COMPUTER SCIENCE (BACHELOR OF SCIENCE, B.S.)

Overview

Computer Science is an ever-expanding field with endless opportunities. Students get hands-on, learning in systems, programming, security and large scale simulation. From team collaboration to internships, your education will prepare you for an exciting career in the IT industry.

The core of Missouri Western's Computer Science program is built around several programming languages and algorithm development. Students also study database, networking, computer architecture, operating systems and graphics.

Admission

The student must be enrolled in CSC 187 Java Programming Fundamentals or have completed CSC 187 Java Programming Fundamentals with a grade of C or higher, or have an ACT composite score of 25 or higher, or an ACT Science Reasoning score of 28 or higher. In addition, the student must have an overall GPA of at least 2.0.

Requirements

Students who choose this bachelor degree program will have no more than 6 years from admission or subsequent declaration to meet the requirements listed below. If certification, accreditation or statutory requirements change and additional requirements become effective during this time, the new requirements take precedence.

Note: Students pre-admitted into the bachelor degree program (pre-major) have three years to meet admission requirements before moving to the overall 6 year time-frame allowed to complete the program requirements.

Code	Title	Credit Hours
General Studies		
Students must complete General Studies courses (http://catalog.missouriwestern.edu/undergraduate/university-information/academic-standards-regulations/baccalaureate-degree/#bachelor-general-studies)		42
Core Requirements		
ACT 101	Introduction to Information Technology	3
ACT 301	Applied Database Systems	3
CSC 187	Java Programming Fundamentals	3
CSC 246	Programming Languages and Paradigms	3
or CSC 346	Enterprise Systems with Java	
CSC 254	Object Oriented Programming	3
CSC 274	Introduction to Unix/Linux	3
CSC 285	Data Structures	3
CSC 289	Computational Methods for Computer Science	3
CSC 294	Networking and Telecommunications	3
CSC 305	Database Architecture and Concepts	3
CSC 324	Software Testing and DevOps	3
CSC 406	Object Oriented Applications and Program Development	3
CSC 490	CS Career Preparation	1
SEC 300	Introduction to Cybersecurity	3
Select one of the following:		3-4
GBA 210	Business Statistics I	
MAT 111	Introductory Statistics	
MAT 111E	Introductory Statistics	

Concentration:
General (p. 1)

General Concentration

Code	Title	Credit Hours
Concentration Requirements		
CSC 208	Discrete Structures I	3
CSC 264	Computer Architecture and Assembly Language Programming	3
CSC 318	Simulation and Modeling	3
CSC 386	Operating Systems Concepts	3
MAT 147	Applied Calculus	5
or MAT 167	Calculus with Analytic Geometry I	
Select five (5) credit hours from ACT, CSC, SEC, or MAT courses numbered 300 - 599 [1]		5
Total Credit Hours		**22**

[1]   Students desiring to take 500+ level courses must meet the criteria required for undergraduates to enroll in graduate level courses.

Note: Computer Science-General majors must own a laptop with approved minimum specifications. Specifications are available on the CSMP home page.

1. Earn a grade of C or higher in all major coursework.
2. Earn an overall GPA of at least 2.0 and a major GPA of at least 2.0.

University Graduation Requirements

1. Earn a minimum of 120 credit hours (100 level and higher, maximum of 6 CED credit hours applicable).
2. Earn a minimum of 30 credit hours in upper-division courses. Lower-division transfer courses accepted as meeting upper-division departmental course requirements cannot be used to fulfill this requirement.
3. Earn 30 of the last 45 credit hours at MWSU in institutional coursework (exclusive of credit by examination).
4. Participate in required departmental and campus wide assessments.
5. Fulfill the Missouri Constitution requirement.
6. Successfully pass the Missouri Higher Education Civics Achievement exam.