deeper into their field of interest. https://www.uww.edu/urp

This program requires a minor. Students are encouraged to start thinking about selecting a minor in the second year. https://www.uww.edu/aaec/major-exploration#how-to-choose-a-minor

Third Year Planning Notes: An internship provides students with hands-on experience in a potential career field, supervision and coaching from prospective employers, and the ability to learn professional norms and behaviors. In addition, completing an internship allows students to differentiate themselves in a competitive job market.

Fourth Year Planning Notes: All students must earn at least 120 credits and complete undergraduate degree requirements to graduate.

Career Information in Letters and Sciences (LSINDP 399) is a 1-credit course that focuses on transition to career and graduate school opportunities; identifying skills, strengths, First Year Planning Notes: Learning Communities are a great option for first-year students to live and study with peers who share similar interests. Computer Science student may be interested in the Thinking in Code Learning Community. http://uww.edu/fye/learning-community.

Graduation: Students should apply for graduation one full semester prior to their intended graduation date. http://www.uww.edu/registrar/graduation

***Computer Science department hardware recommendations: Operating System** - For Computer Science or Cybersecurity students a Windows-based laptop if possible, since most of the programs work well with this operating system. **CPU** - Intel i7/ AMD 7 or above is recommended for CPU. **Memory** - 16GB or above for RAM. **Hard Drive** - SSD (Solid State Drive) with >= 512GB for hard disk.

Learn more about Computer Science Department programs, activities, faculty, and opportunities: https://www.uww.edu/cls/academics/computer-science