

**COMPUTER INFORMATION SYSTEMS MINOR**  
**2018 - 2019 Catalog**

Name: \_\_\_\_\_  
 Bear Number: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Advisor: \_\_\_\_\_

The Computer Information Systems (CIS) Minor is designed for students who wish to pursue collateral work in the computing, technology and communications/networking areas. Completion of the minor prepares a student to successfully employ technology and integrate information systems into his or her career activities. The CIS Minor is attractive to students majoring in other areas of Business Administration as well as to majors from other schools and colleges. It complements their work in these other areas. The program is not designed to prepare individuals to become programmers or systems personnel, but does provide a broad exposure to the area of corporate information systems.

Admission to the minor requires that a Business major be in academic good standing in both the Monfort College of Business and the University of Northern Colorado. A non-Business major who wishes to add or change to a Computer Information Systems Minor must have a cumulative GPA of 2.5 on at least 15 credit hours and obtain written approval from the Department of Accounting and Computer Information Systems, Monfort College of Business, Kepner 2090. Non-Business majors who have a GPA between 2.25 and 2.49 may apply for admission from the Department of Accounting and Computer Information Systems, Monfort College of Business, Kepner 2090.

<b>Computer Information Systems Minor Course Requirements</b>				
<b>18 Semester Credit Hours</b>				
To graduate with a CIS Minor, a student must attain at least a 2.0 or greater cumulative Business GPA and at least a "C-" grade in each individual course required for the CIS Minor.				
<b>Required Courses: 9 semester credit hours</b>				
Take all courses in the following list. A grade of "C-" or better is required in each course.				
Pref/Num	Course Title	Sem. Hrs.	Prerequisite(s) <sup>1</sup>	
BACS 287	Graphical Interface Programming	3	Business majors/minors & SE majors only	
BACS 380	Networking & Data Communications Systems	3	Business majors/minors & SE majors only Juniors or above	
BACS 485	Database Management Systems	3	BACS 287 BACS 300 Business majors & minors & SE majors only Seniors or consent of instructor	
<b>Elective Courses: 9 semester credit hours</b>				
Take three courses from the following list. A grade of "C-" or better is required in each course.				
Pref/Num	Course Title	Sem. Hrs.	Prerequisite(s) <sup>1</sup>	
BACS 350	Intermediate Web Development	3	BACS 200 or consent of instructor	
BACS 371	Introduction to Computer Forensics	3	BACS 300 or consent of instructor	
BACS 382	TCP/IP Network Security	3	BACS 380 or consent of instructor	
BACS 387	Object Oriented System Development	3	BACS 287 Business majors & minors & SE majors only Juniors or above	
BACS 392	Systems Platforms & Network Development	3	BACS 380 with at least C- or consent of instructor Business majors & minors & SE majors only Juniors or above	
BACS 486	Advanced Database Management	3	BACS 485 Business majors only Seniors or above	
BACS 487	Systems Analysis and Design	3	BACS 287 BACS 300 CIS emphasis students, CIS minors, & SE majors Seniors or consent of instructor	
*BACS 495	Special Topics in CIS	1-3	Consent of instructor Business majors and minors only Juniors or above	

<sup>1</sup>The Monfort College of Business monitors course prerequisites. Course prerequisites may be adjusted each new catalog year.

\*BACS 495, Special Topics in CIS, may be used to fulfill minor requirements. It may not exceed 3 semester hours.

**NOTES:** Students may transfer a maximum of 6 semester credits (courses with a "BA" prefix) toward the minor from other institutions.

**A maximum of 12 credit hours of coursework can be shared between a major and a minor.**