COMPUTER SCIENCE - APPLIED COMPUTING EMPHASIS REQUIREMENTS (BA/BS)

This emphasis of the Computer Science major is open only to students who have completed an Associate of Applied Science degree in the Information Technology from an institution that has an articulation agreement with UW-Whitewater. A minor is not required for this emphasis. This 54 unit emphasis combines a specially designed 36 unit Computer Science major with 18 units of approved Applied Technical Skills courses transferred from the technical college. Students will also complete a set of unique requirements to ensure the necessary proficiency in mathematics and writing.

Code	Title	Units
Major Requirements [1]		**36**
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
or ITSCM 314	DATABASE DESIGN AND ADMINISTRATION	
COMPSCI 433	THEORY OF ALGORITHMS	3
COMPSCI 460	COMPUTER NETWORKING	3
or ITSCM 332	NETWORK MANAGEMENT	
COMPSCI 476	SOFTWARE ENGINEERING	3
Electives		12
Any COMPSCI courses numbered 300 or above (no limit)		
Up to 6 total credits in this category may come from the following courses:		
MATH 355	MATRICES AND LINEAR ALGEBRA	
MATH 450	GRAPH THEORY	
MATH 471	NUMERICAL ANALYSIS	
STAT 342	APPLIED STATISTICS	

Code	Title	Units
Applied Technical Skills		**18**
Approved information technology courses transferred under an articulation agreement with a technical college		

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	

[1] No minor is required