MATH AND COMPUTER SCIENCE (MTCS) MAJOR*

A PARTNERSHIP BETWEEN ALVERNO COLLEGE AND THE UNIVERSITY OF WISCONSIN-MILWAUKEE (UWM)
This dual degree program will provide you with a powerful combination of knowledge and skills in both math and computer science. The logic you gain in your math classes at Alverno will assist you with programming tasks, including theory, computation complexity and algorithms, in your studies at UWM. With both degrees, you can move into computer science careers at a higher level.

Math at Alverno

Alverno's approach to math focuses on making the connections between theory and applications. Study areas, including logic, techniques of proof and problem solving, are integrated in your work.

With a faculty-student ratio of 10:1, you will develop meaningful first-name relationships with your professors, who are partners in your success. And Alverno's abilities-based curriculum and rigorous performance-based assessment process will help you practice and perfect the skills most in demand by today's employers, including problem solving, leadership and analysis.

While studying at Alverno, you will complete an internship that can help you translate your skills learned in the classroom to the professional world, strengthening critical and analytical thinking skills.

Computer Science at UWM

Building upon your math foundation, the Computer Science component of this dual degree will provide you with a strong technical background, permitting you to concentrate in one of five areas: artificial intelligence, software engineering, computer networking, algorithm design and programming language design and implementation.

Leading-edge research with faculty will be the cornerstone of your two years at UWM, with opportunities in cryptography, robotics, intelligent dialog systems and more.

How the dual degree program works

Before attending UWM, students must complete the Alverno math coursework, receive a positive recommendation from the Alverno dual degree advisor and meet all UWM undergraduate admissions requirements.

Once the Computer Science Degree coursework is completed, UWM transcripts will be transferred back to Alverno. Students will then apply for graduation at both institutions and are eligible to participate in both commencement ceremonies.

For the first three years, students will pay Alverno tuition, applying for financial aid through the college, if needed. While at UWM, students will pay tuition and apply for aid at UWM.

*This program is suspended and is not currently accepting new students.

Requirements

Code	Title	Credits
Core Requirements		
MT-123	College Algebra	3
MT-124	Trigonometry	2
MT-148	Functions & Modeling	3
MT-152	Calculus 1	4
MT-221	Discrete Structures & Algorithms	3
MT-253	Calculus 2	4
MT-254	Calculus 3	4
MT-255	Linear Algebra	4
MT-256	Probability and Statistics	4
MT-260	Introduction/Mathematical Problem Solvng	2
MT-268	Intro to Python Programming	4
MT-399	Formal Introduction to Advanced Work	0
MT Elective	Math (MT) Electives, one taken at UWM, and one computer science course	12
PH-241 & 241L	Calculus-Based Physics 1 and Physics Lab	4
PH-242 & 242L	Calculus-Based Physics 2 and Calculus-Based Physics 2 Lab	4
Additional Requirements		
INTERN-383	Internship Seminar	2
Total Credits		**59**