

# COMPUTER INFORMATION SYSTEMS MAJOR

Available concentrations are Computer Game Technology (<https://catalog.bradley.edu/undergraduate/programs/computer-information-systems-computer-game-technology-concentration/>); Data Science (<https://catalog.bradley.edu/undergraduate/programs/computer-information-systems-data-science-concentration/>); Mobile Computing (<https://catalog.bradley.edu/undergraduate/programs/computer-information-systems-mobile-computing-concentration/>); and Software, Web, and Computer Security (<https://catalog.bradley.edu/undergraduate/programs/computer-information-systems-software-web-computer-security-concentration/>),

The general requirements for the computer information systems major are:

Code	Title	Hours
<b>Computer Science and Computer Information Systems</b>		
45 semester hours including		
CS 101	Introduction to Programming	4.0
CS 102	Data Structures	3.0
CS 200	Advanced Programming Concepts and Languages	3.0
CS 210	Advanced Data Structures and Algorithms	3.0
CS 220	Computer Architecture	3.0
CS 370	Database Management Systems	3.0
CIS 393	Web Technologies & Systems	3.0
CS 480	Social and Professional Issues in Computing	2.0
CIS 430	Information Technology Infrastructure	3.0
CIS 445	Integrative Programming and Technology	3.0
CIS 475	Computer Information Systems Analysis. Design and Integration	3.0
CIS 491	Computer Information System Project Management	3.0
Select one of the following:		3.0
MIS 379	Information Systems Security (or equivalent)	
CIS 415	Applied Cryptography	
CIS 435	Computer Networks and System Security	
CIS 495	Software and Web Applications Security	
<b>Mathematics</b>		
MTH 120	Discrete Mathematics	6.0
& MTH 111 and Elementary Statistics (or equivalents) <sup>1</sup>		
<b>Psychology</b>		
PSY 101	Principles of Psychology	6.0
& PSY 320 and Human Factors Psychology (or equivalents)		
<b>Communication</b>		
Select one of the following: (or equivalents)		3.0
COM 292	Organizational Communication (recommended)	
M L 354	Maximizing Effectiveness in Organizations	
COM 300	Communication Theory	
<b>English</b>		
ENG 305	Advanced Writing--Technical Writing (or equivalents)	3.0
or ENG 306 Advanced Writing--Business Communication		

## Management, Leadership, and Entrepreneurship

M L 350	Managing for Results in Organizations	3.0
Select one of the following: (or equivalents)		3.0
ENT 385	Technology Entrepreneurship (recommended)	
ENT 381	Entrepreneurship for Non-Business Students	
ENT 280	Entrepreneurial Creativity	

**Total Hours** **63**

<sup>1</sup> MTH 115 Brief Calculus With Applications I is recommended.