

# APPLIED COMPUTER TECHNOLOGY (BACHELOR OF SCIENCE, B.S.)

## Requirements

Code	Title	Credit Hours
<b>General Studies</b>		
Students must complete General Studies courses (http://catalog.missouriwestern.edu/undergraduate/university-information/academic-standards-regulations/baccalaureate-degree/#bachelor-general-studies)		42-47
<b>Core Requirements</b>		
ACT 301	Applied Database Systems	3
ACT 302	Data Analytics	3
ACT 405	Business Intelligence	3
ACT 490	Information Technology Career Preparation	1
CSC 184	Introduction to Computer Programming	3
CSC 274	Introduction to Unix/Linux	2
CSC 294	Networking and Telecommunications	3
CSC 305	Database Architecture and Concepts	3
ETC 200	Introduction to Technical Communication	3
ETC 420	Technical Documentation	3
GBA 210	Business Statistics I	3-4
or MAT 111	Introductory Statistics	
or MAT 111E	Introductory Statistics	
<b>Concentration</b>		<b>21</b>
Select one of the following concentrations:		
Information Technology Security		
Web Development		

### Concentrations:

Information Technology Security (p. 1)

Web Development (p. 1)

## Information Technology Security Concentration

Code	Title	Credit Hours
<b>Concentration Requirements</b>		
CSC 254	Object Oriented Programming	3
CSC 410	Network Security Technologies	3
MAT 112	Finite Mathematics	3
or MAT 116	College Algebra	
Information Technology Security Electives		
Select 9 credit hours from the following: <sup>1</sup>		9
ACT 324	Software Testing and DevOps	
CSC 386	Operating Systems Concepts	
CSC 520	Advance Networking and Network Administration <sup>2</sup>	
CSC 550	Applied Cryptography <sup>2</sup>	

CSC 570	Ethical Hacking <sup>2</sup>
CSC 580	Cloud Computing Security <sup>2</sup>
CSC 590	Information Technology Project Management <sup>2</sup>
ETC 424	Instructional Design

<sup>1</sup> At least two of these courses must be from CSC 520, CSC 550, CSC 570, and CSC 580.

<sup>2</sup> Students desiring to take 500 level courses must meet the criteria required for undergraduates to enroll in graduate level courses.

## Web Development Concentration

Code	Title	Credit Hours
<b>Concentration Requirements</b>		
ACT 102	Introduction to Web Page Development	3
ACT 211	Internet Scripting	3
ACT 311	Web Development Tools	3
ACT 324	Software Testing and DevOps	3
ACT 476	Applications of Computer Information Sciences Capstone	3
CSC 201	Microcomputer Applications	3
CSC 400	Systems Analysis and Design	3

## Program Graduation Requirements

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 GPS 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.