

COMPUTER SCIENCE/ MATHEMATICS DOUBLE MAJOR (BS)

College: College of Business, Economics, and Computing

Program Learning Outcomes

1. Reasoned Judgment: An ability to apply knowledge of computing and mathematics appropriate to the discipline. An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution. An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
2. Social and Personal Responsibility: An ability to function effectively on teams to accomplish a common goal. An understanding of professional, ethical, legal, security and social issues and responsibilities. An ability to analyze the local and global impact of computing on individuals, organizations, and society. Recognition of the need for and an ability to engage in continuing professional development.
3. Communication: An ability to communicate effectively with a range of audiences. An ability to use current techniques, skills, and tools necessary for computing practice.

Requirements for the Computer Science/ Mathematics Double Major

To be eligible for entrance into the double major students must have successfully completed MATH 221 Calculus and Analytic Geometry I and MATH 222 Calculus and Analytic Geometry II with a grade of C or better in each, or at the discretion of the Department.

Students may satisfy graduation requirements for both computer science and mathematics by completing all required courses for computer science with 9 elective credits and PHYS 201 General Physics I, together with the following mathematics courses (which automatically satisfy the computer science breadth requirement):

Code	Title	Credits
Required Math Courses		
MATH 222	Calculus and Analytic Geometry II	5
MATH 223	Calculus and Analytic Geometry III	5
MATH 301	Linear Algebra	4
MATH 303	Set Theory, Logic and Proof	4
MATH 317	Differential Equations and their Applications	4
MATH 350	Advanced Calculus	4
or MATH 367	Elementary Number Theory	
MATH 441	Abstract Algebra	4
Total Credits		30

Students completing the computer science/mathematics double major are strongly encouraged to take CSCI 410 Introduction to Data Science or CSCI 431 Computational Models as one of their electives.

General University Degree Requirements (Bachelor's Degree)

In addition to individual program requirements, students must also fulfill the following requirements:

Requirement	Credits
Skills	7-8
General Education	36
Foreign Language**	6-8
Ethnic Diversity	3
Total	52-55

** Transfer students in sustainable management, and health information management and technology collaborative, online degree-completion programs, the business management online degree-completion program, and the flexible option degree-completion program will be exempt from the university's foreign language requirement. See appropriate academic section for further information.

Skills Requirement (<https://catalog.uwp.edu/policies/#skills>)

Code	Title	Credits
Reading and Writing		
ENGL 101	Composition and Reading	3
Computational Skills		
Select one of the following:		4-5
MATH 102	Quantitative Reasoning	
MATH 103	Elementary Statistics	
MATH 104	College Mathematics with Applications	
MATH 111	College Algebra I	
Total Credits		7-8

General Education (<https://catalog.uwp.edu/policies/#general>)

- General Education Course List (<https://catalog.uwp.edu/programs/general-education-program/#coursestext>)

Foreign Language (<https://catalog.uwp.edu/policies/#language>)

Ethnic Diversity (<https://catalog.uwp.edu/policies/#ethnic>)

Degree Requirements

Requirement	Credits
Minimum Total Credits	120
Upper Level Credits (300 level or above)	36
Residency	30

Cumulative Degree GPA: 2.0 minimum